PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 28TH MAY 2025

The SEAC met on 28th May, 2025 at 03:30 PM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri Sashi Paul. The following members were present in the meeting.

1.	Sri Sashi Paul	-	Chairman (through VC)
2.	Dr. K. Murugesan	-	Member Secretary
3.	Dr. Rabi Narayan Patra	-	Member (through VC)
4.	Dr. Chittaranjan Panda	-	Member (through VC)
5.	Prof. (Dr.) H.B. Sahu	-	Member (through VC)
6.	Prof. (Dr.) Abanti Sahoo	-	Member (through VC)
7.	Er. Fakir Mohan Panigrahi	-	Member (through VC)
8.	Prof. (Dr.) B.K. Satpathy	-	Member (through VC)
9.	Shri Jayant Kumar Das	-	Member (through VC)
10.	Dr. Ashok Kumar Sahu	-	Member (through VC)
11.	Dr. K. C. S Panigrahi	-	Member (through VC)

Draft proceedings of the meeting was finalized by the members through e-mail and final proceedings 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 OF LAXMIPUR (B) STONE QUARRY OVER AN AREA OF 30.171 ACRES OR 12.2099 HECTARES HAVING KHATA NO. 198 PLOT NO. 481 & 482 IN THE VILLAGE LAXMIPUR, TAHASIL SHERAGADA IN DISTRICT GANJAM OF SRI SANTOSH KUMAR PATTNAIK- EC

1. This proposal is for Environmental Clearance of Laxmipur (B) Stone Quarry over an area of 30.171 acres or 12.2099 Hectares having Khata No. 198 Plot No. 481 & 482 in the village Laxmipur, Tahasil Sheragada in District Ganjam of Sri Santosh Kumar Pattnaik.
2. **Category**: This project falls under Category 1(a): Mining of Minerals as per EIA Notification dated 14th Sept, 2006 and its amendments.
3. **TOR details**: Terms of Reference was issued by SEIAA, Odisha vide TOR File No. SIA/OR/MIN/406101/2022 dtd 12.05.2023 for the proposed project.
4. **Public Hearing:** Public hearing was conducted on 17.01.2024 at vacant Govt. Land over Plot No. 698/A, Khata No. 198, Area- 0.4047 Ha. in Laxmipur village under Sheragada Tahasil of Ganjam District, Odisha. The major issues raised during public hearing was employment to the local people, Skill development camps, maintenance of roads, plantation and local area development.
5. **Location and connectivity:** The mine lease area is located in Village- Laxmipur, Tahasil – Sheragada, District- Ganjam, Odisha, is on Khata no- 198, Plot no- 481 & 482 covered in the

Survey of India Topo Sheet No –74 A/11 and is bounded between the Latitude -19°26'23.56" N to 19°26'38.61" N and Longitude – 84°40'20.98" E to 84°40'35.38" E. The kisam of land is Parbata. The nearest water body is Ghodahada River, approx. 0.09 km in NW direction. The nearest town is Sheragada, approx. 10.35 km in NW direction, Nearest Railway Station is Berhampur Railway Station, approx. 20.50 km in SE direction, Nearest National Highway is NH-59, approx. 8.0 km in NE direction, State Highway is SH-36, approx. 6.50 km in NNE direction, Nearest Airport is Biju Patnaik International Airport, Bhubaneswar is approx. 150.0 km towards NE direction.

6. List of Statutory Clearances:
   a) Mining Lease granted by vide letter no 4229/Sairat, date 27/10/2022.
   b) The Mining Plan of Laxmipur (B) Stone Quarry has been approved by The Joint Director of Geology, South Zone, Berhampur on dated 21.10.2022.
7. **Total Reserves:** The total Geological Reserves is 2482801cum and Mineable reserves is 2031463cum. The proposed production is 20025 cum/year.
8. **Baseline study conducted:** Baseline study was conducted during March, 2023 to May, 2023.
9. **Mining details:**
   a) **Mining method:** Mining will be done by opencast semi-mechanized method. Total production - 100125cum.
   b) **Equipments:** Driller (4 nos.), Compressor (3 nos.), Rock Breaker (2 nos.), Excavator (1 nos.), Tipper (2 nos.), Water Carrier (1000 lt)- 1no. and Safety equipments such as Helmets, Safety Shoes, Goggles & Hand Gloves.
   c) **Transportation** -Transportation of minerals will be done by an approach road of approx.0.521 km which further connects to SH 36.
10. **Water requirement**: Total Water Requirement is 5.20 KLD for proposed project which will be drawn from Bore well and hand pump for drinking while from sump for dust suppression and afforestation purpose.
11. **Power Requirement**: Electrical power will be required only for site office and will be obtained from solar energy.
12. **Solid waste generation**: A total of 33375 cum waste/rejects is likely to be generated during plan period. The waste will be dumped in the dumping site which will cover an area of 2000 sq.mt. The dump height will be 10m and 50% of the waste will be utilized for backfilling and maintenance of haulage road.
13. **Total Employment:** The project generates employment opportunities for 41 personnels.
14. **Greenbelt**: A total of 820 nos. of plants to be planted for the proposed project for entire lease in safety zone, along approach road and in Buffer zone during the plan period.
15. **Project cost**: The estimated project cost is ₹ 50 Lakhs. The EMP Cost is ₹10.002 Lakhs (Capital cost) and ₹5.10 Lakhs (Recurring cost). The CER Cost is ₹ 1,00,000/annum.

16. **Environment Consultant**: The Environment consultant **M/s. Cognizance Research India Private Ltd, Noida** along with the proponent made a presentation on the proposal before the Committee on 20.09.2024.

17. The SEAC in its meeting held on dated **20.09.2024** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	The correction of category of Laxmipur (B) Stone quarry from Morrum to stone has not yet been approved in DSR. Hence, the project can be considered subject to approval of DSR.	The category of Laxmipur (B) Stone Quarry was erroneously recorded as "Morrum" in the previous District Survey Report (DSR). However, in the updated DSR, it has been correctly listed as "Laxmipur (B) Stone Quarry" on page 56 and is currently awaiting final approval.	**Updated DSR is currently awaiting for final approval.**
ii)	The traffic study report needs to be vetted by institute of repute.	The Traffic Study Report has been vetted by School of Civil Engineering (KIIT deemed to be University), Bhubaneswar and a copy is attached as **Annexure-I**.	**Complied**
iii)	As observed from the presentation, there is no waste produced after the mining process. Hence the Overburden needs to be screened and sold.	It is confirmed that no waste is generated during the mining process. However, the Overburden (OB) material will be screened for its usability. The screened material will be categorized and sold for suitable applications such as construction aggregates or roadbuilding material. This approach ensures sustainable waste management practices, aligning with the environmental guidelines.	**Complied** as The PP agrees that the Overburden (OB) material will be screened for its usability and sold.
iv)	The proponent shall submit the road mRL, adjacent to the ML area, bottom surface of quarry lease mRL at the end of the approved mining plan period.	A detailed map showing road mRL, bottom surface of quarry lease mRL attached as **Annexure-II**.	Attached as **Annexure-II & Complied.**
v)	As per the PP, the Ghodahada River is at 90m distance (approx.). There should be no discharge of water to the river from the mine. All the water is required to be contained inside the	There is no use of water in the mining operations at the site, so there is no discharge of process water from the mine. Additionally, mining operations are suspended	**Complied.**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	mine with settling pits of adequate design and shall be used to meet the water demand of the mine.	during the rainy season. Therefore, the only water inflow into the area is rainwater runoff from the top of the lease area during rainfall events. To manage this rainwater, settling pits have been designed and constructed within the mining lease area. These pits will collect and store the rainwater, allowing sedimentation to occur naturally. The settled water can later be reused for dust suppression or plantation purposes, as needed.	

Considering the information furnished and the presentation made by the consultant, **M/s. Cognizance Research India Private Ltd, Noida** along with the project proponent, the SEAC recommended for grant of Environmental Clearance upto lease period subject to availability of approved DSR with stipulated conditions as per **Annexure – A and following additional conditions;**

i) The lessee shall not use wagon drilling blasting.

ii) No storage and usage of blasting materials/explosives inside the lease area shall be permitted.

iii) The proponent shall obtain NOC from CGWA and permission from WR department, Govt. Of Odisha for use of ground water, if any.

iv) The project proponent shall maintain periodic health check-up records of their employees and ensure use of face mask by workers in crushing and handling sections of the stone quarry for ensuring that working personnel are not affected by silicosis.

v) The project proponent shall undertake re-grassing of the area or any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for fodder, flora, fauna etc. after ceasing mining operation that is at the time of mine closure.

vi) Haulage road shall be developed and maintained perennially and perpetually by the proponent in consultation with the concerned authority of the Govt.

vii) Detail risk and hazard management procedure as per the **Annexure – B** shall be followed by the lessee.

ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S ESSAR MINMET LIMITED FOR SETTING UP OF 14.3 MTPA GREENFIELD IRON ORE BENEFICIATION PLANT AT TIKARPADA, KENDUJHAR DISTRICT OF SRI AMOL DANGORE – EC.

1. This proposal is for Environmental Clearance of M/s Essar Minmet Limited for Setting up of 14.3 MTPA Greenfield Iron Ore Beneficiation Plant at Tikarpada, Kendujhar district of Sri Amol Dangore.
2. **Category:** As per EIA Notification, 14th September 2006 followed by subsequent amendments, the proposed project falls under Category B1 – schedule 2(b) – Mineral beneficiation.
3. **Details of TOR:** The ToR for EIA of the proposed project was accorded by the MoEF&CC, Govt. of India vide their letter F. No-J-11011/110/2021-1A. II (I) dated 12.04.2021.
4. **Public hearing, if any conducted:** Public Hearing for the project was held on 18.01.2025 at At Mouza - Mahadeijoda (Khata No. 264/3, Plot No. 2073 under Sadar Keonjhar Tehsil of Keonjhar district in accordance with the Ministry of Environment, Forest & Climate Change, Govt of India, EIA Notification No SO -1533 (E) dated 14.09.2006. Major issues raised during hearing were Development of village / Panchayat, Water Supply (drinking + domestic), Development of Road, Improved Health & Education facilities, Employment for local people, Greenery Development, Irrigation facilities, Pollution Control including wastewater management, Toilet facilities & Training & skill development. An amount of Rs. 17.6 Crore has been earmarked under EMP to address the issues/suggestion raised during public hearing.
5. **Location and connectivity**: The proposed project is located at Village- Tikarpada and Kadagarh, Tehsil - Kendujhar Sadar, District – Kendujhar, Odisha.

Sl. No.	Particulars	Details
i)	Geo-coordinates of project site	21°41'20" N, 85°33'18"E 21°41'55" N, 85°33'36"E 21°41'29" N, 85°32'58"E 21°41'33" N, 85°33'30"E
ii)	Toposheet no.	OSM No. - F45N10 (Specific Plant Location)
iii)	Kisam of land	Un-irrigated, non-forest land of Govt. of Odisha being acquired through IDCO
iv)	Total Land	Total Land- 38.38 Ha
v)	Nearest distance of approach road, SH, NH, Airport etc.	Nearest Airport – Jharsuguda (200 km) & Bhubaneswar (210 km) Nearest Sea Port- Paradip (250 km) NH - 215 (NH-20) is at a distance of 3.0 km on the eastern side of the proposed plant. NH 49 runs around 8.0 km at the southern side of the plant and intersects NH 215 in Kendujhar town.

<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td></td><td></td><td>Nearest Railway Station – Gualdih, about 3 km north west from the proposed site.

Nearest Town - Kendujhar, 8.5 km, SE</td></tr>
<tr><td>vi)</td><td>Nearest water bodies</td><td>Project site: No
Study area:<table><tr><th>Waterbody</th><th>Direction</th><th>Distance (km)</th></tr><tr><td>Machkandana Nadi</td><td>E</td><td>1.0</td></tr><tr><td>Ardei Nadi</td><td>NE</td><td>3.7</td></tr></table></td></tr>
<tr><td>vii)</td><td>Reserve forest</td><td>Within 10 km of the study area:
RF- Belda RF (8 km E), Nayagarh RF (6 km NW), Ichinda RF (3 km SW), Gualdih forest (3.2 km N) and SanaGhagara RF (3.5 km S)

PF- Gandhamardhan PF (7 km SW), PF (7 km NE)</td></tr>
<tr><td>viii)</td><td>Nearest Habitation.</td><td><table><tr><th>Habitation</th><th>Direction</th><th>Distance (km)</th></tr><tr><td>Tikarpada Vill.</td><td>S</td><td>0.60</td></tr><tr><td>Kadagarh Vill.</td><td>NE</td><td>0.90</td></tr><tr><td>Mahadeijoda Vill.</td><td>W</td><td>0.80</td></tr></table></td></tr>
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6. There is an Elephant Migratory Corridor along North-West to South-West of the study area. A site-specific conservation plan has been prepared to retain it undisturbed.

7. **Land acquisition status**: Land (71%) has been transferred to the proponent by IDCO for the Project. Balance land is in the final stage of acquisition.

8. **Statutory clearances obtained:**

   - Water drawl approval obtained from Dept. of Water Resources (Govt. of Odisha) vide Letter No.: 9276/WR dated 13.04.2022.
   - Power connectivity approval from OPTCL Talcher-Joda feeder received on 04.08.2022. Renewable power of up to 200 MW will be supplied by NTPC to ESSAR Minmet Limited Projects and MoU has been signed for the same.

9. **Summary of the products generated by the project:**

Units	Products and By products	Existing
Beneficiation plant	Iron ore Concentrate (BF & DRI grade	Proposed- 14.3 MTPA

10. **Proposed Unit Configuration:**

Sl. No.	Unit	Proposed Capacity (MTPA)
i)	Grinding & Beneficiation plant	2 x 7.5
i) A	Feed conditioning (Drum Scrubber) – 4 Nos.	500 TPH each

Sl. No.	Unit	Proposed Capacity (MTPA)
i) B	De-sliming cyclones for 2 clusters per line - 4 Nos.	150 TPH each
i) C	Gravity Separation Equipment – Spirals 10 Banks	300 TPH each
i) D	Magnetic Separation Equipment – 14 Nos.	100 TPH each
i) E	Wet type Ball Mills - 6 Nos.	4.8 m Dia x 24 m long 6 x 250 TPH
ii)	a) Concentrate thickeners - For DR grade conc.- 1 No. b) Concentrate thickeners - For BF grade conc. - 2 Nos.	50 m dia each 60 m dia each
iii)	Intermediate thickeners (3 Nos.)	50 m dia each
iv)	Residual fines thickener - 1 No.	60 m dia
v)	Residual fines storage tank - 1 No.	7500 tons (18 m dia x 20 m ht)
vi)	Concentrate slurry holding tanks with Agitator - 4 Nos.	7500 tons (18 m dia x 20 m ht) each
vii)	Pump house for slurry transportation - 4 W + 1 S	350 Cum per hour each

11. **Raw material:**

Material	Quantity, MTPA	Probable Source
Iron ore fines	17.5	Will be sourced/procured locally from the surrounding major merchant iron ore mines in Joda Barbil-Koira regions (Kendujhar and Sundargarh Districts) of Odisha

Sl. No	Mining Company / Lessee	Contracted Quantity MTPA	Date of Agreement	Mines name	Distance from the plant
A	**Iron Ore Fines Agreement for 14.3 MTPA Beneficiation Plant**				
i)	Indrani Pattnaik	2.0	6th Aug' 2024	Unchabali, Murgabeda	40 KM
ii)	TP Mohanty	1.0	24th May' 2024	Naibuga	40 KM
iii)	MGM Minerals Limited	0.5	15th June' 2024	Patabeda	45 KM
iv)	Kashvi International Pvt. Ltd	2.0	22nd Aug' 2024	Jaribahal, Dholta Pahar	40-90 KM
v)	S N Mohanty	2.0	15th June' 2024	KJST	90 KM
vi)	San & Co	6.0	21st Aug'2024	Aggregator	--
vii)	JRS Ventures	2.0	2nd Aug' 2024	Aggregator	--
	Sub-Total A	**15.5**			
B	Odisha Mining Corporation Ltd (OMC)	17.5	Assurance letter dated 26th Dec' 2022 rec'd from OMC for supply of Iron ore fines	Gandhamardan, Guali, Jilling Langalota, Dubuna Serkadi, Khand-bandh	~20 KM - < 80 km
	Sub-Total B	**17.5**			

Sl. No	Mining Company / Lessee	Contracted Quantity MTPA	Date of Agreement	Mines name	Distance from the plant
	Total (A+B)	**33.0**			

12. **Baseline study data –**

- **Time period -** The baseline data were collected in during Summer Season (March to May, 2024).

Parameter	Number of Locations	Description
Ambient Air Quality Monitoring	08	$PM_{2.5}$ = 32.23 - 49.56 µg/m^3 (P98 value)
		PM_{10} = 62.74 - 75.46 µg/m^3 (P98 value)
		SO_2 = < 4.0 µg/m^3
		NOx = 18.20 - 30.00 µg/m^3 (P98 value)
		CO = <4.18 mg/m^3
Noise Level Monitoring	09	Day Time - 51.73 to 65.71Leq dB (A) Night Time - 41.23 to 54.41 Leq dB (A)
Surface water	08	**pH** - 6.77- 7.11 **DO** - 5.93 - 6.40 mg/l **BOD** - 3.33 – 7.67 mg/l **COD** - 11.17 – 33.6 mg/l
Ground Water	08	**pH** - 6.40- 7.02 **Total Hardness** - 66.66 - 377.14 mg/l **Chlorides** - 25.37 - 157.69 mg/l **Fluoride** - 0.19 - 0.51 mg/l **TDS** - 248.7-1055.3 mg/l **Cr^{6+} (Heavy Metal)** - <0.1 mg/l
	08	pH - 6.58 to 6.96 Organic Matter - 0.45 % to 0.82 % Nitrogen - 210.08 to 272.15 kg/ha Phosphorous - 12.83 to 51.72 kg/ha Potassium - 195.67 to 380.96 kg/ha

13. **Water requirement:** The water requirement for the proposed project is estimated as 17520m^3 /day, which will be sourced from Baitarani River through pipeline. Additionally, 370m^3/hr return water from slurry dewatering at the interlinked pellet plant at Paradip, Odisha will be received through return water pipeline for usage in the beneficiation plant processes.

14. **Wastewater management:** Wastewater, of around 14.4 KLD, upon treatment in STP will be used for greenery development. Clarifloculator of capacity 2.5 MLD has been provided to separate solid from extra storm water. The plant will be designed on ZLD basis.

15. **Rainwater Harvesting**: Planned rainwater harvesting intervention for the plant area buildings is estimated around 3648.90 m^3. Total RWHS intervention planned to be undertaken under this project is for recharging/ storage of 10000 cum rainwater. Total RWHS intervention planned to be undertaken under this project is for recharging/ storage of 10000 cum rainwater. Total rainwater potential of the plant area (built-up + open areas) is around 4,71,000 cum. Clarifloculator of 2.5 MLD will be installed which can handle 50 % of the total

rainwater and the water can be utilized for makeup water requirement (accordingly makeup water from Baitarani will reduce) and any excess clean water from clarifloculator would be discharged to nala.

16. **Power requirement**: The power requirement for the proposed project is estimated as 38 MW (max)/ 332.90 kWh x 10^6 (avg.), which will be obtained from the Talcher Joda feeder of OPTCL.

17. **Soild Waste Generation And Management:**

Particular	Since inception of Mine	Generation and management during Plan Period	Generation and management during Conceptual Period
Top Soil	Quantity: 6,650 tons Management: Used for plantation and green belt development. No separate storage required.	Quantity: 22,233 tons Management: Use in greenbelt and plantation.	Quantity: 4,37,062 million tons Management: Use in greenbelt and plantation, also for spreading over backfilled area
Waste	Quantity: 1.50 million tons Management: dumped in temporary waste dump over an area of 13.78 ha up to 42 m height	Quantity: 5.14 million tons Management: will be dump in existing temporary waste dump over an area of 19.54 ha	Quantity: 37.975 million tons Management: Backfilling in the mining lease area.

18. **Greenbelt**: Proposed greenbelt will be developed in 12.67 ha which is about 33% of the total project area. A 10-40m wide greenbelt, consisting of 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/ MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees/Ha. Total no. of 32,675 saplings will be planted and nurtured in 12.67 hectares in 4 years.

19. **Total employment:** The employment generation from the proposed project is 1,050 (both direct and indirect) during construction and 103 permanent and 200 (indirect) during operation.

20. **Project cost**: The capital cost of the proposed project is **Rs 1,918 Crores** and the capital cost for environmental protection measures is proposed as **Rs 75 Crores.** The annual recurring cost towards the environmental protection measures is proposed as **Rs 5.0 Crores**. The details of cost for environmental protection measures are as follows:

Sl. No	Particulars	CAPEX (INR Lakh)	OPEX (INR Lakh)
i)	Greenbelt	300	40
ii)	Clarifloculator for treating runoff water	600	60
iii)	RCC Roads & Rainwater Harvesting	2000	50
iv)	Pipe Conveyor	3150	200
v)	Peripheral Rainwater garland drain	320	40
vi)	MDSS (Mechanical dust suppression system for TUS, Yard conveyor Junction House, Reclaimer &	300	30

Sl. No	Particulars	CAPEX (INR Lakh)	OPEX (INR Lakh)
	stacker Transfer Chutes)		
vii)	Continuous Ambient air quality monitoring system	400	40
viii)	Sewage treatment plant	100	20
ix)	Water quality monitoring analyzer	100	10
x)	Environmental laboratory	200	10
xi)	Piezometer with online pH and conductivity meter	30	0
	Total	**7500**	**500**

21. **Environment Consultant**: The Environment consultant **M/s M. N. Dastur & Company (P) Ltd.,** along with the proponent made a presentation on the proposal before the Committee on **22.04.2025**.

22. The SEAC in its meeting held on dated **22.04.2025** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Land documents and permission from IPICOL & IDCO for use of proposed approach road of 3.7km connecting the project site to the National Highways.	Essar Minmet Ltd (EML) Beneficiation plant will be connected from NH-20 with an exclusive road connecting Raisuan for movement of dumpers/ trucks, carrying iron ore fines from different mines. This road length will be 3.7 km and width 24 mt. EML had requested IPICOL to allot land through IDCO, vide letter dated 20th Sep 2024 (**Annexure 1.1**). Subsequently, IPICOL vide their letter no. CGM/SLNA/EML- 185/19 dated 6th Nov 2024 (**Annexure 1.2**) conveyed their approval to IDCO and recommended 22.85 acres land for the said road. They also informed IDCO to take up the construction of this approach road on depositary work basis. EML submitted all land details to IDCO vide letter dated 14th Feb 2025 (**Annexure 1.3**) and requested to initiate action for land acquisition and road construction on depositary basis. The map of proposed road is attached for	Permission from IPICOL vide their letter no. CGM/SLNA/EML-185/19 dated 6th Nov 2024 is attached as **Annexure 1.2** wherein IPICOL have conveyed their approval to IDCO and recommended 22.85 acres land for the said road **Complied**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		reference (**Annexure 1.4**) The road will be made ready before commencement of the plant operation.	
ii)	Dimensions of the road and materials for its construction (The approach road proposed should be wide enough and made up of sturdy material for handling of the massive pressure during conveyance).	IPICOL has recommended 22.85 acres land as per their standard for EML exclusive road for transport of raw materials from National Highway-20 to Beneficiation plant. Accordingly, EML is going to construct 24 mt wide road for this purpose which will be as per MORTH standard to take care of heavy load transport continuously. The cross-section of the road is attached at **Annexure 2.1**.	24 mt wide road will be constructed which will be as per MORTH standard to take care of heavy load transport continuously. The cross-section of the road is attached at **Annexure 2.1** **Complied**
iii)	Land documents regarding the conversion of kisam of the project site from Gochar to industrial use.	Documents with respect to land de-reservation from Gochar and conversion to Patit for village Tikarpada vide i) letter no. 2417/Rev./Dt. 30.09. 2023 ii) letter no. 498/XIX-36/2024/Rev Dt. 06/03/2024 from Office of the Collector & District Magistrate, Keonjhar (**Annexure 3.1**). Documents with respect to land de-reservation from Gochar and conversion to Patit for village for village Kadagarh vide i) letter no. 2398/Rev./Dt. 29.09. 2023 ii) letter no. 502/XIX- 37/2024/Rev Dt. 06/03/2024 from Office of the Collector & District Magistrate, Keonjhar. (**Annexure 3.2**)	The attached Annexure 3.1 & 3.2 are regarding the conversion of kisam of the project site from **Gochar to Patit.**
iv)	Safety precautionary measures to be taken for health protection of the children studying in the primary school nearby.	Govt. Upper Primary School is located at Tikarpada, at a distance of about 100 m to the south of the project site. The following measures have already been considered in the plant layout to minimize the impact of the project on the school.	----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		1. Only non-process units such as admin building, two-wheeler parking, MRSS, canteen etc. have been proposed in our plant layout on the south side of the land area towards the school. 2. Process units and raw material storage facilities have been located to the north side of the land area which is away from the school. Even for raw-material storage area, appropriate dust control measure like water sprinkling, DFDS systems are already envisaged. 3. The project area towards the school is primarily utilized for greenbelt development which will further reduce the impact of fugitive dust and noise on the school. Additional measures to mitigate impact on the school are as follows: 1. Additional wind screen to be installed on the boundary wall towards the school 2. Tree species comprising of high canopy cover to be planted inside the boundary nearest to the school	
v)	Brief note on timeline of completion of the slurry pipeline project proposed.	The slurry pipeline will be laid from Beneficiation plant at Tikarpada Keonjhar to Pellet plant at Paradip. The distance is approx. 245 km. The pipeline will be laid 1.5 mtr below the ground surface for which already Right of Way has been obtained. The tentative slurry pipeline laying schedule is of 25 months. The slurry pipeline schedule is attached (**Annexure 5.1**).	The tentative slurry pipeline laying schedule is of 25 months. The slurry pipeline schedule is attached as **Annexure 5.1** **Complied**
vi)	Write-up on the slurry pipeline route and its land acquisition status along the utility corridor.	The slurry pipeline will be laid from Beneficiation plant at Tikarpada Keonjhar to Pellet plant at Paradip. The distance is approx. 245 km. While starting from Beneficiation plant to Pellet plant, it passes through PWD road, NH-20, NH-16, NH-53, side of Taldanda canal and	National Highway Authority of India has designated utility corridor of 5 mt on either side of the highway attached as

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		road under Paradip Port. The width of RoW is 1.5 mt. National Highway Authority of India has designated utility corridor of 5 mt on either side of the highway (**Annexure 6.1**) The RoW for the complete length is approved from the concerned authorities. Summary of RoW approvals for Slurry pipeline are attached (**Annexure 6.2**) and RoW approvals are attached (**Annexure-6.3**).	**Annexure 6.1** Summary of RoW approvals for Slurry pipeline are attached as **Annexure 6.2** and RoW approvals are attached as **Annexure- 6.3** **Complied**
vii)	Traffic study vetted by Institute of repute.	Traffic study has been prepared by M/s M N Dastur & Company (P) Ltd. Consulting Engineers (NABET Certificate No. NABET/EIA/2225/RA 0289, dated 06.07.2023)	**Traffic study has not been vetted by any reputed institution.**
viii)	Care should be taken to discharge only clean treated wastewater to the nearby nala in monsoon season. Zero Liquid Discharge should be maintained during the non-monsoon season.	The Beneficiation plant at Tikarpada is going to operate on zero liquid discharge principle. The STP water will be used green belt. During non- monsoon season the process drain water will be pumped to Thickener and used further. During monsoon the storm water will be utilized as make up water and if at all any extra water which cannot be used will be cleaned through Clar flocculator, from which solids will be collected and clear water will be discharge to the nearby Nala.	The Beneficiation plant at Tikarpada is going to operate on zero liquid discharge principle. **Complied**
ix)	Brief note on the residual slime management along with the process details.	The major solid waste would be the residual fines consisting of total non-magnetic fraction obtained from the different process equipment. About 1.5 MTPA (maximum on dry basis) residual fines will be generated from the proposed beneficiation plant. The residual fines collected from the residual fines thickener underflow would be stored at residual fines slurry holding tank and subsequent the same will be pumped to pressure filters (residual fines for necessary treatment to recover water and generation	**Complied**. • The detail process of handling of residual fines is given in EIA Report at Chapters 2 and 4A • PP has already signed an MoU with M/s. Sree Metailiks Limited who has agreed

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		of the residual fines filter cake with about 10 to 15% moisture and the same would be stored in dry form in a residual fines/residual fines storage area. Residual fines generated from the plant have been planned to store in dry form all along the western boundary of identified land at Tikarpada considering the presence of hills all along the western boundary (The detail process of handling of residual fines is given in EIA Report at Chapters 2 and 4A). EML has already signed an MoU with an agency who is going to lift this material for further processing at their end (**Annexure 9.1**). The storage area can accommodate 4.5 months of residual fines. EML is also planning for taking additional land for increasing residual fine storage area. If any time the material quantity increases due to sluggish offtake by MoU agency, other agencies will be tried. If extra material still becomes problem, same will be stored like a hill and trees will be planted so that material does not wash out.	to purchase the said residual fines (non-binding material) and will use after recycle at their Plant at Anra. Copy of the MoU is attached as **Annexure 9.1** **The PP is also planning for taking additional land for increasing residual fine storage area. If any time the material quantity increases due to sluggish offtake by MoU agency, other agencies will be tried. If extra material still becomes problem, same will be stored like a hill and trees will be planted so that material does not wash out.**
x)	PP should plan for development of food forest as a part of the planation initiative and incorporate substantial number of Kendu trees.	Due care will be taken while planting trees to develop food forest along with other trees as advised by DFO which is included in EIA report. Substantial number of Kendu trees also will be planted.	**Complied**
xi)	Plan of activities for skill development of the local people.	Under Corporate Environmental Responsibility (CER), EML has planned to impart skill development training on welding, electrician course, machinery,	Plan of activities for skill development of the local people

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		carpentry to 80 persons each year for three years. For women, vocational training on tailoring, farming and poultry will be taken under skill development for 60 women in a year for three years. The above plan is included under monitorable action plan for addressing Public Hearing issues. The above information is given in chapter 7.	has been submitted and **complied**

23. The Committee observed the following:

a) Land for Beneficiation Plant at Tikarpada and Kadagarh in the district of Keonjhar has been proposed over 94.85 acre of Govt. Land in EC application and accordingly, layout map has been submitted. The entire land parcel of 109.25 acres which includes the above 94.85 acres of land has been obtained by IDCO for Essar Minmet Limited (EML). IDCO has signed a land lease deed with the Collector Keonjhar. Payment has been made for 67.33 acres of land to IDCO by EML which constitutes major portion of land (71%). Demand Letter from IDCO was received on 11.09.2023 vide letter no. HO/P&A/LAE-8042/2020-23 and payment receipt dated 18.01.2024. For the balance 41.92 acres of land, the land converted from Gochar land to Patita land, IDCO has already signed lease deed with Collector Keonjhar. A demand note from IDCO for this 40.52 acres of land is expected soon. Accordingly, the lease deed between EML and IDCO will be executed.

b) A Writ Petition No. 10989 of 2025 (Madhusudan Sahu & Ors Vrs Union of India & Ors) has been filed before the Hon'ble High Court of Orissa in the form of a Public Interest Litigation (PIL). The petition challenges the validity and legality of the public hearing conducted on 18.01.2025 for the proposed 14.3 MTPA Iron Ore Beneficiation Plant to be set up at Tikarpada, in the district of Keonjhar, Odisha. The petitioners have claimed that the public hearing was conducted violating the following grounds mentioned below:

i) The public hearing was convened before the expiry of 30 days from the purported newspaper publication.

ii) The affected villagers of the project area have been physically restrained from the said public hearing.

- The prayer of the petitioners:

  i) Quashing the public hearing.

  ii) Convene a fresh public hearing.

However, the facts as analysed are as follows:

i) Date of 1st Public Hearing notification advertisement in the newspaper was 20.09.2024 and date of 1st Public hearing was 28.10.2024. The 1st public hearing

was cancelled due to law and order situation. Date of 2nd Public hearing notification advertisement in the newspaper was 02.01.2025 and date of 2nd Public hearing was 18.01.2025.

ii) As this was the rescheduled public hearing, the notification in the newspapers was given 15 days before as per amended EIA Notification, S.O. 2163 (E), dated 09.05.2022.

iii) 226 people were participated in the public hearing held on 18.01.2025 covering all the affected villagers.

iv) About 186 persons expressed their views orally and in writing in the meeting.

v) Writ petition is pending before the Hon'ble High Court of Orissa. No formal court instruction is there for any stay or any other action.

c) Govt. Upper Primary School is located at Tikarpada, at a distance of about 100 m to the south of the project site and the proponent has to take precautionary measures for safety and health protection of the children studying in the primary school.

24. **The Committee opined that the EC application has to be disposed off within the time limit prescribed in EIA Notification, 2006 and amendment thereafter and EC can be granted on merit subject to final outcome of the Writ Petition No. 10989 of 2025 (Madhusudan Sahu & Ors Vrs Union of India & Ors) pending before the Hon'ble High Court of Orissa, where in the public hearing has been challenged**.

Considering the information furnished and the presentation made by the consultant, **M/s M. N. Dastur & Company (P) Ltd.** along with the project proponent, the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – C** in addition to the following specific conditions:

i) **The EC may be granted subject to final outcome of the Writ Petition No. 10989 of 2025 (Madhusudan Sahu & Ors Vrs Union of India & Ors) pending before the Hon'ble High Court of Orissa, where in the public hearing has been challenged and in view of the time limit prescribed in the EIA Notification for disposal of application**.

ii) The waste water that will be generated from the tailings shall be treated in ETP following appropriate standard technical procedure.

iii) Care should be taken to discharge only clean treated wastewater to the nearby nala in monsoon season. Zero Liquid Discharge should be maintained during the non-monsoon season.

iv) The project activity shall be confined to 94.85 acre of land as per the EC application and layout map submitted. No gochar land shall be used without dereservation.

v) Govt. Upper Primary School is located at Tikarpada, at a distance of about 100 m to the south of the project site and the proponent shall take following precautionary measures as proposed for safety and health protection of the children studying in the primary school.

a) Only non-process units such as admin building, two-wheeler parking, MRSS, canteen etc. have been proposed in our plant layout on the south side of the land area towards the school.

b) Process units and raw material storage facilities have been located to the north side of the land area which is away from the school. Even for raw-material storage area, appropriate dust control measure like water sprinkling, DFDS systems are already envisaged.

c) The project area towards the school is primarily utilized for greenbelt development which will further reduce the impact of fugitive dust and noise on the school.

d) Additional wind screen shall be installed on the boundary wall towards the school.

e) Tree species comprising of high canopy cover shall be planted inside the boundary nearest to the school.

vi) The PP shall plan for development of food forest as a part of the planation initiative and incorporate substantial number of Kendu trees.

vii) Traffic study report shall be vetted by Institute of repute.

viii) As the PP will implement the dry stacking of tailings, there will be trickling down of effluent. Also during rain, the leached effluent from stack will trickle down. PP shall ensure collection of these effluents for treatment with routine analysis to ensure satisfying the standard before it is discharged. All data shall be kept for periodical compliances.

ix) The project site is situated by the side of a hill. It has a gradient towards residential area. During heavy rain it may so happen that the storm water may carry iron ore fines and tailings to nearby village area and agricultural field. So, PP shall design and implement proper retaining wall and drain around the raw material storage area and tailings dump area to reduce damages to the nearby residential area and agricultural field during heavy rain.

ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S SUMMA REAL MEDIA PVT. LTD FOR PROPOSED PHARMACEUTICAL MANUFACTURING & RESEARCH UNIT COMPRISING PHARMACEUTICAL FORMULATION & DEVELOPMENT CENTER OVER A TOTAL BUILT-UP AREA 46061.50M^2 AT MOUZA - GOTHAPATANA, BHUBANESWAR, DIST - KHORDHA OF SRI ANURAG NAYAK – EC.

1. This proposal is for Environmental Clearance for M/s Summa Real Media Pvt. Ltd. for proposed pharmaceutical manufacturing & research unit comprising pharmaceutical formulation & development center over a Total Built-up area of 46061.50m^2 at Mouza - Gothapatana, Bhubaneswar, Dist - Khordha of Sri Anurag Nayak.
2. **Category:** This project falls under Category “B”, Project or Activity 8(a) Building and Construction projects as per EIA Notification dated 14th Sept, 2006 as its amendments.
3. **Location and connectivity**: The proposed project is construction of building to facilitate a research unit comprising of pharmaceutical formulation & development centre. The project comprises of 10 nos. of RCC Buildings over revenue Plot no. 153-155, 157(P)-1 60 (P), 149(P) , 151(P), 156(P), 152(P) and Khata No. 1/E and Plot no. 3 , Revenue Khata no. – 684/3, IDCO land, located at Mouza - Gothapatna, Dist-Khorda. The project site falls under Topo sheet No. F45T15. The site is coming under IDCO Industrial Area. The site is located adjacent to the local landmarks, Satabdhi Resorts, Krishna International School and

Krishnapuri residential area at Mouza - Malipada. The Nearest railway station is Bhubaneswar Railway station which is about 10 km from the project site. The Nearest airport is Biju Patnaik International Airport, Bhubaneswar about 6.7 km(aerial) from project site. Present Kisam of land is Industrial. Proposed site is well connected to Khandagiri - Chandaka Road at distance of 8 km through Gothopatna Road by newly constructed road from the project site. Nearest NH is NH-16-6.23km, SE and AH-45-9.61km. The Nearest sanctuary is Chandaka Wild Life Sanctuary – 3.76km. The Nearest protected forest Bharatpur Protected Forest - 3.16KM.

4. **The Geographical coordinates of the project site:**

Sl. No.	Latitude	Longitude	Sl. No.	Latitude	Longitude
i)	20^0 18' 10.41''N	85^0 44' 45.91''E	**9**	20^0 18' 16.15''N	85^0 44' 53.61''E
ii)	20^0 18' 12.38''N	85^0 44' 46.55''E	**10**	20^0 18' 3.29''N	85^0 44' 55.36''E
iii)	20^0 18' 14 54''N	85^0 44' 47.25''E	**11**	20^0 18' 5.55''N	85^0 44' 55.55''E
iv)	20^0 18' 9.28''N	85^0 44' 47.41''E	**12**	20^0 18' 12.40''N	85^0 44' 57.65''E
v)	20^0 18' 16.50''N	85^0 44' 47.88''E	**13**	20^0 18' 5.67''N	85^0 44' 58.12''E
vi)	20^0 18' 7.91''N	85^0 44' 49.22''E	**14**	20^0 18' 12.16''N	85^0 44' 58.23''E
vii)	20^0 18' 16.51''N	85^0 44' 51.57''E	**15**	20^0 18' 16.54''N	85^0 44' 58.66''E
viii)	20^0 18' 5.79''N	85^0 44' 52.30''E			

5. The project site comes under Bhubaneswar Development Authority.
6. The Proposed building comprises of 10 Nos. of RCC Buildings which are:

   i) Common QC, QA, Sales, Factory, Admin etc. (G+9) having total built up area 12000 sqm.
   ii) Change room, toilets and canteen building (G+9) having total built up area 10000sqm.
   iii) General products Tablets, Capsules etc. Building (G+4) having total built up area 6000sqm.
   iv) NUTRA block building (G+4) having total built up area 6000sqm.
   v) LVP Block (G+2) having total built up area 9408sqm.
   vi) Common Indoor utility servicing Building (G+2) having total built up area 937.50 sqm.
   vii) Fuel Storage Building (G) having total built up area 1125 sqm.
   viii) Primary Health Care Center (G+1) having total built up area 333.0 sqm.
   ix) Security Cabin (3 no.s) having total built up area 162 sqm.
   x) 10 Watchman Cabin (8 no.s) having total built up area 96 sqm.

   Total plot area =25 AC

   Total Built Up Area =46061.50 SQM

   Total FAR Area =46061.50 SQM

7. **LULC of project site:** Proposed project site comes under Public and Semi-Public Zone as per LULC map of Bhubaneswar Development Authority**.**

Description	Area In Sqm	%
Total Built Up Area	46061.50	45.5
Total FAR Area	45061.50	44.52
Ground coverage	9402.22	9
Open Parking	16852.71	17
Green Belt	20242	20
Open space	13154	13.
Open Area for Future Expansion	27714	27
Internal Road and Other Facilities	13843.59	14
Total Plot Area	101208.06	100

8. **Project Area Statement:**

Area statement	Gr. Fl. (in m)	1st fl. (in m)	2nd fl. (in m)	3rd fl. (in m)	4th fl. (in m)	5th fl. (in m)	6th fl. (in m)	7th fl. (in m)	8th fl. (in m)	9th fl. (in m)	Bldg.Ht (in m)
(a)comm. QC, QA, sales factory admin, etc.(G+9)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	36.0
TOTAL BUILT-UP-AREA=12000.00SQ.MTS.											
Area statement	Gr. Fl. In smt.	1st fl. In smt.	2nd fl. In smt.	3rd fl. In smt.	4th fl. In smt.	5th fl. In smt.	6th fl. In smt.	7th fl. In smt.	8th fl. In smt.	9th fl. In smt.	Bldg.Ht. in mts.
(B) Change room, toilets & canteen bldg.	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	36.0
TOTAL BUILT-UP-AREA=10000.00SQ.MTS.											
(c)general products tablet, capsules etc(G+4)	1200	1200	1200	1200	1200	----	----	-----	-----	-----	25.0
TOTAL BUILT-UP-AREA=6000.00SQ.MTS.											
(d)NUTRA block bldg. (G+4)	1200	1200	1200	1200	1200	----	----	-----	-----	-----	25.0
TOTAL BUILT-UP-AREA=6000.00SQ.MTS.											
(e) LVP block(G+2)	3136	3136	3136	----	----	-----	-----	-----	-----	-----	18.0
TOTAL BUILT-UP-AREA=9408.00SQ.MTS.											
(f) Common indoor utility serv. Bldg.	312.5	312.5	312.5	----	----	-----	-----	-----	-----	-----	21.0
TOTAL BUILT-UP-AREA=937.00SQ.MTS.											

(g) Fuel storage bldg.	1125	-----	-----	----	----	-----	-----	-----	-----	-----	7.0
TOTAL BUILT-UP-AREA=1125.00SQ.MTS.											
(h) Primary health care centre (G+1)	166.50	166.50	-----	----	----	-----	-----	-----	-----	-----	7.2
TOTAL BUILT-UP-AREA=333.00SQ.MTS.											
(i) Security cabin (3nos.) (9x6), G	54x3	-----	-----	----	----	-----	-----	-----	----	-----	3.0
TOTAL BUILT-UP-AREA=162.00SQ.MTS.											
(J) Watchman cabin 4x3 each, (8 nos), G	12x8	-----	-----	----	----	-----	-----	-----	-----	-----	3.0
TOTAL BUILT-UP-AREA=96.00SQ.MTS.											

9. **Justification for Proposed Project is proposed under 8(a) - Building & Construction Project:**

   - Basically, this is a Drug Formulation Unit Mainly Nutraceuticals and pharmaceutical formulations and R & D and there is no chemical Production.
   - No Chemical synthesis is required in the process of Drug Formulation proposed.
   - Since, only physical processes like Binding, Granulation, Blistering, Stripping, Filtration and pH adjustment etc. are involved in this unit. Hence, the proposed project does not come under category - 5(f).
   - Due to total built up area of 10 no. of RCC Buildings proposed for pharmaceutical manufacturing & research unit which comprising pharmaceutical formulation & development center is more than 20,000 sqm, so the proposed project is comes under 8(a) - Building & Construction Projects (as per EIA Notification of 2006 and its amendment).

10. **Water requirement**: The total water requirement is 500 KLD (Drinking + Flushing+ Processing). The total fresh water requirement on daily basis is 400 KLD. The flushing water requirement is 15 KLD. The source of water supply is IDCO water supply.

11. **Wastewater details:** The project will generate approx. 400 KLD of wastewater out of which flow to STP is 23 KLD and flows to ETP is 375 KLD. The treated wastewater of 276 KLD will be recovered and reused in processing and gardening. The wastewater will be treated in an onsite STP of capacity 50 KLD & ETP of capacity 400 KLD. 276 KLD will be recycled within the project during dry season and 176 KLD treated waste water discharged into municipal in monsoon season.

WATER REQUIREMENT TABLE

Sl. No.	Towers	Total Units	No of Persons	Domestic water requirement in liters/day	Flushing water requirement in liters/day	Total water requirement in liters/day	Waste water generate in KLD	STP capacity
i)	**DRINKING WATER FOR All BLOCKS**							
a	Permanent Employees	10	250	5000	6250	11250	23	50 KLD
b	Temporary Employees	10	315	6300	7875	14175		
ii)	**PROCESS WATER FOR ALL PROCESSING UNITS**							
	Towers	**Total Units**	**RAW WATER**	**RECYCLED WATER**	**Total water requirement in liters/day**	**Waste water generate**	**ETP capacity**	
a)	Process water	10	375000	100	475000	375000	400000	
	Total			**60000**				

Total Water Requirement=500 KLD (Drinking + Flushing+ Processing)

Fresh Water Requirement on Daily Basis =400 KLD

Flushing Water Requirement = 15 KLD

Waste Water Generate = 400 KLD out of which flow to STP 23 KLD and flows to ETP 375 KLD

Treated Water Recovered and Reused = 276 KLD recovered and reused in processing and Gardening.

STP Capacity: 1 No. (50 KL)

ETP Capacity: 1 No. (400 KLD)

12. **Rainwater harvesting details:** Total 25 nos. of Rainwater harvesting pits of 56m^3 capacity will be constructed at different locations for storage of rain water. The rain water overflow from all Rain water harvesting pit shall be channelized into a central sump. Storm water from this sump can be pumped or connected to City Storm Water drain line near to the project site. 1 no. of recharge well will be provided for storm water recharge to ground water aquifer.
13. **Parking details:** Adequate provision of 16852.71 sqm. (30 % of total FAR Area of pharma unit and as per ODA planning standards) will be kept for car/vehicles parking at the surface parking purpose.
14. **Power Requirement:** The requirement load for the project will be 1500 kVA. The power supply will be supplied by TPCODL, Bhubaneswar. There is provision of 3 nos. of DG sets (3X650 KVA) capacity for power back up. There is a Stand by DG Set of Capacity = 1950 KVA (certified for Retrofit Emission Control Devices (RECDs) applicable to Diesel Genset Engines (Up to 800 kW). The proposed DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion. There is provision for installation of battery-operated light system in stair cases to be utilized during fire hazards.

15. **Solar Power Generation:** The Solar power demand for the proposed pharma unit will be 5% of total demand i.e., Solar power 75 KwP. An area of 900 Sq.m is required for roof top area for installation of Solar Photo voltaic power plant.

Solar Water Heating:

20 % of total hot water requirement must be catered through Solar

Thermal system:

Total Water Requirement – 500 KLD

Solar Hot water system for 20 % capacity = 100000 liters, 100 KLD

Solar Panel Nos@ 300 Liter/Panel = 334 Nos.

OR

Solar PV System

(Providing emergency lighting for common area (staircase, lift lobby, basement etc.)

SPV Modules of 170 Wp or above for a total capacity 75 KW OR 75000 WATT

SPV Panel Nos.@170 Wp/Panel = 441 Nos.

16. **Solid waste generation**: During the operation phase, waste will comprise domestic waste. Vegetable and Food waste, Food packets, Sludge from STP and Non-Biodegradable waste: Thermocol, Plastic, Cartoon, glass bottles, Paper waste. The Biodegradable and Non-Biodegradable waste disposed through BMC. The recyclable material like thermocol, cartoon boxes, Glass, plastic, newspaper waste is given to the rag pickers for recycling. The sludge generated from the STP will be directly taken by sludge tank to municipal dump yard. Industrial Waste will be sent to Treatment, Storage and Disposal Facility (TSDF). Each component will be collected in separate bins. The disposal of recyclable and non-recyclable waste and other waste will be done through the government approved agency.

Item	Other Item	Quantity per Annum	Unit	Distance from Site (KM)	Mode of Transport	Mode of Disposal	Name of Waste
Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		1.5	Kilolitre	40	Road	Authorized Recyclers	Used Oil
Paper, Plastic and Other mixed waste		160	Tons	40	Road	Authorized Recyclers	General waste scrap
E Waste		0.6	Tons	40	Road	Authorized Recyclers	Electrical and Electronic Waste
Industrial Waste		4.4	Tons	40	Road	Treatment,	ETP

Item	Other Item	Quantity per Annum	Unit	Distance from Site (KM)	Mode of Transport	Mode of Disposal	Name of Waste
						Storage and Disposal Facility (TSDF)	Sludge from ETP Process

17. **Greenbelt:** Total green area measures 20242 m^2 (20 % of the net plot area.) Evergreen tall and ornamental trees have been proposed to be planted inside the premises. The list of trees/plants to be planted is given below.
    No. of trees required = 1 tree/80 sq.m. of plot area =101208/80 = 1265 say 1266 Nos.
    Total no. of trees proposed = 1266.

18. **Manpower requirement:** During Construction phase, Permanent Employment- 10 nos & Temporary Employment-100 nos. During Operation phase, Permanent Employment- 250 nos & Temporary Employment- 315 nos.

19. **Traffic Study Report**: Traffic Study has been undertaken by **M/s Visiontek Consultant Services Private Limited, Bhubaneswar. LOS found to be "B".**

20. **Project cost**: Total estimated cost of the proposed project is Rs. 200 Cr. Cost for EMP is capital cost- 143 Lakh (During construction and operation phase) and the Annual recurring cost is 24 Lakh.

EMP COST DURING CONSTRUCTION PHASE

S. No.	Description of EMP during Construction Phase	Approximate Cost (Rs in Lacs)	Recurring Cost (Rs in Lacs)
i)	Water for Dust suppression	6.5	2
ii)	Strom Water Management (RWH)	20	-
iii)	Waste Water management (STP & ETP)	74	-
iv)	Solid Waste Management including OWC	15	1
v)	Air, Noise, Soil, Water Monitoring	-	1.5
vi)	PPE for workers & Health Care	3.5	0.5
vii)	Green Belt Development	8	1
viii)	Others	3	0.5
Total		**130**	**6.5**

EMP COST DURING OPERATION PHASE

S. No.	Description of EMP during Operation Phase	Approximate Cost (Rs in Lakhs)	Recurring Cost (Rs in Lacs)
i)	Strom Water Management (RWH)	0	2
ii)	Waste Water management (Sewage Treatment Plant)	0	4.5
iii)	Solid Waste Management	1	5
iv)	Green Belt Development	8	3.5
v)	Monitoring for Air, Water, Noise & Soil	-	1.5

vi)	Others	3	1
	Total	**13**	**17.5**

21. **Environment Consultant**: The Environment consultant **M/s Visiontek Consultant Services Private Limited, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee on 10.07.2024.

22. The SEAC in its meeting held on dated **10-07-2024** recommended the following:

A. **The proponent may be asked to submit the following for further processing of EC application:**

i) Clarification regarding area with relevant supporting land documents showing that the proposed project area and its location doesn't come within the proposed project "THE NEW CITY- Bhubaneswar" of M/s Bhubaneswar Development Authority.

ii) Tree Enumeration to be submitted from Forest Dept.

iii) Sabik RoR with Kisam and Hal RoR with Kisam to rule out involvement of Forest /DLC land in the project.

iv) DLC certificate from concerned DFO for entire project land to be submitted.

v) The SEAC observed that there are 3 different figures for total land area in submitted online documents. Submit clarification regarding this discrepancy in total land area and submit revised application form and online submitted documents.

vi) The total built up area should be limited to 40% of total plot area. Submit the details regarding this and correct figures regarding the total built up area.

vii) Since, the proposed project is a commercial unit. Therefore, the total parking space provided should be minimum 40% of the total built-up area of the project. Revisit the calculation of parking area and resubmit the correct area statement as per the norms.

viii) Unit operations involved in the proposed project with detail flow chart/process to get a clear picture on total water demand. The process details of obtaining pharmaceutical grade water from the water proposed to be sourced from IDCO needs to be furnished separately indicating inputs of raw water, production of pharmaceutical grade water used in the process and reject / wastewater quantity.

ix) Approval copy from IDCO for water supply

x) Correct water balance, water quality of input water & reject water and note on utilization of the reject water.

xi) Justify how Zero Liquid Discharge will be attained in the project site.

xii) Layout of the internal drainage system.

xiii) The Project Proponent has mentioned that 150KLD will be discharge drain in Monsoon Period. Layout map showing the treated water fallout to nearest public drain and it's distance. Copy of permission of the concerned authority of the drain / sewer to discharge the treated water and storm water from project to the nearby drain.

xiv) Details of the Effluent Treatment Plant provided along with the water balance. The balance water from the ETP should be reutilized.

xv) Traffic study report duly vetted by institute of repute.

B. **The proposed site shall be visited by Sub-Committee of SEAC to verify the followings:**

i) Environmental settings of the project site.

ii) Verify if the site is a flood prone area.

iii) Construction activity if any started at the site and extent of construction activity.

iv) Road connectivity to the project site.

v) Drainage network at the site along with plan of discharging excess treated sewage water and storm water to the nearest public drain.

vi) Discharge point for discharge of treated water and distance of the discharge point from the project site.

vii) Any other issues including local issues.

23. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Clarification regarding area with relevant supporting land documents showing that the proposed project area and its location doesn't come within the proposed project "THE NEW CITY-Bhubaneswar" of M/s Bhubaneswar Development Authority.	The site is coming under IDCO Industrial Area. Total land required for this proposed project is 101208 m^2 (25 acre) or 10.128 Ha. Present Kisam of land is Industrial. Land allotment letter to M/S. Summa Real Media Pvt. Ltd. From IDCO vide letter no- IDCO/P&A/LAE-8707/23 (19819) on Dated: - 27/06/2023 attached as **Annexure-1** The land agreement between IDCO &M/S. Summa Real Media Pvt. Ltd. Made at Bhubaneswar on the day of 5th January 2024. The lease deed with IDCO in respect of allotted land on behalf of M/S. Summa Real Media Pvt. Ltd. Is attached as **Annexure-2**. The building plan has been approved by IDCO (Special Planning Authority) vide letter no. 4283, on dated 07.02.2024. The copy of letter is enclosed as **Annexure-3**.	Annexure 1 and 2 is attached. Kisam is Patita. IDCO letter no. 4283, on dated 07.02.2024 states the deficiency or clarification for the plan approval application. The above-mentioned letter is not approval of the building plan by IDCO (Special Planning Authority) and the letter of approval of the building plan needs to be submitted by the project proponent.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
ii)	Tree Enumeration to be submitted from Forest Deptt.	Letter from Office of the Divisional Forest Office and Wild life Warden, Chandaka Wildlife Division, Gaja Vihar, Baramunda, Bhubaneswar vide letter no. 6350/4F (F.C Act & Lease) -101/2024, Bhubaneswar on dated 05/10/2024. Attached as **Annexure 4**. The joint verification letter from Office of the Tahasildar, Bhubaneswar vide letter no.15421 on Dated 03/10/2024 (office of the Revenue supervisor, Bhubaneswar vide letter no-27 on dated 26/09/2024). It is clearly mentioned in the above letter no. 6350/4F (F.C Act & Lease) -101/2024, Bhubaneswar on dated 05/10/2024. that "There is no forest growth over the plot numbers included in the project". Hence no Tree Enumeration to be required from Forest Department."	Annexure 4 is attached and complied.
iii)	Sabik RoR with Kisam and Hal RoR with Kisam to rule out involvement of Forest /DLC land in the project.	Office of the Revenue supervisor, Bhubaneswar clearly mentioned vide letter no-27 on dated 26/09/2024 that there is no forest land involved in the plot numbers included in the project. Above letter is attached As **Annexure-5.**	Annexure 5 is attached.
iv)	DLC certificate from concerned DFO for entire project land to be submitted.	DLC certificate from concerned DFO for entire project land to be submitted as **Annexure -4.**	Annexure 4 is attached and complied.
v)	The SEAC observed that there is 3 different figures for total land area in submitted online documents. Submit clarification regarding this discrepancy in total	Total project area- 101208 m2 (25 acre) Total Built-up area –46061.50 m The site is coming under IDCO Industrial Area over Plot no. 153-155, 157(P)- 160(P), 149(P), 151(P), 156(P), 152(P). Total land required for this proposed project is 101208	Annexure 14 is attached.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	land area and submit revised application form and online submitted documents.	m2 (25 acre) or 10.128 Ha. Present Kisam of land is Industrial. Land allotment letter to M/S. Summa Real Media Pvt. Ltd. From IDCO vide letter no-IDCO/P&A/LAE-8707/23 (19819) on Dated: - 27/06/2023 attached as Annexure-1. Now as per IDCO approval & fire recommendation the area has been changed and comparison table of area details is given in **Annexure-14**. (Reconciled all areas & refer Annexure-14 as per IDCO format & final site plan)	
vi)	The total built up area should be limited to 40% of total plot area. Submit the details regarding this and correct figures regarding the total built up area.	Built area limited to 40 % to be read as Ground coverage limited to 40 % as per IDCO guideline on the basis of which all attached plans are submitted to IDCO. The building plan has been approved by IDCO (Special Planning Authority) vide letter no. 4283, on dated 07.02.2024. The copy of letter is enclosed as Annexure-3. Total Built-up area –46061.50 m2.	Annexure 3 is attached. IDCO letter no. 4283, on dated 07.02.2024 states the deficiency or clarification for the plan approval application. The above-mentioned letter is not approval of the building plan by IDCO (Special Planning Authority) and the letter of approval of the building plan needs to be submitted by the project proponent.
vii)	Since, the proposed project is a commercial unit. Therefore, the total parking space provided should be minimum 40% of the total built-up area of the project. Revisit the calculation of parking area and	Parking space provided as 30 % of built up/FSI area as per IDCO guideline on the basis of which all attached plans are submitted to IDCO. The building plan has been approved by IDCO (Special Planning Authority) vide letter no. 4283, on dated 07.02.2024. The copy of letter is enclosed as **Annexure-3**.	Annexure 3 is attached. They have provided 30% parking space. IDCO letter no. 4283, on dated 07.02.2024 states the deficiency or clarification for the plan approval application. The above-mentioned letter is not approval of the building plan by IDCO (Special Planning

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	resubmit the correct area statement as per the norms.		Authority) and the letter of approval of the building plan needs to be submitted by the project proponent.
viii)	Unit operations involved in the proposed project with detail flow chart/process to get a clear picture on total water demand. The process details of obtaining pharmaceutical grade water from the water proposed to be sourced from IDCO needs to be furnished separately indicating inputs of raw water, production of pharmaceutical grade water used in the process and reject / wastewater quantity.	Unit operations involved in the proposed project with detail Process Flow Chart is attached As **Annexure-6**. Water demand diagram indicating process flow wise water consumption along with reject water for reprocessing as well waste water to be treated through either STP or ETP meeting waste water out let parameters set by pollution control board allowing disposal to local drain provision as per IDCO or local pollution control board guidelines. Water Balance Chart Is Given in **Annexure-7** Raw Water (IDCO SUPPLY WATER) quality testing report is given in **Annexure-8**	Annexure 6, 7 and 8 are attached.
ix)	Approval copy from IDCO for water supply	At present there is no water supply facility provided by IDCO near the project site. IDCO has floated a tender for supply of surface water to the industries located in the area. Till the water supply is made available by IDCO at the project site, we will fulfil our fresh water requirement from ground water sources. We have got permission from CGWA for ground water extraction. The NOC from CGWA given in **Annexure-9.**	They have obtained NOC from CGWA for 95 m^3/day (attached as per annexure-9) whereas requirement is 500 m3/day and No surface water supply system is developed by IDCO so far.
x)	Correct water	Detail Water Balance Chart Is Given	Annexure 7 and 10 is

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	balance, water quality of input water & reject water and note on utilization of the reject water.	InAnnexure-7 and water quality of input water & rejects water is given in **Annexure-10**. (PROPOSED ETP DETAILS ATTACHED)	attached. ETP design is provided and water balance is provided. However, the treatment system (ETP) proposed seems to be inadequate as they have proposed to treat blow down from boiler, ro reject from raw water treatment system and washing from process area in biological treatment Adequacy may check by SEAC members. Partly RO reject proposed to utilize in gardening/flushing may not accepted. The project proponent needs to submit the quality of input water (TDS, salinity, pH etc.) proposed to be treated by the RO system along with the water quality (TDS, salinity, pH etc.) of RO system output and RO system reject. Annexure 10 total dissolved solids in the treated effluent is not readable. In the same annexure total dissolved oxygen is mentioned to be < 10 ppm. Natural water contains about 7 ppm dissolved oxygen.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
			Minimum oxygen content in the treated sewage effluent to be specified by the project proponent.
xi)	Justify how Zero Liquid Discharge will be attained in the project site.	Based on attached water demand diagram indicating process flow wise water consumption & treatment indicating water for reprocessing where in waste water can be either treated through STP or ETP meeting waste water let out water parameters set by pollution control board, qualifying for either disposal to permitted local drains or partly may be reused as approach to attempt zero liquid discharge policy where 100 % ZLD can be limiting factor.	They have proposed to discharge 100 KLD treated effluent to nearby drain
xii)	Layout of the internal drainage system.	Layout of the internal drainage system is given in **Annexure-11.**	Annexure 11 is attached and complied Annexure 11 is showing the layout map of the site showing boundary wall, internal road along the periphery. There is no marking on the map showing the internal drain system, the direction of flow of water in the drain, discharge point of the drain from the site and its connection to the nearest available public drain.
xiii)	The Project Proponent has mentioned that 150KLD will be discharge drain in Monsoon Period.	Layout of the internal drainage system and end point of disposal is given in **Annexure-11.**	They have not submitted permission letter from concerned authority for discharge of treated effluent.of 100 KLD.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	Layout map showing the treated water fallout to nearest public drain and it's distance. Copy of permission of the concerned authority of the drain / sewer to discharge the treated water and storm water from project to the nearby drain.		Annexure 11 is showing the layout map of the site showing boundary wall, internal road along the periphery. There is no marking on the map showing the internal drain system, the direction of flow of water in the drain, discharge point of the drain from the site and its connection to the nearest available public drain.
xiv)	Details of the Effluent Treatment Plant provided along with the water balance. The balance water from the ETP should be reutilized.	Details of the Effluent Treatment Plant with flow chart is given in **Annexure-12**. Detail Water Balance Chart Is Given in **Annexure-7.**	Annexure 7 and 10 is attached and they have proposed to discharge 100 KLD treated effluent to near by drain
xv)	Traffic study report duly vetted by institute of repute.	Vetted traffic study report is attached as **Annexure-13**.	Annexure 13 is attached and complied.

24. The proposed site was visited by the sub-committee of SEAC on **16.08.2024**. Following are the observations of the sub-committee:

a) The site was empty land with some bushes and was allotted by IDCO. PP and consultant were present who explained the lay out and plan of operation

b) It was explained that at present they are seeking EC for the Research Centre and Few formulations (tablets and syrup) in Phase-1 along with the entire layout having provisions for expansion in next phases.

c) PP may be asked to submit the following:

i) Details of formulation with machineries to be used

ii) Water purification system and its purity certification

iii) Method of certification of formulated drug before use

iv) It should be ZLD, any effluent if generated to be treated and used internally in plantation

v) Any gaseous generation

vi) Safety and Fire management systems

vii) Provision of road, drain etc., if by IDCO, copy of relevant document

viii) All other points asked during presentation.

25. The SEAC in its meeting held on dated **07.02.2025** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Details of formulation with machineries to be used	Details of pharmaceutical formulations with list of machineries to be used are given in **Annexure -1**.	Complied
ii)	Water purification system and its purity certification	The final quality of water which will be used for manufacturing of Drug will be checked by the Drug Inspector of State/Centre	The unit has not submitted compliance w.r.t purification system
iii)	Method of certification of formulated drug before use.	We are undertaking a rigorous certification process for our formulated drugs detailed in **Annexure-2**. This multi-step approach is designed to ensure quality, safety, and compliance with regulatory requirements. We will ensure to follow the state govt. guidelines mentioned in the **Annexure-2A (PROCESS FLOW FOR GRANT OF MANUFACTURING DRUG LICENSE**)	Complied
iv)	IDCO letter no. 4283, on dated 07.02.2024 states the deficiency or clarification for the plan approval application. The above-mentioned letter is not approval of the building plan by IDCO (Special Planning Authority) and the letter of approval of the building plan needs to be submitted by the project proponent. The approval of building plan by appropriate authority to be	Our building layout plan is currently in process for approval from IDCO (Special Planning Authority). This project was discussed in the 19th DPP Committee which has held on 3 rd September 2024 and we are attaching the MoM of the same meeting here as a **Annexure-3**. We assure that we will submit a copy of the final building plan approval by IDCO (Special Planning Authority) to you before construction.	They have not submitted final approval of the Building Plan from IDCO(Special Planning Authority)

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	submitted.		
v)	It should be ZLD, any effluent if generated to be treated and used internally in plantation	Water balance diagram is attached in **Annexure -4**. It shows the ZLD	----
vi)	The project proponent needs to submit the quality of input water (TDS, salinity, pH etc.) proposed to be treated by the RO system along with the water quality (TDS, salinity, pH etc.) of RO system output and RO system reject.	Raw Water (IDCO SUPPLY WATER) quality testing report is given in **Annexure-5**. Parameters of effluent before treatment and after treatment is given in **Annexure- 6.**	They have submitted water quality report of drinking water and Effluent quality at ETP inlet and outlet. **But, not submitted water quality inlet to RO Plant and RO Plant output and RO Reject.**
vii)	Annexure 10 total dissolved solids in the treated effluent is not readable. The same to be furnished.	Parameter of treated effluent are considered as per water Act 1974. value of TDS in the treated effluent will be maintaining less than 2100 mg/lit. Parameters of effluent before treatment and after treatment is given in **Annexure- 6.**	Complied
viii)	In the same annexure total dissolved oxygen is mentioned to be < 10 ppm. Natural water contains about 7 ppm dissolved oxygen. Minimum oxygen content in the treated sewage effluent to be specified by the project proponent.	The value of Total dissolved oxygen in the treated effluent will be within range of 7-10 PPM. Parameters of effluent before treatment and after treatment is given in **Annexure- 6**.	----
ix)	Any gaseous generation.	Following are the emissions from proposed pharmaceutical formulations manufacturing facility 01. D G Set:- as standby power source :- proposed D G Set 2 x 750 KVA shall use High Speed Diesel producing air Emissions meeting environmental norms set by local	----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		pollution control board Proposed facility shall be using 02. Boiler for plant steam:- proposed pharmaceutical formulations facility shall be using LPG gas available locally as pollution free fuel for generating steam 4 to 5 tons per hour for the purpose of process heating as well for the production of distilled water 750 lit per hour along with 500 kgs per hour pure steam which is required for injectable product's manufacturing process, the emissions from boiler shall be meeting local environment norms as set by pollution control board policy	
x)	Safety and Fire management systems.	As per NBC and Fire Recommendation the Proposed Plot-A Building A. Warehouse-1 (G + 2) B. Warehouse-2 (G + 2) C. General Products (Tablet, Capsule, Liquid Oral, Ointment) (G + 2) Nutra Block (G + 2) E. Large Volume Parenteral/ LVP Block (FFS) (G + 1) F. Canteen, Change Room & Toilets, Time Office, Guest House, (G + 3) Common Indoor Utility Service (G + 2) H. Fuel Storage (Ground) I. Primary Health Care Centre (G + 1) J. Security Cabin-1A, 1B & 1C (Ground) K. ICT Room (Ground) L. Watchman cabin-3,4,5,6,7 (Ground) the Buildings are coming under "Industrial Building" as per Odisha Development Authorities (Planning and Building Standards) Rules, 2020 and "Industrial(G-2) building" as per NBCI-2016. Fire management plan for the proposed building will be prepared as per fire recommendations of Odisha Fire and Emergency Services. Fire recommendation is given in **Annexure-7**	Complied
xi)	Annexure 11 is showing the layout map of the site showing boundary wall, internal road along the periphery. There is no marking on the map showing the internal drain	We have planned for ZLD system. Also, we have submitted an undertaking for the same. We will not discharge any kind of waste water at any time. Though we are set up in Gothapatna Industrial Estate, IDCO has already assured that they will provide all the external infrastructure like road, drainage,	----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	system, the direction of flow of water in the drain, discharge point of the drain from the site and its connection to the nearest available public drain. The drainage layout plan to be submitted.	water supply etc. which will be required for us and the surroundings to set up in Gothapatna Industrial Estate.	
xii)	Provision of road, drain etc., if by IDCO, copy of relevant document. The project proponent needs to make necessary arrangements for ensuring safe discharge of excess treated effluent and storm water from the project site to the nearest public drain during the operational phase of the project. Permissions from the appropriate authorities also should be taken for the above-mentioned discharges.	We have planned for ZLD system. Also, we have submitted an undertaking for the same. We will not discharge any kind of waste water at any time. Though we are set up in Gothapatna Industrial Estate, IDCO has already assured that they will provide all the external infrastructure like road, drainage, water supply etc. which will be required for us and the surroundings to set up in Gothapatna Industrial Estate.	----

Considering the information furnished and the presentation made by the consultant, **M/s Visiontek Consultant Services Private Limited, Bhubaneswar** along with the project proponent, the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – D** in addition to the following specific conditions**.**

i) The Proponent before implementation of the project shall convert the land to industrial kisam and shall take the ownership of the land if not already taken.

ii) The land was earlier with another owner, who had done only foundation work for few buildings (as observed). PP needs to demolish and comply with clear land layout with land ownership document before any construction activity. Any permission required for such demolition needs to be taken. Real time proof of demolition to be submitted at appropriate time.

iii) Greenbelt shall be developed in minimum 33% of the total plot area as applicable for industrial project.

iv) The Proponent shall obtain permission/NOC from Executive Engg. (PHD) and / or from the appropriate authority for disposal of excess STP treated water to the nearest drain

without which the Proponent will not start construction work. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission and possession as the case may be.

v) The proponent shall obtain permission from concerned authority for connecting drain to the road side drain with approval of drain layout and discharge of excess treated water.

vi) The proponent shall approve drain layout and sewage layout with plan for treatment and disposal of sewage waste.

vii) The proponent shall obtain approval of building plan from BDA.

viii) The project proponent shall make necessary arrangements for ensuring safe discharge of excess treated effluent and storm water from the project site to the nearest public drain during the operational phase of the project. Permissions from the appropriate authorities also should be taken for the above-mentioned discharges.

ix) The proponent shall use solar energy at least to the tune of 5%of total power requirement as proposed.

x) The proponent shall obtain permission from concerned Fire Safety Authority.

xi) Trees located within the project area shall be transplanted to alongside the boundary green development area.

xii) The proponent shall adopt Zero Liquid Discharge (ZLD) system.

xiii) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.

xiv) The project proponent shall maximise utilisation of treated water in flushing, plantations and ground washings etc. as per need to reduce water discharge to drain. This shall be verified in future compliance report.

xv) Before starting the construction project physical properties as well as engineering properties of the soil along with its bearing capacity should be undertaken and the report should be submitted.

xvi) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

xvii) All water to be used in process shall be tested and certified periodically as per the protocols or regulations by appropriate authorities, before use.

xviii) RO water quality also shall be tested as per protocol before use.

xix) As building plan is not approved, the built up area details submitted by PP will not undergo any change. In case there is any change PP to apply for Mod-EC again before implementation.

xx) Since it's a unit where drug preparation will be carried out by following processes of formulations, necessary license requirements for the same and certification process about their efficacy need to be taken from appropriate authorities as per regulations, before operations.

xxi) Permission from relevant medical/regulatory authorities as per need to be taken for the unit.

xxii) ZLD to be applied and any solid waste generated to be detoxified and disposed to approved vendors

xxiii) PP is going to establish a regular drug formulation unit mainly nutraceuticals and pharmaceutical formulations and R & D centre. It would manufacture specially IV fluids, syrups besides capsules and tablets .Chemical process is involved and pharmaceutical grade water would be used for manufacturing these items. So proper certification from appropriate authority like Drug and Pharmaceutical Board may be obtained for manufacturing the said products.

ITEM NO. 04

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR PATPALI STONE QUARRY PROJECT OVER AN AREA OF 5.06 HA. FOR PRODUCTION OF 4655 CUM/YEAR OF STONE AT VILLAGE- PATPALI, TEHSIL- MANESWAR, DISTRICT- SAMBALPUR OF SRI RAJKISHORE AGRAWAL - EC

1. This proposal is for Environmental Clearance for Patpali Stone Quarry project over an area of 5.06 Ha for production of 4655 cum/year of stone at Village- Patpali, Tehsil- Maneswar, District- Sambalpur of Sri Rajkishore Agrawal.
2. **Category:** The proposed project comes under category 1(a)-Mining of Minerals as per EIA Notification 2006 and subsequent amendment.
3. The Mining Lease was granted by vide letter no 679 date 12/02/2021 to the Successful Bidder-Sri Rajkishore Agrawal S/o-Shyam Sundar Agarwal, At/Po/Ps-Rengali, District - Sambalpur,State - Odisha.
4. Patpali Stone Quarry has been approved by Director of Geology, O/o The Joint Director of Geology, Sambalpur on dated 25.01.2021.
5. This is a new mine and Mining lease is an identified source shown in the DSR Report.
6. Public hearing was conducted on 29.11.2022 at RMC Market Yard, Dhama, Mouza: Dhama R.I- Dhama, G.P: Deogaon Under Maneswar Tahasil In Sambalpur District. Issues raised during public hearing are ground water depletion, road damage due to quarry operation, blasting activities affecting local habitation and wild animals, environmental damage and disturbance in nearby college and village.
7. **TOR details**: Terms of Reference was granted by SEIAA vide Letter No 4583/SEIAA dated 19.05.2022.
8. **Location and Connectivity**: The mine lease area is located in Khata no- 35, Plot no- 83, Village-Patpali, Tahasil - Maneswar, District-Sambalpur in Odisha, covered in the Survey of India Topo Sheet No –F44R16 and is bounded between Latitude $21^0$14'31.43" to $21^0$14'41.01" N and Longitude 83° 55'17.79" E to 83° 55'29.09" E . The kisam of land is Parbata Tini & Melana Padhia. Nearest Town - Sambalpur , approx. 25.12 km in NNE direction. Nearest Water Body is Mahanadi River, approx. 320 Meters in West direction. Nearest Railway Station is at Attabira Railway station at a distance of 20.80 km in NW direction. Nearest National Highway - NH 55, approx. 20.10 km NE direction. SH 15, approx.

1.00 km SE direction. Nearest Airport - Biju Patnaik International Airport, Bhubaneshwar is approx. 225.78 km towards ESE direction.

9. **Geological reserves and proposed production**: As estimated Geological Reserves is 6,58,694 (cum) and Mineable Reserves is 5,01,530 Cum with proposed production of 4655 cum/year.

Year	Total Production in cum
1st	4655
2nd	4655
3rd	4655
4th	4655
5th	4655
Total	**23,275**

10. **Mining Method**: The mining will be done by opencast semi-mechanized method. The total production is 4655 cum/year. Transportation of minerals will be done by an approach road of approx.0.99 km which further connects to SH 15.

The Equipments used are described in table below:

S. No.	Particular	Nos.	Capacity
i)	Excavator/Loader	1	0.9/2.1 m^3
ii)	Tractor mounted Jack Hammer drill	1	-
iii)	Tippers/Trucks	2/1	10T/20T
iv)	Water Tanker	1	5000 lts

11. **Details of Waste generated and management:** About 70 % of rock mass waste will be generated. Maximum waste of 1995m^3/annum or166m^3/month is estimated to be generated curing proposed excavation schedule. Out of which, maximum 55m^3/month waste is assumed to be separated at the pit head and will be stacked in the temporary waste dump and will be utilized by the lessee for making of mine road and allied infrastructures as required. Assuming quarterly accumulation of waste of about 166m^3 at the pit head, a temporary dump has been proposed over 0.0083ha, with single terrace of maximum height of 2m in the lease area. The slope of the dump will be maintained at less than 45^0.

Year	Waste /Rejects in cum
1st Year	1995
2nd Year	1995
3rd Year	1995
4th Year	1995

5th Year	1995
Total	**9975**

12. **Baseline Study Details**: The Baseline Study has been conducted during March, 2022 to May, 2022.

    i) **Ambient air quality:** Ambient Air Quality Monitoring reveals that the minimum & maximum concentrations of PM_{10} for all the 8 AQ monitoring stations were found to be 53.28 to 87.88 µg/m^3 with the 98th percentile ranging between 75.16 µg/m^3 to 87.26 µg/m^3. The minimum & maximum concentrations of $PM_{2.5}$ were found to be 24.48 µg/m^3 to 57.96 µg/m^3 with the 98th percentile ranging between 36.47 µg/m^3 to 55.72 µg/m^3. The minimum & maximum concentrations of SO_2 were found to be 6.24 to 17.66 µg/m^3 with the 98th percentile ranging between 10.46 µg/m^3 to 16.94 µg/m^3. The minimum & maximum concentrations of NO_X were found to be 10.41 µg/m^3 to 26.56 µg/m^3 with the 98th percentile ranging between 15.91 µg/m^3 to 26.15 µg/m^3.

    ii) **Water quality:** The pH of the ground water samples in the region varied from 7.21 to 7.63. Concentration of Fluorides varied from 0.24 mg/l to 0.32 mg/l. The results indicate groundwater is generally in conformity with the drinking water standards (IS: 10500) and surface water is in conformity with IS-2296 standards.

    iii) **Noise Levels:** The values of noise observed in some of the areas are primarily owing to vehicular traffic. Assessment of hourly night time Leq (Ln) varies from 38.8 to 43.6 dB (A) and the hourly daytime Leq (Ld) varies from 50.3 to 58.5 dB (A) within the study area.

13. **Water Requirement and wastewater management:** The total water requirement will be around 7.10 KLD for proposed project.

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10 lpcd per labor 6*10/1000= 0.06 KLD	0.06
Dust suppression	Total haulage road to be water sprinkled = 990 m 990m*6 m*0.5 lt/sqm *2times/1000= 5.94 KLD	5.94
Plantation	506 plants @ 2 L/per plant= 506*2 lt = 1012/1000= 1.012 KLD	1.012
	Total	**7.012 ~ 7.10 KLD**

14. **Power Requirement and solar power details:** The mining will be done only during the daytime hence there is no requirement of Power. The transportation will be done through dumpers or trucks operating on diesel.

15. **Rainwater Harvesting Details:**

16. **Greenbelt Development**: The Proposed Plantation Program is 506 plants for proposed project.

Year	Green belt Nos.
	Approach road & at other place in village after

Year	Green belt Nos.
	consulting local authorities
1st	--
2nd	506
3rd	Maintenance
4th	
5th	
Total	**506**

17. **Total Employment**: - It has been proposed that the mining will be carried out by open cast method. It has been calculated that the manpower for the project is 6 nos. of people.

18. **Project Cost:** The total project cost is Rs 20 Lakhs for the Proposed Project. EMP cost includes Capital Cost of Rs 4.987 Lakhs and Reccuring Cost of Rs 4.90 Lakh/annum.

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
i)	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
ii)	Pollution Monitoring: i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
iii)	Green belt development	1,01,200	50,000
iv)	Maintenance of approach road	2,47,500	90,000
v)	Fencing for the protection of the wild animals.	1,00,000	25,000
vi)	Training Programs regarding the awareness of bio-diversity	----	1,00,000
vii)	Installation of hand pumps (2)	50,000	15,000
	Total	**4,98,700**	**4,90,000**

Table: CER activity Budget.

Sl. No.	Activity	Capital Cost (in Rs.)/Annum
i)	Financial aid for medical camp in Patpali village. @ Rs. 20,000/ camp (1 camp in a year)	20,000
ii)	Skill development program camps like computer learning, sewing etc. in Patpali village. @Rs 20,000/trainer (1 trainer)	20,000
	TOTAL	**40,000**

Sl. No.	Activity	Capital Cost (in Rs.)/Annum
i)	Financial aid for medical camp in Patpali village. @ Rs. 20,000/ camp (1 camp in a year)	20,000

ii)	Skill development program camps like computer learning, sewing etc. in Patpali village. @ Rs 20,000/trainer (1 trainer)	20,000
TOTAL		**40,000**

19. **Environment Consultant**: The Environment consultant **M/s P & M Solution, Noida** along with the proponent made a presentation on the proposal before the Committee on **31.01.2025.**

20. The SEAC in its meeting held on dated **31.01.2025** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Layout marking the safety zone area left as Mahanadi River is nearby. Project proponent shall also provide the details of the retaining wall. Project Proponent shall take all preventive measures to protect the river from pollution cause due to mining.	Not Submitted	**PP has not submitted the Layout marking the safety zone area left as Mahanadi River is nearby and details of the retaining wall. Preventive measures proposed to protect the river from pollution to be caused due to mining**
ii)	Note on Flying rock Management.	Not Submitted	**PP has not submitted Note on Flying rock Management**
iii)	Compliance of specific ToRs is found not satisfactory. Hence, Project proponent shall correct and resubmit specific TOR compliance status.	Not Submitted	**PP has not submitted the corrected specific TOR compliance status as the Compliance of specific ToRs was found not satisfactory**

21. The SEAC in its meeting held on dated **28.04.2025** decided to take decision after receipt of the following information and documents from the proponent as same has not been submitted in the compliance furnished. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	The approved mining plan needs to be revised for incorporating the layout marking the safety zone area left as Mahanadi River is nearby and details of the retaining wall.	The Mahanadi River is located approximately 250 meters away from the western boundary of the lease area. To prevent the direct runoff of water from the quarry site to the river, a retaining wall of 2-meter width shall be constructed along the southern boundary of the lease. In conjunction with this, a single settling pond has been proposed along the retaining wall	Though the unit has submitted proposal for construction of retaining wall of 2m width garland drain and setting tank to prevent wash out to river Mahanadi, but **nothing is**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	Preventive measures proposed to protect the river from pollution to be caused due to mining.	to collect and temporarily store surface runoff. This pond will allow suspended particles to settle before the water is allowed to flow out through the natural drainage channel. (Map showing the retaining wall and the settling pond is attached as **Annexure-I**.)	**mentioned about safety zone and not submitted revised mining plan incorporating the same.**
ii)	Note on Flying rock Management.	A Blasting Mat may be used which is typically constructed from sliced rubber tires bound together with ropes, cables or chains and to be used during rock blasting to contain explosions, prevent flying debris, and suppress dust. Blasting mats are commonly employed in locations such as quarries or construction sites where explosives are detonated. These mats are to be placed over the blasting area to contain the explosion, reduce noise, suppress dust, and prevent high-velocity rock fragments, known as fly rocks, from causing harm to nearby structures, individuals, or the environment.	Complied
iii)	To correct and resubmit specific ToR compliance status as the Compliance of specific ToRs is found not satisfactory	Specific ToRs compliance attached as **Annexure-II.**	In Specific ToR compliance , they have not submitted certificate from Tahsildar regarding distance from nearby habitation and reply to ZLD condition is not satisfactory

Considering the information furnished and the presentation made by the consultant, **M/s P & M Solution, Noida** along with the project proponent, the SEAC recommended for grant of Environmental Clearance upto lease period with stipulated conditions as per **Annexure – A and following additional conditions. However, EC may be issued after the proponent submit a certificate from the concerned Tahasildar/Mining Officer about the exact distance of the mine from habitational area, which is reported as 600 meters.**

i) The approved mining plan needs to be revised for incorporating the layout marking the safety zone area left as Mahanadi River is nearby and details of the retaining wall. Preventive measures proposed to protect the river from pollution to be caused due to mining. EC is subject to revision of mining plan.

ii) Proper distance as applicable shall be maintained for mining activity from habitational area and accordingly, no mining zone shall be earmarked from the habitational area.

iii) The lessee shall not use wagon drilling blasting.

iv) No storage of blasting materials/explosives inside the lease area shall be permitted.

v) The proponent shall obtain NOC from CGWA and permission from WR Department, Govt. Of Odisha for use of ground water.

vi) The project proponent shall maintain periodic health check-up records of their employees and ensure use of face mask by workers in crushing and handling sections of the stone quarry for ensuring that working personnel are not affected by silicosis.

vii) The project proponent shall undertake re-grassing of the area or any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for fodder, flora, fauna etc. after ceasing mining operation that is at the time of mine closure.

viii) Haulage road shall be developed and maintained perennially and perpetually by the proponent in consultation with the concerned authority of the Govt.

ix) Detail risk and hazard management procedure as per the **Annexure – B** shall be followed by the lessee.

x) The proponent shall adopt Zero Liquid Discharge (ZLD) concept during monsoon by providing garland drain and settling tank as proposed.

ITEM NO. 05

PROPOSAL OF AMENDEMENT IN ENVIRONMENTAL CLEARANCE FOR M/S ROYALE HOTELS PVT. LTD FOR PROPOSED (B1+B2+G+15) STORIED BUILDING FOR IT PARK CUM FOOD COURT LOCATED AT IDCO PLOT NO. F/104, F/103/1, F/103/2, F/103/3, CORRESPONDING TO REVENUE PLOT NO. 7(P) & 44 (P), OVER AN BUILT-UP AREA 40830.71 SQM CHANDAKA INDUSTRIAL ESTATE, MOUZA- CHANDRASEKHARPUR, BHUBANESWAR, DIST-KHURDA OF SRI DALBIR SINGH ARORA – MOD EC.

1. This proposal is for amendment of Environmental Clearance of M/s Royale Hotels Pvt. Ltd for Proposed (B1+B2+G+15) Storied building for IT Park Cum Food Court located at IDCO Plot No. F/104, F/103/1, F/103/2, F/103/3, Corresponding to Revenue Plot No. 7(P) & 44 (P), over an built-up area 40830.71 sqm Chandaka Industrial Estate, Mouza-Chandrasekharpur, Bhubaneswar, Dist-Khurda of Sri Dalbir Singh Arora.
2. **Category**: As per EIA Notification, 2006 and its subsequent amendments, the proposed project falls under Category 'B' in Schedule in item 8(a) - Building and Construction projects.
3. The project was earlier granted Environment Clearance by SEIAA, Odisha vide File No. 453171/130-INFRA2/01-2024 dated 19.11.2024 for our **IT Park cum Food Court** Project over IDCO Plot No. F/104, F/103/1, F/103/2, F/103/3 corresponding to Revenue Plot No. 7 (P) & 44 (P) at Chandaka Industrial Estate, Mouza- Chandrasekharpur, Bhubaneswar, Dist-Khurda, Odisha.
4. The PP wants to bring kind notice to the following facts for consideration of this application

for Amendment in EC letter:

5. The Environmental Clearance Order has been issued to PP, is as per the application in the Title of "**IT Park Cum Food Court**".
6. IDCO is of the opinion that, while all the usage as per the submitted plans are permissible as per the IT Policy 2022 and IT Department Notification No. 2678/E&IT dated 22.06.2023, the project title should not be "IT Park cum Food Court ".
7. Accordingly, IDCO vide its letter No CIV/ARCH/E-4785/01-23/IDCO, BBSR 2415 dated 24.01.2025 has directed us to change the project title to **"IT PARK**" instead of **IT PARK CUM FOOD COURT** as the lease deed has been executed for that purpose.
8. **The project details, its occupancy and space usage remains unchanged.**
9. **Floor Wise Modification:**

As Per Old EC		As Per New Application	
Ground Floor			
Food Zone With Kitchen	2	Food Zone With Kitchen	2
Kitchen With Cafeteria	2	Kitchen With Cafeteria	2
Kiosks	3	Kiosks	3
Commercial And Public Utility Area	1	Convenience Store	1
1ST Floor Plan			
Food Zone With Kitchen	2	Food Zone With Kitchen	2
Kitchen With Restaurant	2	Kitchen With Restaurant	2
Kiosks	3	Kiosks	3
Kitchen Cum Store	2	Kitchen Cum Store	2
Restaurant	2	Restaurant	2
2ND Floor Plan			
Restaurant	1	Gym & Recreational Centre	1
Open Terrace	1	Club	1

10. **Building Details:**

Particular	**Proposed**	**Required**
Total Plot Area	8,092.00 sqm	--
Road Affected Area	364.74 sqm	--
Net Plot Area	7,727.26 sqm	
Ground Coverage	3,013.63 sqm (39%)	--
FAR Area	28,679.75 sqm	--
FAR	3.71	
Total Built up Area	**40,830.71 sqm**	**--**
Maximum Height	78.3 m	--
Road Area	8,065.10 sqm	--
Basement Parking Area	11,656.72 sqm	**11,471.9 sqm (40%)**
Total Parking Area	**11,656.72 sqm (40.6%)**	
Green Belt Area	1,661.36 sqm (21.5 %)	1,545.45 sqm (20 %)
Maximum No. of Floor	B1+B2+G+15	--
Power Requirement	2108.11 KW	--
Solar	116.01 KW	

Particular	Proposed	Required
No. of DG sets	2x1010 KVA & 1x500 KVA	--
Fresh Water requirement	142.3 KLD	--
Sewage Treatment Plant	STP Capacity – 200 KLD	--
Solid Waste Generation	679.4 kg/day	
Estimated Population- Residential, Commercial, Floating/visitors	Commercial- 2321 Nos. Visitor- 2992 Nos.	--

11. **Environment Consultancy**: The proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar** made a detailed presentation before the SEAC on 07.03.2025.

12. The SEAC in its meeting held on dated **07.03.2025** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Letter from IDCO that there is no objection for establishment of Food Court.	Letter from IDCO is attached in **Annexure-1**.	Complied. Letter from IDCO says that "*Food Court is a criteria for the IT Park as envisaged in Clause-5.1 of the Odisha IT Policy, 2022*"
ii)	Undertaking by the Project Proponent that all activities mentioned in the proposed project will be established by Project Proponent.	An undertaking is attached in **Annexure- 2**.	An undertaking is attached in **Annexure- 2** **Complied.**

Considering the information furnished and the presentation made by the consultant, **M/s Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar** along with the project proponent, the SEAC recommended for modification of Environmental Clearance as proposed by the proponent without changing conditions as stipulated in earlier Environmental Clearance.

ITEM NO. 06

PROPOSAL OF ENVIRONMENTAL CLEARANCE OF M/S FERRO ALLOYS CORPORATION LTD FOR PRODUCTION OF 28119 TPA ROM OF MANGANESE ORE WITH TOTAL EXCAVATION OF 68289 TPA (ROM OF 28119 TPA + WASTE 40170 TPA) FROM KATASAHI MANGANESE ORE MINES OVER AN AREA OF 13.674 HA IN VILLAGE KATASAHI UNDER BLOCK- JODA, SUBDIVISION CHAMPUA IN KEONJHAR DISTRICT OF SRI SANDEEP KITTANA ACHARYA – VIOLATION EC

1. This proposal is for Environmental Clearance of M/s Ferro Alloys Corporation Ltd for production of 28119 TPA ROM of Manganese Ore with total excavation of 68289 TPA (ROM of 28119 TPA + waste 40170 TPA) from Katasahi Manganese Ore Mines over an area of 13.674 Ha in village Katasahi under Block- Joda, Subdivision Champua in Keonjhar District of Sri Sandeep Kittana Acharya.

2. **Category**: As per EIA Notification, 14th September 2006 followed by subsequent amendments, the proposed project falls under Category B1 – schedule 1 (a) – Mining of Minerals.

3. **Mining Lease details**: Mining lease for manganese ore was granted in favour of M/s. Ferro Alloys Corporation Limited(FACOR) vide proceeding no.3339/SM,dated.04.05.1998 issued by Department of Steel and Mines, Govt. of Odisha. Subsequently the lease deed was executed for entire lease area over13.674 ha for 20 years, from 01.08.1998 to 31.07.2018. According to Section - 8A(3) of the MMDR Act-2015 all the valid mining leases which are subsisting as on 12.01.2015 granted before the commencement of the Mines and Minerals (Development and Regulation) Amendment Act, 2015 shall be deemed to have been granted for a period of fifty years. As such by virtue of Section-8A (3) of MMDR Act-2015, the mining lease of Katasahi Manganese Mines is deemed tohavebeengrantedupto31.07.2048.

4. **Project details**: The lessee has reported the opening date of mining to be 30.04.2001. However, the commercial production from the mines started in 2002. The mines was inspected on 16.08.2010 by Task Force & subsequently the mining operation has been stopped within the lease area since 27.08.2010 by the IBM due to violation found against the approved mining scheme; later the same suspension has been revoked by IBM itself vide its order of 25.01.2011. But mining operation has not started after that due to lack of EC & FC. At the time of lease execution, entire 13.674 ha was classified as non- forest land, but later on the office of Tahasildar, Badbil, vide his Memo no. 3047 dtd. 28.06.2016 has verified the total mining lease area of 13.674 ha of Katasahi Manganese Mines of FACOR and certified that out of 13.674 ha, 8.846 ha area was coming under Forest Category as per Sabik Settlement Record as on 25.10.1980. M/s Ferro Alloys Corporation Limited has proposed to restart production of Manganese ore from Katasahi Manganese Mines spread over an area of 13.674 ha by opencast mechanized mining method. The mining process shall include drilling, blasting, loading, manual sizing, transportation, etc. The mine shall be developed for production up to a maximum ROM of 28,119 TPA manganese ore. Accordingly the application was submitted to SEIAA, Odisha on 10th March 2022 and after detailed deliberations on the proposal, SEAC confirmed the case to be a violation of the EIA notification,2006. Violation ToR letter was issued vide letter no. SIA/OR/MIN/73422/2022 on 3rd November 2022.

5. The project proponent has suo -moto declared that there is violation involved in the project proposal in accordance of the Supreme Court order dated 02.08.2017 in WP(C) No. 114/2014 for excess manganese ore production beyond permissive quantity and also without obtaining prior environmental clearance during the year 2002-03 to 2009-10 without prior approval of the competent authority. Project proponent undertakes to pay the penalty and remedial measures as per the provision in para 12.2 of the Standard Operating Procedure (SOP) of the MoEF & CC F. No. 22-21/2020-IA-III, dated 7th July, 2021. Accordingly, the Director of Mines, Govt. of Odisha vide its letter dated 02.09.2017 raised the demand of Rs 10,41,47,899/- (as accessed by CEC) on the project proponent. Therefore, the project proponent deposited the amount of Rs 11,20,23,192/- (i.e. demand amount along with interest) on dated 22.03.2021.

6. **Chronology of the project**:

S. No.	Project Activity	Date/Duration
i)	Application for ToR submitted to SEIAA, Odisha	10.03.2022
ii)	First Technical Presentation (for ToR) held before SEAC, Odisha	13.04.2022
iii)	SEAC recommended for issue of violation ToRs	20.08.2022
iv)	ToR Letter issued by SEIAA, Odisha on	03.11.2022
v)	Baseline Data Collection	(Oct 2022 – Dec 2022)
vi)	Public Hearing Documents submitted to SPCB on	22.11.2023
vii)	Conduct Public Hearing	16.08.2024
viii)	Public Hearing proceedings forwarded to SEIAA, Odisha by OPCB	27.08.2024
ix)	Final EIA Report submission to SEIAA, Odisha	01.09.2024
x)	Final Technical presentation in SEAC, Odisha (Agenda)	20.09.2024
xi)	Resubmission of Final EIA Report (Online)to SEIAA, Odisha	29.03.2025
xii)	Final Technical presentation in SEAC, Odisha	22.04.2025

S. No.	Project Activity	Date/Duration
A. Status of Mining Lease		
i)	Mining Lease granted in favor of M/s. FACOR	04.05.1998
ii)	Mining operation in the said lease was continued	from 2002-03 to 2009-10
iii)	Validity of the Lease area (As per the MMDR amendment Act, 2015 under sec. 8A)	For 50 years i.e till 31.07.2048
B. Status of Mining Plan		
iv)	Review of Mining Plan has been approved by IBM, Bhubaneshwar	23.11.2021 (Till 2025-26)
C. Existing Environmental Clearance		
v)	Environmental Clearance	Under Process
D. Forest Clearances		
vi)	Forest clearance of 8.846 ha forest land by MoEFCC (FC Division)	FC proposal is accepted by state Govt. and it is under final stage of approval.
E. Surface Right		
vii)	The lease hold area is 13.674 Ha. Out of the total, 6.665Ha of Surface right area has been granted by State Govt. of Odisha	24.01.2001
F. CTE		
viii)	CTE for 28119 MTPA Manganese Ore Production	Under Process. Field Inspection already conducted by SPCB. Presentation to be held.

S. No.	Project Activity	Date/Duration
H. NOCs		
ix)	CGWA NOC Renewal regarding the withdrawal of 50 KLD ground water	Valid up to 27.10.2025
x)	Authenticated list of flora and fauna from State Forest Department	21.06.2023
xi)	Authenticated Location Map of Odisha from State Forest Department showing the distance of mine lease from National Parks / sanctuaries / Elephant/ Tiger Reserves/ Biosphere reserve/Elephant Corridor	21.06.2023

7. **About the Project proponent**: FACOR produces Charge Chrome/Ferro Chrome along with operation of a 100 MW Power Plant in Bhadrak, Odisha. High Carbon Ferro Chrome is used in the manufacturing of ball-bearing steels, tool steels as well as other alloy steels. It is used as a major ingredient in stainless steel manufacturing to impart anti-corrosion properties. In the year 2020, Group of Vedanta Ltd has taken over the M/s. Ferro Alloys Corporation Ltd. through NCLT. M/s Ferro Alloys Corporation Limited has an integrated ferro alloys plant located at Village: Randia, District: Bhadrak (~103 km from the mine lease), having capacity 1,45,000 TPA and 11,800 TPA from MRP and it is planned to further expand its capacity to 4,45,000 TPA. Presently, the leasee has only one operating chromite Mine & 3 non-operating chromite Mines in Odisha. And one non-operating Manganese Mine i.e Katasahi Manganese Mine in Keonjhar Dist. of Odisha to get the EC.

8. **Public Hearing details:-** The Public Hearing meeting was held in respect of Environmental Impact assessment of Katasahi Manganese Mines of M/s Ferro Alloys Corporation Ltd. at the scheduled venue & time i.e on 16.08.2024 (11:00 am) at in the Mouza Katasahi (Khata No.64 Rakhit) 66 A.J.A), Plot No-268/517,267, proposed area Ac 0.690 Kissam- Unnat Jojana Yoga Taila-I) under Joda Block of Keonjhar district, Odisha. The meeting was presided over by Regional Officer, State Pollution Control Board, Keonjhar along with Additional District Magistrate (Revenue) Keonjhar who presided over and supervised the public hearing.

9. **Location and Connectivity**- The mining project is coming under village Katasahi under Barbil Tehsil of Champua Sub-division in Keonjhar district and is accessible from Barbil town, which is at a distance of 21 km from the project site in NE direction. The ML area is covered under the SOI toposheet No. 73 G/5 or open series map No. F45 N5 and spread within the coordinates Latitude- 21^0 57' 33.27" N to 21^0 57' 14.79" N and Longitude- 85^0 19' 01.26" E to 85^0 19' 27.72" E. The black top road from Barbil to Rugudihi includes 5 km between Barbil to Bhadrasahi and 12 km between Bhadrasahi & Rugudi square. These 17 km of road is 4 lane and part of NH 520 and the last 4 km from Rugudihi square to ML area is concrete road. The concrete road connecting Rugudihi (4km from project site in north direction) to Koida (12km away by road in SW direction) via Katasahi & Sanindipur, runs within the Block – A boundary in east direction. Both Rugudihi & Koida are located on NH-520, which runs from the junction of NH-20 at Rimuli to junction of NH-143 at Rajamunda. State capital Bhubaneswar is 285 km away from Barbil, the nearest major railhead of SE railway is situated at a distance of 21

km in NE direction and Barsuan railway siding is at a distance of 42 km in SW direction. Newly developed Jaroli railway station & siding on Daitari-Bansapani line is 17 km away in east direction. Veer Surendra Sai Airport, Jharsuguda is 180 km away. Sidhamath R.F. is at a distance of 1.5 KM towards East from the lease hold area. Baitarani R.F. is at a distance of 2.8 Km towards East from the lease hold area.

10. There is no seasonal or perennial nala within the lease area. Surface run-off water flows along the natural slopes, valleys and seasonal nalas and finally into Suna Nadi in southern side, which flows more or less at a distance of 70m south of the lease area.

11. **List of Statutory clearances obtained earlier-**

- ToR of proposed mining project has been issued by SEIAA, Odisha vide letter dtd. 03.11.2022.
- The Review of Mining Plan along with Progressive Mine Closure Plan was approved for the period 2021-22 to 2025-26 by the Regional Controller of Mines, IBM on 23.11.2021, vide letter no-RMP/A/24-ORI/BHU/2020-21/1269.
- Permission by Central Ground Water Authority, Govt. of India CGWA/NOC/MIN/ORIG/2023/19644 for withdrawal of 50 KLD Groundwater.
- Diversion proposal for the forest land involved in the lease area i.e. 8.846 Ha submitted to FC proposal is accepted by state Govt. and it is under final stage of approval. And Application for Exemption of Forest Clearance as per Forest (Conservation) Amendment Act 2023 (Since the land has changed to non-Forest Kisam prior to 12.12.1996) – Under Process with state Govt., Odisha.)
- Site Specific Wildlife Conservation plan submitted at DFO, Keonjhar for further process towards its approval.
- Initially while executing the lease deed which was completely non-forest land, however as communicated by DFO in 2016 there is 8.846 Ha of Sabik Forest land involve in the mining lease.

12. **Proposed facilities**:

Sl No.	**Facilities/Scope**	**Proposed**
i)	Production capacity of the Mine	28119 TPA
ii)	Capacity of the Beneficiation Plant	10 TPH
iii)	Electric Power	250 KVA (From TPNODL)
iv)	Standby Power	250 KVA (DG)
v)	Water Requirement	50 KLD(From Ground water)

13. **Summary of products generated by the project**

Units	**Products and By products**	**Existing**	**Additional**	**After Expansion**
Existing Manganese Ore Mines	Manganese Ore	0.0 TPA	28,119 TPA	28,119 TPA

14. **Mining Plan Details:** The Review of Mining Plan along with Progressive Mine Closure Plan was approved for the period 2021-22 to 2025-26 by the Regional Controller of Mines, IBM on 23.11.2021, vide letter no- RMP/A/24-ORI/BHU/2020-21/1269

15. **Mining blocks**: Block- A (9.275 ha): the Manganese ore zone is spread over 3.108 hectares with a maximum depth of up to 29m. Block- B (4.399 ha): the Manganese ore zone is spread over 1.265 hectares with a maximum depth of up to 9m. Stripping ratio is (Ore is 1 : 0.72 (t / m3)

16. **Methods of Mining and transportation:** Because of exposures of manganese ore and its limited depth of occurrence, open cast mechanized method of mining and OTFM (Other Than Fully Mechanized) will be adopted with drilling & blasting with deployment of Jackhammer drill, excavator, dumper, etc. ROM of Manganese ore lifted from mines will be transported to manual breaking, shorting & sizing yard from where manganese ore with +20% Mn will be dispatched for its captive plant consumption as well selling to other industries like steel plants, ferro-manganese plants, slico-manganese plants, etc. and sub grade ore with 10% to 20% Mn will be stacked initially & dispatched subsequently after blending with +20% Mn as per demand and also beneficiated in the beneficiation Plant to be installed within the lease area of capacity having 10 TPH. Transportation will be through tippers through 25t to 30t dumper/Tipper Trucks. Bench height will be 6m Height / 9m Width, individual benches shall be kept at 750 while overall quarry slope angle shall be maintained at 300 with horizontal. The ground water table of the nearby habitation area reaches 550m AMSL in post monsoon period; whereas the ultimate mine working depth will be at 566m AMSL, which is in the hilly area & in this part water table is minimum at 16m below. Thus, the quarry depth at the end of the life of the mines will never intersect the ground water table. DTH drilling of 115mm dia hole. Blasting by power gel explosive, detonator and safety fuse.

17. **Machineries & Plant-**

Sl. No.	HEMM with Capacity	Capacity	No. of Equipments
i)	Excavator	1.2 cum	02
ii)	Loader	1.7 cum	01
iii)	Dozer	180 hp	01
iv)	Jack Hammer Drill machine	32 mm	03
v)	Tipper	05 cum	03
vi)	Water Tanker	10 KL	01
vii)	Light Vehicle	30 HP	02
viii)	DG Set	250 KVA	01
ix)	Mineral beneficiation plant	10 TPH	01

18. **Proposed Crusher & Screen plant –**Mineral Beneficiation plant of 1 x 10 TPH capacity is proposed for the project.

19. **Land use as per mining plan at the end of plan period and at conceptual stage:**

Type of land use	Existing Land use (in ha)	At the end of Plan Period (in ha)	At the end of Conceptual Period (in ha)
Area under	2.502	2.918	4.719

Type of land use	Existing Land use (in ha)	At the end of Plan Period (in ha)	At the end of Conceptual Period (in ha)
excavation			
Overburden dump	0.450	1.176	1.276
Mineral Reject storage	0.201	0.267	0.217
Mineral storage	0.008	0.375	0.325
Top Soil storage	---	0.100	---
Infrastructure (Office, canteen, Plant,rest shelter, weighbridge, etc)	0.010	0.050	0.050
Road	0.567	1.058	1.058
Sub-Total	3.738	5.944	7.645
Safety zone	2.713	2.713	2.713
Untouched area	7.223	5.017	3.316
Total	**13.674**	**13.674**	**13.674**

20. **Over Burden generation and management:** No topsoil will be generated from the Quarry-1 whereas from Quarry-2, during the 5 year period 3000m^3 and by the end of the life of the mines 16,320m^3 of top soil will be generated, which will be stacked temporarily over 0.1ha in Block–B. OB & Intercalated waste material consists of soil, alluvium, laterite, shale, etc. During the 5 years of Review of Mining Plan Period, 91,780 m3 waste will be generated which will be dumped over combined Dump- 1 & 1A for first two years and during last three years waste material will be dumped over Dump- 2. Overburden material will be sent outside mine lease area for any suitable use, as & when required basis after getting necessary statutory permission & approval.

21. **Baseline study details:** Baseline study was conducted during the Time period-Oct 2022 to Dec 2022,

Parameters	Numbers of Locations	Description	
		Parameter (µg/m^3)	Permissible Limit (µg/m^3)
Ambient Air Quality Monitoring	08 Locations	PM_{10} – 58.2 to 76.3 µg/m^3	100 µg/m^3 (24 hours)
		$PM_{2.5}$ – 31.2 to 40.9 µg/m^3	60 µg/m^3 (24 hours)
		SO_2 – 5.8 to 13.3 µg/m^3	80 µg/m^3 (24 hours)
		NO_2 – 11.3 to 20.3 µg/m^3	80 µg/m^3 (24 hours)
Noise Level Monitoring	08 Locations	Noise Level During Day Time – 51.5 to 54.2 Leq dB (A)	75 Leq dB (A)
		Noise Level During Night time – 35.7 to 41.8 Leq dB (A)	70 Leq dB (A)

Parameters	Numbers of Locations	Description	
		Parameter (µg/m^3)	Permissible Limit (µg/m^3)
Water Sampling	Ground water Sampling at 5 Locations	pH – 6.92 to 7.26	6.5-8.5
		Total Hardness – 150.0 to 172.0 mg/l	200-600 mg/l
		TDS – 348.0 to 394.0 mg/l	500-2000 mg/l
	Surface water Sampling at 5 Locations	pH- 7.27 to 7.96	6.5-8.5
		Iron as Fe– 0.39 to 0.45 mg/l	0.5mg/l
		Total Dissolved Solids – 154.8 to 171.6 mg/l	1500mg/l
Soil Sampling	5 Locations	pH – 5.79 to 6.92	-
		Texture-Sandy Loam	-
		Available Nitrogen – 227.2 to 247.1 mg/Kg	-

22. **Water requirement and waste water management:** Total Fresh Water requirement in Katasahi Manganese Mines is 50m^3/day. For industrial use peak water demand shall be 48m^3/day, whereas for domestic use i.e drinking water need along with cleaning & washing at work place is 2 m^3/day. The total required water shall be collected form rainwater harvesting pond & from bore well proposed be put up within the ML area with due permission. Wastewater generated from Beneficiation plant will be recycled & reused. Domestic wastewater will be disposed through soak pit.

23. **Used Oil & oil Contaminated Waste-** These wastes will be disposed as per provision under Hazardous Waste handling Rule,2016.

24. **Green belt and Plantation details –** 15073 no's. of saplings will be planted in the ensuring plan period. Green belt will be maintained over 1.950 Ha i.e. around the 7.5m of mines. The proposal of 4,875 saplings plantation along the lease boundary over 1.95 ha. in the 1st year of mining. Total 25,243 saplings will be planted over 10.097 ha. area during the conceptual period of the Mine. Additional 600 sapling of three tier plantation will be done around the school

25. **Power Requirement and solar power details**- The supply of electrical energy for the mine site shall be received from TP Northern Odisha Distribution Limited (TPNODL). The power requirement for the mining complex (including office) shall be 250KVA.

26. **Rainwater harvesting Details**- 1974.7cum/yr volume of water will be recharged to ground water through Rain water harvesting structures which are at strategic points has been implemented within & outside the lease area as per the Rain Water harvesting plan.

27. **Total Employment**- Total employment for the proposed project will be 77 nos. (Direct 7 & Indirect 70 nos).

28. **Project Cost**- The estimated cost of the project is 7.31 Crore and Proposed EMP Capital Cost is Rs 126.50 lakhs & Annual Recurring EMP Cost is 40 Lakhs while proposed CER Cost is Rs 147 Lakhs.

S. No.	Particulars	Budget
1.	Project Cost	Rs. 7.31 Crore
Cost for EMP		
2.	Cost for Environment Protection	Rs. 105.00 Lakh
	Budget for addressing the Public Hearing issues	Rs. 21.50 Lakh
	Total Capital Cost for EMP	Rs. 126.50 Lakh
3.	Recurring Cost for EMP (Per annum)	Rs. 40.00 Lakh / Annum
4.	Recurring Cost for addressing PH issues (Per annum)	Rs. 69.00 Lakh / Annum

Further, as it is a violation project the proposed Natural and Community Resource Augmentation Plan will be implemented within three years. The project proponent will also give a Bank Guarantee equivalent to the amount of remediation plan, natural and community resource augmentation plan i.e. Rs. 1,16,10,000/- to State Pollution Control Board (SPCB), Odisha which could be returned on completion of the above stated plan. The total fund **Rs. 1,12,10,000/-** is allocated for remediation/Environment management plan.

A	Natural Resource Augmentation Plan	
i.	Plantation or afforestation programme	Rs. 4,32,700.00
B	Community resource augmentation plan	
i.	Drinking Water Supply to two of the water scared villages nearer to the project site.	Rs. 2,00,000.00
ii.	Development of educational institutions of villages nearer to the barrage.	Rs. 2,00,000.00

29. **Environment Consultant**: The Environment consultant **M/s. EHS 360 LABS PVT. LTD., Chennai** along with the proponent made a presentation on the proposal before the Committee.

30. The SEAC observed the following:

i) The mine had gone for production in the year 2010-11 and 2011-12 without Environmental Clearance and subsequently closed due to want of Environmental Clearance and Forest Clearance. The proposal was considered as a violation case and violation ToRs was issued on 03.11.2022.

ii) A Primary school is located within the lease area and a ME school is located adjacent to lease area, Cremation ground at 300 mtr distance and Grazing land of 6.681Ha. PP needs to bring it to the knowledge of the Government on the above and submit the response of the later.

iii) Out of 13.674 ha of mining lease area, 8.725 ha area is coming under Forest Category. But the forest diversion application is rejected by PSC.

iv) Due to presence of Sloth Bear, Elephant (some Schedule - I species as per WPA, 1972) and Jackal, Sambar, Jungle Cat, Rat Snake, etc (as per WPA, 2022) an approved Site Specific Conservation Plan is required.

v) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 is under process.

vi) EIA study was conducted and EIA/EMP report was prepared by the Environmental Consultant **M/s Centre for Envotech & Management Consultancy (P) Ltd., Bhubaneswar** and presently, Environmental Consultant **M/s. EHS 360 LABS PVT. LTD., Chennai** has been engaged by the proponent for final presentation and appraisal. As per clarifications by QCI- NABET, while substituting an accredited consultant before presentation to EAC/SEAC (for validation of completed EIA for presentation), new ACO has to follow following few processes.

- Site visit by EC and FAEs
- Baseline data to be cross checked by at least at 10% sites

vii) The application for EC was submitted as per MoEF&CC, GoI guidelines and case being the violation case (post-facto clearances), the SEIAA, considering the Hon'ble Supreme Court Order in W.P. (C) No. 1394/2023, which stayed the operation of OM dated 07.07.2021 and 28.01.2022 issued by MoEF&CC, rejected EC proposal.

viii) Recently, the Hon'ble Supreme Court in its order dated 06.01.2025 in SLP Diary No. 49103 / 2024 allowed / permitted the concerned Govt. authorities to process the EC application / completion of formalities. However, final order granting approval shall not be passed till further orders."

ix) Further, MoEF&CC, GoI vide its OM dated 28th March 2025 given orders to process the files. However, final order granting approval shall not be passed till further orders of the Hon'ble Supreme Court."

x) Accordingly, Lessee has again applied the proposal towards further consideration towards grant of EC.

xi) A case has been filed by the lessee before Hon'ble High Court of Orissa for delay in getting Environmental Clearance.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s. EHS 360 LABS PVT. LTD., Chennai,** the SEAC decided to take decision on the proposal after receipt of following:

i) Permission from the concerned Tahasildar for use of road passing in between the two blocks of the mining lease.

ii) Latest application copy and status for stage-I forest clearance.

iii) Copy of site specific Conservation Plan if already approved.

iv) The proponent has to clarify with supportive documents whether they have followed the procedures as pointed out above at Para 30 (vi) for change of Environmental Consultant.

v) Status of court case, which has been filed by the lessee before Hon'ble High Court of Orissa for delay in getting Environmental Clearance.

vi) Copy of the approved Mining plan indicating the details about size reduction, washing, crusher, blasting, tailing management etc.

vii) A detailed note on the calculation for time period of waste generation, Slope stabilization of the over burden, height of the waste dump, material balance and tailing management.

viii) Scientific study report on stability of bench and dump slopes from an Institute of repute.

ix) The PP shall install the wheel washing facility at the exit gate so as to control dust being carried away with the exiting vehicles. **(to be put as condition)**

x) Parking plaza details.

xi) Details of Violation penalty and Damage assessment for violation committed.

xii) Note on measures proposed for Occupational health hazards.

xiii) PP shall carry out regular health check-up camps for nearby habitation. **(to be put as condition)**

xiv) An undertaking that the school area within the lease boundary shall not be affected due to the proposed project. Moreover, school area shall be earmarked and protection measures shall be taken up for the same. A minimum of 200 metres safety zone shall be maintained from the nearest habitation.

xv) Revised compliance status for the Specific ToR condition No. XII.

xvi) Surface run off management plan for the monsoon season along with dimensions of the structures.

xvii) PP should plan for development of food forest as a part of the green belt to be developed and incorporate substantial number of Kendu trees. (To be put as a condition).

xviii) Copy of CTE and CTO obtained from State Pollution Control Board, Odisha for previous production.

31. The SEAC in its meeting held on dated **22.04.2025** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Permission from the concerned Tahasildar for use of road passing in between the two blocks of the mining lease.	Copy of Permission dated 19.05.2025 granted by Tahsildar Barbil Keonjhar is enclosed herewith as **Annexure-01** for your kind reference.	Enclosed as **Annexure-01**
ii)	Latest application copy and status for stage-I forest clearance.	Forest Diversion Proposal of Katasahi Manganese Mines is in process Nodal Office for recommendation after PSC-II on 16-05-2025. Copy of Forest Diversion	Enclosed as **Annexure-02**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		application and present status is enclosed herewith as **Annexure-02** for your kind reference.	
iii)	Copy of site-specific Conservation Plan if already approved.	Application for Site Specific Wildlife Conservation Plan has been submitted vide our letter dated 14.10.2023 to the Divisional Forest Officer Keonjhar. The same is currently under final stage of approval. We will submit it immediately upon receipt of approval from the competent authority i.e PCCF Odisha. Copy of Application is enclosed herewith as **Annexure-03** for your kind reference.	Enclosed as **Annexure-03**
iv)	The proponent has to clarify with supportive documents whether they have followed the procedures as pointed out above at Para 30 (vi) for change of Environmental Consultant.	We have already disclosed the change of Environment Consultant to EHS 360 Labs Pvt. Ltd, Chennai (NABET Certificate no – NABET/EIA/2225/IA 009) submitted on 01.09.2024. The relevant details are available on Page No 224 of the EIA, which is enclosed herewith as an **Annexure-04** for your kind reference.	Enclosed as **Annexure-04**
v)	Status of court case, which has been filed by the lessee before Hon'ble High Court of Orissa for delay in getting Environmental Clearance.	On 06.05.2025, Hon'ble High Court granted interim protection and directed that no step be taken by the Government of Odisha for grant of the lease to any third party. Also directed to expediate the approval of Environment Clerance & Forest Clerance for Katasahi Manganese Mines. Copy of the said order is enclosed herewith as **Annexure-05** for your kind reference.	Enclosed as **Annexure-05**
vi)	Copy of the approved Mining plan indicating the details about size reduction, washing, crusher, blasting, tailing management etc.	The review of the Mining Plan was approved by IBM on 23.11.2021 vide their letter no. RMP/A/24- ORI/BHU/2021-22. The details pertaining to size reduction, washing, crushing, blasting, and tailing management have been duly mentioned in the said Mining Plan. Copies of the relevant pages are enclosed herewith as **Annexure-06** for your kind reference.	Enclosed as **Annexure-06**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		Washing, crushing, and tailing management form an integral part of the beneficiation study. As mining operations at Katasahi Manganese Mines have remained suspended since 2009, the beneficiation study (covering each stage of the process) will be undertaken after the recommencement of mining operations. The findings of the study will be incorporated in the Mining Plan, & will be submitted to SEAC and SEIAA accordingly.	
vii)	A detailed note on the calculation for time period of waste generation, Slope stabilization of the over burden, height of the waste dump, material balance and tailing management.	The detailed note is enclosed herewith as **Annexure- 07** for your kind reference.	Enclosed as **Annexure-07**
viii)	Scientific study report on stability of bench and dump slopes from an Institute of repute.	Mining Operation of Katasahi Manganese Mines has remained suspended since the year 2009 and continue to remain non-operational till date. We hereby undertake that a scientific study on the stability of bench and dump slope shall be conducted through a nationally reputed organizations/institutes immediately after the resumption of mining operation. The resulting study report will be submitted to SEAC and SEIAA without delay upon its completion. Further, we affirm that all recommendations arising from the said study report will be implemented in full compliance, without exception.	To be decided by SEAC
ix)	The PP shall install the wheel washing facility at the exit gate so as to control dust being	We hereby undertake that a wheel washing facility shall be installed at the exit gate prior to the commencement of mining	To be decided by SEAC

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	carried away with the exiting vehicles. **(to be put as condition)**	operation. Furthermore, we will ensure that continuous and effective operation of the facility at all times without fail.	
x)	Parking plaza details.	Considering the proposed production capacity, our total requirement is only 05 to 07 trucks per day for mineral transportation, sufficient parking area is available within the mine premises to facilitate smooth monitoring and regulation of mineral movement.	To be decided by SEAC
xi)	Details of Violation penalty and Damage assessment for violation committed.	On 30.01.2020, the adjudicating authority i.e NCLT Cuttack approved the Resolution Plan ("ARP") in favour of Vedanta Group Company and the new management took over the company in accordance with the said plan on 21.09.2020. No law including the provision of EIA Notification, 2006 has been violated by the new management. Since we submitted the EC application under fresh category, the question of damage assessment for violation committed does not arise. In this regard we submitted a details clarification to SEAC on 19.05.2025. Copy of the said letter is enclosed herewith as Annexure-08 for your ready reference.	Enclosed as **Annexure-08**
xii)	Note on measures proposed for Occupational health hazards.	We hereby undertake that utmost care will be taken to address Occupational Health Hazard during the Course of Mining Operations. A detailed and comprehensive plan in this regard has been incorporated in the EIA/EMP report (refer Chapter 4.21). The relevant page of the report is enclosed herewith as **Annexure-09** for your kind reference.	Enclosed as **Annexure-09**
xiii)	PP shall carry out regular health check-up camps for nearby habitation. **(to be put as condition)**	We hereby undertake that regular health checkup camps for the nearby habitation will be conducted by qualified occupational health specialists upon immediate resumption of mining operations. In	To be decided by SEAC

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		addition, periodic health awareness programs will be organized for both employees and the local population at regular intervals.	
xiv)	An undertaking that the school area within the lease boundary shall not be affected due to the proposed project. Moreover, school area shall be earmarked and protection measures shall be taken up for the same. A minimum of 200 metres safety zone shall be maintained from the nearest habitation.	Undertaking is enclosed herewith as **Annexure-10** for your kind reference.	Enclosed as **Annexure-10**
xv)	Revised compliance status for the Specific ToR condition No. XII.	Since mining operations of Katasahi Manganese Mines have been stopped from the year 2009 till date, conducting a vibration study to establish blasting parameters is not permissible under existing mining laws. We hereby undertake to conduct vibration study immediately once the operations are restarted and shall ensure compliance with all recommendations arising therefrom. Copy of the report will be shared with SEIAA and other authorities. The distance between the school/nearest habitation and the working quarry (conceptual stage) is more than 255 to 260 meters. We hereby undertake to maintain a double safety zone of 15 meters around the school premises by developing a food-bearing forest comprising appropriate species, as part of our green belt development initiative.	To be decided by SEAC
xvi)	Surface run off management plan for the monsoon season along with dimensions of the structures.	We hereby undertake that we will implement the adequate Surface run off management plan in the mine prior to monsoon. A detailed plan is enclosed herewith as **Annexure-11** for your kind	Enclosed as **Annexure-11**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		reference.	
xvii)	PP should plan for development of food forest as a part of the green belt to be developed and incorporate substantial number of Kendu trees. (To be put as a condition).	We hereby undertake that, upon grant of Environment Clerance, we will develop a food-bearing forest comprising species such as mango, kendu, guava, jamun, jackfruit, etc. as part of the green belt development. We further commit to ensuring the proper maintenance and nurturing of the said plantation throughout the course of mining operation to promote ecological balance and sustainability.	To be decided by SEAC
xviii)	Copy of CTE and CTO obtained from State Pollution Control Board, Odisha for previous production.	Copy of last approved CTO is enclosed herewith as **Annexure -12** for your kind reference.	Enclosed as **Annexure-12**

32. The Hon'ble Supreme Court of India vide its judgment dated 16.05.2025, in W.P. 1394/2023 titled Vanashakti vs. Union of India and connected matters, i.e. WP (C) 118 of 2019 titled Ajay Jajodia vs. Union of India, WP(C) 115 of 2024 titled One Earth One Life vs Union of India and Civil Appeal 381-382 of 2025 titled Fatima vs. Union of India passed the following order:

    a) We hold that the 2017 notification and the 2021 OM as well as all circulars /orders / OMs / notifications issued for giving effect to these notifications are illegal and are hereby struck down;

    b) We restrain the Central Government from issuing circulars/orders/OMs/notifications providing for grant of ex post facto EC in any form or manner or for regularizing the acts done in contravention of the EIA notification;

    c) We clarify that the ECs already granted till date under the 2017 notification and the 2021 OM shall, however, remain unaffected.

33. The MoEF&CC, Govt. of India vide OM No. F. No. IA3-3/7/2024-IA.III(Part) [E- 254652], dated 26.05.2025 circulated the above judgement dated 16.05.2025 of Hon'ble Supreme Court in W.P. 1394/2023 in the matter of Vanashakti vs. Union of India for compliance.

34. The Committee opined that the violation proposals which have been already processed and pending at SEAC/SEIAA level may be returned to the project proponent indicating the above order of Hon'ble Supreme Court of India as circulated by the MoEF&CC, Govt. of India without bringing to the committee meeting.

After detailed discussion, the SEAC recommended to send the proposal to SEIAA, Odisha with a request to return the same to the project proponent intimating the order passed by the Hon'ble Supreme Court of India at para – 32 above.

ITEM NO. 07

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S GREEN EARTH MAGIK SOLUTION FOR COMMON BIOMEDICAL WASTE TREATMENT FACILITY (CBWTF) HAVING TOTAL PLOT AREA OF 2AC. AT PLOT NO. - 80, KHATA NO. - 86, OVER PLOT AREA 2 ACRES LOCATED AT MOUZA – NUAGAON, G.P. – BADADEULI, TEHSIL – KARANJIA, DIST – MAYURBHANJ OF SRI DEBABRATA MOHANTY – 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 EIA Notification, 2006 and amendment thereafter.
2. This proposal is for Terms of Reference for EIA study for M/s Green Earth Magik Solution for Common Biomedical Waste Treatment Facility (CBWTF) having total plot area of 2Ac. at plot no. -80, Khata No. -86, Over plot area 2 Acres located at Mouza – Nuagaon, G.P. – Badadeuli, Tehsil – Karanjia, Dist – Mayurbhanj of Sri Debabrata Mohanty.
3. **Category:** The proposed project falls under Category "B" Projects of activity 7 (da)- Common biomedical waste treatment facilities as per EIA Notification dated 14th September, 2006 and its subsequent amendments.
4. **Location and Connectivity**: The proposed project is located at plot no. - 80, Khata No. - 86, Mouza – Nuagaon, G.P. – Badadeuli, Tehsil – Karanjia, Dist – Mayurbhanj, State – Odisha. The project site is bounded by latitude - 21°48'22.02"N and longitude is 85°55'2.70"E bearing Toposheet no F45N14, F45N13 and F45O1. Nearest road connectivity is AH 46 is at 5.56 km northwest direction, SH 53 is at 8.80 km East direction, NH 220 is at 8 km East direction and the Biju Pattnaik International Airport is at 172 Km – South direction. Nearest water bodies Baitarani River is at 9.55 KM – West direction and Deo River is at 4 KM – SW direction.
5. **Project details**: Project proponent has mentioned that there are 20 Health Care Facilities with Bed strength of 548 numbers present in Keonjhar district of Odisha. Similarly, there are 32 HCF available with Bed capacity of 668 numbers in the Mayurbhanj district. 3The plant capacity has been estimated for waste for 10,000 beds to be 5.0 TPD. of health care establishments of Districts Keonjhar and Mayurbhanj. Total plot area is 8093.71 Sqm / 2 Acres / 0.809 Ha.
6. **Land Use Break-up**:

Sl. No.	Description	Area (in Ac.)	%
i)	Incinerator (Phase 1 & 2)	0.027	135
ii)	ETP	0.031	1.55
iii)	Ash Dump Area	0.041	2.05
iv)	Autoclave Shredder	0.041	2.05
v)	Waste Shredder	0.041	2.05
vi)	Autoclave Shredder	0.041	2.05
vii)	UST	0.037	1.85
viii)	Storage Part Spare	0.037	1.85

Sl. No.	Description	Area (in Ac.)	%
ix)	LAB	0.042	2.10
x)	Material Storage & Recycle	0.058	2.90
xi)	Ash Storage	0.041	2.05
xii)	Waster Dispenser Toilet	0.041	2.05
xiii)	Waste Incinerator	0.039	1.95
xiv)	Vehicle Wash	0.051	2.55
xv)	Parking Area	0.041	2.05
xvi)	Greenbelt Area	0.655	32.75
xvii)	Utility – 1	0.030	1.50
xviii)	Utility – 2	0.029	1.45
xix)	Others (Office, Canteen, Toilet)	0.072	3.60
xx)	Quarters	0.059	2.95
xxi)	Security Room	0.006	0.30
xxii)	Time Office	0.006	0.30
xxiii)	Road	0.450	22.50
xxiv)	Drain	0.060	3.00
xxv)	Weight Bridge	0.024	1.20
Sub-Total Area (In Ac.)		2.000	100.00

7. **Plant capacity details**: The proposed plant capacity is ; Incinerator- 250 Kg/ hr – 2 number (1W+1S); Autoclave: 300 kg/batch; Shredder: 300 kg/hr; Effluent Treatment Plant (ETP): 10 KLD; Total estimated waste 5 TPD generated from about 10,000 beds @ 300~500 gm/bed; Proposed CBWTF Capacity-8 TPD; Incinerable waste = 40~50% of total waste = 2.0~2.5 TPD and Operating hours =8 to 10 hrs/day.

8. **Total water requirement:** Total Water requirement for the proposed CBWTF project is 21 KLD and daily fresh water requirement is 16 KLD for Domestic and Processing including Vehicle washing and Plantation purposes.

SL. No.	Details	Consumption (KLD)
i)	Process requirement (Incineration, Cleaning of storage area, Autoclave, Shredder)	12
ii)	Domestic Requirement	2
iii)	Vehicle Washing & Floor washing	2
	Total	**16**

9. **Waste water Management:** Wastewater generated from the treatment of biomedical waste during incineration, autoclaving, washing of floors, vehicle wash platform, etc. will be treated in the Effluent Treatment Plant (capacity 10 KLD). The treated water would be recycled in the plant to reduce the amount of water used.

10. **Power requirement:** DG set of 125.0 KVA is proposed for the project and 100 KW at 11 KV lines will be taken from TP Northen Odisha Distribution Limited (TPNODL).

11. **Rainwater Harvesting Details:** Total 7 nos of recharge pit of volume 6 cubic meter will be provided.
12. **Green belt development-** Total greenbelt area proposed for the project is 2650.69 sq m. The no. of trees provided for Plantation is 665 Nos. Planting of trees in each row will be in staggered pattern & at distance between rows and columns shall be 2 m x 2 m.
13. **Waste generation and management**: Wastes will be generated in the form of ash and other residues. Ash will be generated approx. 100 Kg to 150 Kg per day and quantity of other residues generated will be approx. 10 Kg to 20 Kg per day. Ash residue from high temperature incineration and other material residues from the process shall be collected into containers / bags and shall be stored at temporary ash storage shed and shall be disposed into the secured landfill periodically after sufficient accumulation. All hazardous waste shall be strictly disposed as per Hazardous & Other Waste (Management & Trans-boundary movement) Rule, 2016.
14. Baseline monitoring period has been conducted from March-2024 to MAY 2024.
15. **Total Employment**: Proposed employment generation from proposed project will be is 30 in numbers out of which temporary workers are 10 in numbers.

Table: Total Employment Details

SL. NO.	JOB PROFILE	NO. OF PERSONS
i)	Project/ Plant Manager	1
ii)	Chief Operator of Equipment	2
iii)	Assistant Operators	2
iv)	Office Staff including marketing people	3
v)	Drivers	3
vi)	Helpers with the Vehicles	3
vii)	Workers on the Floor at the Facility	1
viii)	Security Personnel	3
ix)	Marketing Person	2
x)	Temporary Workers	10
	Total	**30**

16. **Project Cost details:** Total cost of the Project is Rs. 2 Crores.

Table: Project cost breaks up

Sl. No.	Type	Cost (in Lakh.)
i)	Incinerator of capacity 250 kg/hr -Static type, 2 nos, Oil fired, with scrubber, stack	80
ii)	Autoclave, 1 no	12
iii)	Shredder, 1 no	8
iv)	Tata Ace Vehicle with GPS, 6 nos	40
v)	ETP	10
vi)	Admin Building, Storage room	10
vii)	Computer, Softwares	12

viii)	Miscellaneous	28
		200

17. **Environment Consultant**: The Environment consultant **M/s Visiontek Consultancy Services Pvt. Ltd.., Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee on 27.12.2024.

18. The SEAC in its meeting held on dated **27-12-2024** recommended the following:

A. The proponent may be asked to submit the following for further processing of TOR application:

i) CPCB guidelines stipulates that no common biomedical facility to be allowed within 75 kms from existing Common Biomedical Facility. Distance Certification with a declaration by Project Proponent about the exact distance of proposed project from the Nearest Common Biomedical waste treatment Facility shall be submitted.

ii) Land document with Kisam of land in the name of the company.

B. Following specific ToRs may be included while issue of Terms of References.

i) Supporting documents for road connectivity to the project site.

ii) NOC/Permission from the concerned local Authority for use of Revenue Road for transportation.

iii) A detailed route chart from where the Biomedical wastes shall be collected.

iv) The project shall follow the proper engineering landfill process rather than handover the waste to hazardous collecting agencies.

v) Project proponent shall provide Air Pollution Control Measures in the incinerator proposed for the project. Incinerator details to be submitted.

vi) Storm water management along with drainage layout. The PP needs to explain how they will attain Zero Liquid Discharge.

vii) GPS system to be installed in vehicles to monitor the movement of vehicles.

19. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	CPCB guidelines stipulates that no common biomedical facility to be allowed within 75 kms from existing Common Biomedical Facility. Distance Certification with a declaration by Project Proponent about the exact distance of proposed project from the Nearest Common Biomedical waste treatment Facility	We are applied to The Regional Officer, State Pollution Control Board, Mayurbhanj for Aerial Distance Certificate of Nearby CBWTF Within 75km Radius from our Project Site. Google Image Shows the Distance of CBWTF Is Attached here for your reference.	Submitted the distance through google map from existing CBWTF

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	shall be submitted.	Kindly, approve the distance from our proposed CBWTF and proceed further, **TABLE** Distance Map of existing CBWTF from our proposed project site in Odisha. **Google MAP**	
2.	Land document with Kisam of land in the name of the company.	Land documents are given in **Annexure**-1	Submitted the lease agreement but not mentioned the kisam of land

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of the following from the proponent:

i) CPCB guidelines stipulates that no common biomedical facility to be allowed within 75 kms from existing Common Biomedical Facility. Distance Certificate from concerned authority like State Pollution Control Board about the exact distance of proposed project from the Nearest Common Biomedical waste treatment Facility shall be submitted.

ii) Land document with Kisam of land in the name of the company as land lease agreement submitted by the proponent does not indicate kisam of land.

iii) PP is required to submit action plan in the event of temporary shutdown of treatment plant due to any operational problems to ensure bio-medical waste collected is treated.

iv) PP is to submit gap analysis with respect to bio-medical waste generation and its projection over a period of ten years.

20. The SEAC in its meeting held on dated **19.04.2025** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	CPCB guidelines stipulates that no common biomedical facility to be allowed within 75 kms from existing Common Biomedical Facility. Distance Certificate from concerned authority like State Pollution Control Board about the exact distance of	We are applied to The Regional Officer, State Pollution Control Board, Mayurbhanj for Aerial Distance Certificate of Nearby CBWTF Within 75km Radius From Our Project Site. Goole Image Shows the Distance of	**The distance certificate from Distance Certificate from concerned authority like State Pollution**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	proposed project from the Nearest Common Biomedical waste treatment Facility shall be submitted.	CBWTF is Attached here for your reference. Kindly, approve the distance from our proposed CBWTF and proceed further,	**Control Board about the exact distance of proposed project from the Nearest Common Biomedical waste treatment Facility has not been attached.**
ii)	Land document with Kisam of land in the name of the company as land lease agreement submitted by the proponent does not indicate kisam of land.	Land documents are given in **Annexure-1**	Land documents are not attached
iii)	PP is required to submit action plan in the event of temporary shutdown of treatment plant due to any operational problems to ensure bio-medical waste collected is treated.	Action Plan in the Event of Temporary Shutdown of Treatment Plant **1. Objective** The objective of this action plan is to outline the procedures and measures that will be taken in the event of a temporary shutdown of the bio-medical waste (BMW) treatment plant, ensuring that all collected waste is appropriately managed and treated to minimize health and environmental risks. **2. Reasons for Shutdown** The conditions under which the treatment plant may be shut down temporarily, such as: • Operational issues (e.g., equipment malfunction, electrical failure) • Natural disasters or unforeseen events (e.g., □looding, earthquakes) • Scheduled maintenance or upgrades **3. Immediate Action and Communication** • Notify Key Stakeholders: As soon as the shutdown is triggered,	-----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		inform: • Plant operators • Environmental Health and Safety (EHS) team • Local authorities (e.g., Pollution Control Board, Municipal Corporation) • Waste management contractors • Healthcare facilities and generators of bio-medical waste • Assess Waste Accumulation: A quick assessment of the accumulated BMW should be made to understand the volume and type of waste that needs alternative handling. **4. Alternative Waste Treatment Methods** In the event that the plant cannot operate, the following actions should be taken: • Temporary Treatment Solutions: Utilize other available options such as: • Off-site treatment: Arrange for transportation of the BMW to other nearby treatment facilities (authorized for BMW or Common Hazardous Treatment Plant). • Incineration at alternative sites: Coordinate with other hospitals or facilities equipped with incinerators for temporary waste disposal. • Interim Waste Storage: Identify a safe, secure, and environmentally controlled storage site to temporarily hold the BMW until the treatment plant is operational again. • The site must: • Be properly sealed to prevent leakage or contamination. • Be monitored regularly for safety. • Follow regulatory guidelines for the safe holding of untreated waste. **5. Health & Safety Measures** • Protection of Workers: Ensure that	

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		personnel handling the waste during the shutdown period are adequately equipped with appropriate PPE (personal protective equipment) to prevent exposure to harmful pathogens. • Disinfection Protocols: Implement protocols for the disinfection of work areas and vehicles used for transporting waste. • Emergency Medical Plans: Provide first aid facilities and ensure medical assistance is available in case of accidental exposure. **6. Transportation and Documentation** • Waste Transport: If BMW needs to be transported to other facilities (Already agreement with a CHWTF Nearby) Ensure compliance with: • Proper documentation (manifest, consignment note, etc.). • Authorized transportation vehicles and licensed operators. • Tracking and Reporting: Maintain detailed records of all transportation and disposal actions for regulatory compliance and audit purposes. **7. Communication Plan for Stakeholders** • Internal Communication: Regular updates should be provided to plant personnel and management regarding the status of the shutdown and resumption of operations. • External Communication: Notify all relevant healthcare institutions and waste generators about the temporary shutdown and alternative waste management arrangements. **8. Contingency Plans for Extended Shutdown** Assessment of Duration: If the shutdown is expected to last longer than	

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		anticipated, an evaluation should be conducted to determine the need for: • Continuous off-site treatment. • More permanent interim storage solutions. • Capacity Building: If required, collaborate with external agencies to increase capacity for off-site treatment during prolonged shutdown periods. **9. Monitoring and Documentation of Actions Taken** During the shutdown and the implementation of the alternative measures, continuous monitoring and documentation should be maintained. This includes: • Daily Log: A daily log detailing the activities undertaken, the waste handled, the quantity of waste, and the status of waste treatment or storage. • Regulatory Compliance Reports: Ensure compliance with all applicable bio-medical waste management regulations, and submit required reports to the regulatory authorities. **10. Resumption of Operations** • Once the treatment plant is operational again: • Inspection and Testing: Perform a thorough inspection and functional test of all systems to ensure the plant is ready for normal operation. • Recovery Plan: Prioritize the treatment of any backlog waste that accumulated during the shutdown period. • Notify Stakeholders: Inform all concerned parties that the treatment plant is back online and normal waste processing can resume.	

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th><th>Views of SEAC</th></tr>
<tr><td></td><td></td><td>Conclusion

This action plan ensures that the bio-medical waste continues to be properly treated and managed in the event of an unexpected shutdown of the treatment plant. It highlights the importance of quick response, alternative treatment solutions, and clear communication with all stakeholders to mitigate risks to health and the environment.</td><td></td></tr>
<tr><td>iv)</td><td>PP is to submit gap analysis with respect to bio-medical waste generation and its projection over a period of ten years</td><td>Gap Analysis Report: Bio-Medical Waste Generation and 10-Year Projection:

1. Objective

To assess the current status of bio-medical waste (BMW) generation, treatment, and disposal capacity, identify existing gaps, and project future waste generation over the next ten years. This will guide infrastructure planning, resource allocation, and regulatory compliance.

2. Data Sources and Methodology

• Current BMW data: Collected from facility records (weighbridge logs, treatment logs, manifest forms).
• Categories considered: Yellow, Red, White, Blue as per Bio-Medical Waste Management Rules, 2016 (and subsequent amendments).
• Projection method: Based on historical trends, population growth, health care infrastructure expansion (e.g., bed capacity, diagnostic centers), and expected increase in service demand.
3. Current Scenario

<table><tr><th>Parameter</th><th>Value</th></tr><tr><td>Total BMW generated per</td><td>1785 kg/day</td></tr></table></td><td>----</td></tr>
</table>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC

day	
Number of healthcare facilities (HCFs) served	50
Bed capacity covered	1200 beds
Current treatment capacity	5000 kg/day
Type of treatment technologies	(e.g., autoclave, incinerator, microwave)
Storage capacity available	10000 tons
Collection & transportation infrastructure	(e.g., 10 no of vehicles, frequency)

4. **Identified Gaps**

TABLE

5. **Future Projections (10 Years)**

Assuming a CAGR (Compound Annual Growth Rate) of 7–10% due to increasing patient inflow, new HCFs,

and diagnostic services.

Year	Projected BMW Generation (kg/day)	Proposed Treatment Capacity (kg/day)
Year 1	1273	5000
Year 2	1362	5000

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC

Year 3	1458	5000
…..	……..	……
Year 10	2341	5000

Note: Growth rate assumptions should be justified with reference to healthcare development plans, urbanization trends, and regional health indices.

6.Infrastructure Planning Recommendations

- Capacity Augmentation: Install additional treatment units to meet projected demand.
- Technology Upgradation: Consider energy-efficient and environmentally friendly options (e.g., plasma pyrolysis, hybrid systems).
- Storage Facility Expansion: Design for worst-case accumulation scenarios (e.g., 2-3 days of untreated waste).
- Strengthening Logistics: Add GPS-tracked vehicles, increase collection frequency in underserved areas.
- Manpower Training: Regular capacity-building for BMW handlers and facility staff.
- Digitalization: Implement barcoding, online tracking, and MIS reporting for real-time compliance.

7. **Conclusion**

This gap analysis and projection show that current BMW treatment infrastructure will be sufficient to handle future volumes. Proactive investments in treatment, storage, and logistics capacities are essential to ensure environmental safety and regulatory compliance.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of the following from the proponent as same has not been furnished in earlier compliance:

a) CPCB guidelines stipulates that no common biomedical facility to be allowed within 75 kms from existing Common Biomedical Facility. Distance Certificate from concerned authority like State Pollution Control Board about the exact distance of proposed project from the Nearest Common Biomedical waste treatment Facility shall be submitted.

b) Land document with Kisam of land in the name of the company as land lease agreement submitted by the proponent does not indicate kisam of land.

ITEM NO. 08

PROPOSAL OF ENVIRONMENTAL CLEARANCE OF SRI KRISHNA ESTATES AND CONSTRUCTION PVT. LTD FOR PROPOSED B+G+9 FLOORS HOTEL & BANQUET BUILDING (BLOCK -A) AND LG+G+12 FLOORS RESIDENTIAL BUILDING (BLOCK-B) OVER PLOT NO- 312/669 AND OTHERS, KHATA NO- 142/140 AND OTHERS, MOUZA- SIPASURUBALI, DIST- PURI OF SRI PRATEEK ROUTRAY – EC

1. This proposal is for Environmental Clearance of Sri Krishna Estates and Construction Pvt. Ltd for Proposed B+G+9 Floors Hotel & Banquet building (Block -A) and LG+G+12 Floors Residential Building (Block-B) Over plot No- 312/669 and others, Khata No- 142/140 and others, Mouza- Sipasurubali, Dist- Puri of Sri Prateek Routray.
2. **Category**: As per EIA Notification, 2006 and its subsequent amendments, the proposed project falls under Category B in Schedule in item 8(a) - Building and Construction projects.
3. This Proposed Project consists of Hotel Cum Commercial Cum Recreation Cum Residential Building The project comprises of : Block A - Hotel & Banquet Block [B+G+9] Block B- Residential Block [LG+G+12].This proposed Building falls under the **CRZ II category**. **The total area of the site is 39294.98 Sq. m, which comprises of C.R.Z Area 18882.83 Sq.m. + Non-C.R. ZArea-20412.15 Sq.m.**
4. **Location and connectivity**: The project site is located at Khata No. – 142/140, 142/139, 142/141, 142/142, Plot no – 312/669, 312/668,312/670, 312/671, Mouza - Sipasurubuli, Dist–Puri, Odisha. The site is located in the south part of the Puri city and also adjacent to Bay of Bengal.. The geographical co-ordinates of project site are 09° 47' 14.471"N to 09° 47' 14.471"N and 85°45'23.15"E to 85°45'24.07"E. The land in the project site is plain land with a general elevation of about 5-6 m AMSL. Project site is connected with NH-316 which is nearer to the project site in North direction. Proposed project site also connects to and NH-203 (Puri-Bramhagiri-Satapada) is at a distance of 5.4km towards North Direction. Puri railway station is 6.23 km away in North-East direction. Biju Patnaik International Airport is 51.12 km in North direction. The nearest habitat is Sipasurabali, Bhagwatpatna – (East). The area is located in Survey of India Topo sheet No. E45B13. Cultural and heritage site nearby are Sri Jagannath Temple – 4.0 km (NNE) & Chandi Temple - 8.8 Km (SWW). Nearest water bodies are : Bay of Bengal – 210 m (S), Mangla River – 0.70 km (W), Samang Lake - 4.72km (NE), Sara Lake – 13 km (NE) and Bhargabi River – 8.57 km (NE). Nearest Sanctuary - Nalaban Sanctuary - 54.8 Km (SWW). Nearest reserve forest is Balukhand RF - 8.7 Km (E), Kalikabagh PF – 12.3 Km (W).

5. The proposed project is coming under Puri-Konark Development Authority.
6. The project will be developed on the land measuring of Total plot area - 39294.98 Sqm. / 9.71 Acres or 3.9294 Ha. Plot area- [C.R.Z Area-18882.83 Sq.m. & Non-C.R. Z. Area-20412.15Sq.m.].Total Built up area - 1,40,094.79 m^2.
7. **Area Statement:**

Sl No.	Type	Area in Sqm.
i)	Total Site Area	39294.98 Sqm/9.71 Ac/3.9294 Ha
ii)	Plot area- C.R.Z Area	18882.83
iii)	Plot area - Non-C.R. Z Area	20412.15
iv)	Base F.A.R.	2
v)	Achieved F.A.R.(C.R.Z.)	1.98
vi)	Achieved F.A.R. (Non C.R.Z.)	2.84
vii)	Total Super Built up Area	1,40,094.79 Sqm.
viii)	Residential Built-up Area	1,17,124.69 Sqm.
ix)	Commercial Built-up Area	22970.10 Sqm.

8. Land use break-up for core zone

SL. NO.	DESCRIPTION	AREA (Sqm)	% Of Total Area
i)	Ground Coverage	9996.62	25.4
ii)	Surface Parking	3282.4	8.4
iii)	Grenbelt Area	8644.896	22.0
iv)	Road And Paved Area With Open Space	17371.06	44.2
	Total Plot Area	39294.98	100.0

9. **Water requirement**: The total Water requirement is 823 m^3/day (fresh water + flushing water) out of which fresh water requirement is 548 m^3/day and treated water to be reused is 592 m^3/day. The daily fresh water requirement will be met through Municipality Supply/ CGWA.
10. **Wastewater Management**: The total Waste water generation is 658 m^3/day. The treated water recovered is 592m^3/day. There will be reuse of treated water in flushing 275 m^3/day, horticulture 70 m^3/day. During monsoon season, 282 KLD & @ 247 m^3/day water in dry seasons will be discharge to nearest drain. There will be a STP of capacity - 100 KLD and 10 KLD of ETP for Hotel.
11. **Rain water harvesting:** Total 13 no of Rain Water harvesting structures are being proposed for artificial rain water recharge within the project premises.
12. **Power requirement:** The Power Requirement:1507 KW and Source of Power is TPCODL. Incase of power failure, Power Backup - For Banquet Hall (1 x 400 KVA) & (1 x 320 KVA) For Hotel 1 (1 x 400 KVA) & (1 x 750 KVA) For Hotel 2 (1 x 400 KVA) & (1 x 750 KVA)(Certified for Retrofit Emission Control Devices (RECDs) applicable to Diesel Genset Engines (Up to 800 kW).Consumption of diesel: 0.9liters/KVA /hr on full load basis. Provision for installation of battery operated light system in stair cases to be utilized during fire hazards.
13. **Solar Power requirement:** 5% of the total power demand will be met through solar energy i.e. 75 KW. The area requirement on roof top has been calculated @12 Sq.m per 1KwP.

14. **Parking requirement:**

PARKING AREA PROPOSED	Area In SQM	PARKING
EWS	8227.72	822.77(10%)
COMMERCIAL AREA (CONSIDERED 30%)	1233.856	370.16(30%)
LIG AREA	738.86	73.88(10%)
MIG AREA	79945.92	19986.48(25%)
TOTAL PARKING REQUIRED		21253.29
PARKING AREA		
BASEMENT PARKING AREA RESIDENTIAL (SQM)		17975.08
SURFACE PARKING RESIDENTIAL (SQM)		3282.4
TOTAL PARKING PROVIDED		21257.48
EXTRA PARKING		4.19

15. **Fire Fighting Installation:** Firefighting measures will be adopted as per the guidelines of NBC. External yard hydrants shall be installed around all buildings in the complex in galvanized steel fire house cabinet (weather proof). All external yard hydrants shall be at one meter height from finished ground level as per NBC at a distance of 60 m along the road. External fire hydrants shall be located such that no portion of any building is more than 45 m from a hydrant and the external hydrants are not vulnerable to mechanical or vehicular damage

16. **Solid waste generated and its management:**

- Construction Phase - 27 kg/day solid waste (peak) will be generated during construction phase and will be disposed through waste handling agency.
- Operational Phase: Total solid waste generation is about 3.265 T/day. The generated waste is being handled as per norms. The biodegradable waste 1.958 TPD will be processed in OWC (Organic waste Converter) and the non-biodegradable waste (1.307 TPD) will be handed over to authorized local vendor. Hazardous waste like discarded paints and oils to be disposed as per applicable norms. Construction debris to be disposed in low lying areas.

17. **Greenbelt development**: Green Belt will be developed over an area of 8644.89 m^2 which is 22% of total plot area. Total 492 Nos. of plants to be planted.

18. **Project cost**: The estimated Project cost is 80 Crores. The Capital environmental management plan budget during operation phase - 190 Lakh. Annual recurring environmental management plan budget during operation phase- 5.13 Lakh.

S.no	Measure Particulars	Details	Budget in Lakhs	
			Capital	Recurring
i)	Air Pollution	Air pollution Control	6	0.5
ii)	Water Pollution Control	Sewerage System	95	2
		Strom Water Drain and Network	5	0.5
		Sewage Treatment and Disposal	2	0.5
iii)	Noise Pollution control	Acoustics enclosure for DG Set	2	0.02
iv)	Pollution Monitoring	Laboratory testing equipment	1	0.01

v)	Occupational Health	Firefighting equipment (Portable)	45	0.75
		Firefighting equipment (Fixed)	20	0.75
		Personal protective equipment	2	0.01
vi)	Greenbelt	Maintenance	10	0.08
vii)	Miscellaneous	Cost variation	2	0.01
Total			**190**	**5.13**

19. **Environment Consultant**: The Environment consultant **M/s Visiontek Consultancy Services Pvt. Ltd, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.

Considering the information furnished and the presentation made by the consultant, **M/s Visiontek Consultancy Services Pvt. Ltd, Bhubaneswar** along with the project proponent, the SEAC recommended the following:

A. The proponent may be asked to submit the following for further processing of EC application:

i) **Recommendations of the CRZ authority for the proposal.**

ii) NOC from the concerned authority for the proposed project is not coming within sweet water zone.

iii) NOC from the concerned authority for discharge of excess treated water and storm water to nearest drain and construction of sewerage line from project site to sewerage line of Swosti hotel.

iv) Presently, the project proponent has taken clearance from AAI, for Biju Pattnaik International Airport. In future, there is a proposal for construction of Puri Airport. NOC/Permission from concerned department should be taken up in future.

v) Traffic Study Report to be vetted from Institute of repute.

vi) Details of Rain Harvesting pits showing in layout. Sand deposits will happen frequently which needs to be cleared for safe harvesting of rain water.

vii) Vertical plantation to be adopted to utilise more treated water.

viii) The PP shall make necessary arrangement in basement area so that in rainy season water don't get into basement area where STP and Biodigester is placed.

ix) List of plants to be planted in greenbelt.

B. The proposed site shall be visited by Sub-Committee of SEAC to verify the followings

i) Environmental settings of the project site.

ii) Extent of construction activity.

iii) Road connectivity to the project site.

iv) Drainage network at the site.

v) Safety concern to be checked.

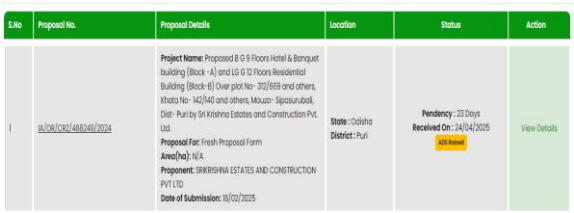
vi) Greenbelt development in the existing plant.

vii) Solid waste management practice of the existing plant.

viii) Vacant land available.

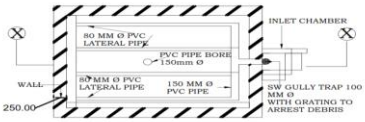
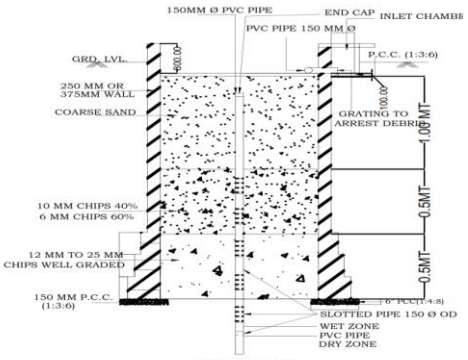
ix) Any other issues including local issues.

20. The SEAC in its meeting held on dated **25.02.2025** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	**Recommendations of the CRZ authority for the proposal.**	**Project Name:** Proposed B G 9 Floors Hotel & Banquet building (Block -A) and LG G 12 Floors Residential Building (Block-B) Over plot No- 312/669 and others, Khata No- 142/140 and others, Mouza- Sipasurubali, Dist- Puri by Sri Krishna Estates and Construction Pvt. Ltd. **Proposal For:** Fresh Proposal Form **Proposal No: IA/OR/CRZ/488249/2024** **Proponent:** SRI KRISHNA ESTATES AND CONSTRUCTION PVT LTD **Date of Submission: 18/02/2025** **State File No.: OCZMA/6/2025** **Status of the project:** The authority has raised a request for additional details from the proponent  	They have applied for CRZ clearance and not obtained CRZ clearance yet.
ii)	NOC from the concerned authority for the proposed project is not coming within sweet water zone.	**As per Letter No.73 OCZMA dated the 16.09.2017 Bhubaneswar** For protection and conservation of the ecologically sensitive sweet water zones of coastal city of Puri to avoid drinking water scarcity in future following steps are taken	----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		i. **Sale/lease/transfer/renewal of lease of the area by any authority i.e Municipality/Revenue Authority or any individual** For the proposed project "Proposed B G 9 Floors Hotel & Banquet building (Block -A) and LG G 12 Floors Residential Building (Block-B) Over plot No- 312/669 and others, Khata No- 142/140 and others, Mouza- Sipasurubali, Dist- Puri by Sri Krishna Estates and Construction Pvt. Ltd." Puri Konark Development Authority has been given Approval for construction of Hotel and Residential building on this plot. **ii. Controlled withdrawal of ground water without permission from competent authority** No objection certificate (NOC) for ground water abstraction has been received from Central Ground Water Board South Eastern Region, vide NOC No.: CGWA/NOC/INF/ORIG/2024/20252 on dated 5/3/2024. iii. **Restricting encroachment by disallowing construction of any kind of structure including roads, new buildings both commercial and private** Puri Konark Development Authority has been given Approval for construction of Hotel and Residential building on this plot. **For above reason it is conclude that the above said project site is not coming under sweet water zone.**	

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
iii)	NOC from the concerned authority for discharge of excess treated water and storm water to nearest drain and construction of sewerage line from project site to sewerage line of Swosti hotel.	NOC from the concerned authority for discharge of excess treated water would be obtained from the concerned authority and the construction of sewerage line from project site to sewerage line of Swosti hotel would be constructed by the project component during the commencement of work.	To be stipulated as condition in EC.
iv)	Presently, the project proponent has taken clearance from AAI, for Biju Pattnaik International Airport. In future, there is a proposal for construction of Puri Airport. NOC/Permission from concerned department should be taken up in future.	At present, the project proponent has obtained the necessary clearance from the Airports Authority of India (AAI) for Biju Patnaik International Airport, as per existing requirements. Regarding the proposed Puri Airport, since it is currently at the planning stage and no official notification or demarcation has been issued, no specific clearance is applicable at this time. However, the project proponent affirms that as and when the proposal for Puri Airport progresses and official guidelines or notifications are issued by the competent authority, all necessary permissions and NOCs will be obtained accordingly.	To be stipulated as condition in EC.
v)	Traffic Study Report to be vetted from Institute of repute.	Traffic Study Report is attached as **ANNEXURE – I.**	Complied
vi)	Details of Rain Harvesting pits showing in layout. Sand deposits will happen frequently which needs to be cleared for safe harvesting of rain water.	Total 13 no of Rain Water harvesting structures are being proposed for artificial rain water recharge within the project premises. **TABLE**	----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		 PLAN OF RAIN WATER HARVESTING PIT (SIZE 6.0mX2.0mX1.55m)  SECTION AT X-X (SECTION OF RAIN WATER HARVESTING PIT)	
vii)	Vertical plantation to be adopted to utilise more treated water.	To promote sustainable water management and ecological enhancement within the proposed residential and hotel project in the Coastal Regulation Zone (CRZ) area of Odisha, vertical plantation will be adopted as a key green infrastructure component. This system will make efficient use of **treated water from the Sewage Treatment** **Plant (STP)** through **drip or micro-irrigation** techniques, reducing dependency on freshwater sources while enhancing air quality, aesthetics, and building insulation. Given the coastal environment, the vertical plantation will primarily utilize **local, native, and salt-tolerant plant species** that are well adapted to the region's saline and humid conditions. This selection supports the ecological balance and long-term sustainability of the green infrastructure. **Local Native Species Proposed for Vertical Plantation in Coastal Odisha:** • **Clerodendrum inerme** (Glory Bower) – Salt-tolerant, hardy, and ideal for vertical	Complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		greening. • **Ipomoea cairica** (Mile-a-minute Vine) – Fast-growing climber suitable for vertical structures. • **Rhoeo spathacea** (Oyster Plant) – Low-maintenance and thrives in coastal humidity. • **Wedelia trilobata** (Creeping Daisy) – Dense foliage cover; well-suited for vertical surfaces. • **Asystasia gangetica** (Chinese Violet) – Ornamental and hardy ground/vertical cover. • **Scaevola taccada** (Beach Cabbage) – Extremely salt-tolerant, native to coastal areas. • **Portulaca grandiflora** (Moss Rose) – Suited for vertical planters exposed to sunlight. • **Bougainvillea spectabilis** – Drought and salt-tolerant, flowering vine ideal for trellises. This approach will enhance the green footprint of the project while ensuring effective reuse of treated water, in accordance with CRZ guidelines and sustainable development principles.	
viii)	The PP shall make necessary arrangement in basement area so that in rainy season water don't get into basement area where STP and Biodigester is placed.	We acknowledge the Committee's concern regarding water ingress into the basement area during the rainy season, where the STP and Biodigester are proposed to be located. Necessary design and engineering measures shall be incorporated to prevent water entry into the basement, including but not limited to: • **Construction** of a peripheral drain with proper slope to divert rainwater away from the basement entry points. • Provision of rainwater harvesting sumps and stormwater drainage systems with adequate capacity. • Installation of thresholds and weather-proof sealing at basement	Complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		entry points. • Use of automated sump pumps with float sensors to evacuate any accidental water accumulation. • Ensuring the basement floor level is higher than the invert level of the nearest external drain. • Provision of a grating and covered drain channel at the ramp entrance with proper connection to stormwater drainage. These measures will ensure that the STP and Biodigester remain safe and operational even during peak monsoon conditions.	
ix)	List of plants to be planted in greenbelt.	• The green area will be developed approx. 8644.89 m2 (22 % of the plot area for plantation). • The no. of trees Required for Plantation – 492. **Selection of Plant Species for Green Belt Development** 1. The species should be fast growing and providing optimum penetrability 2. The species should be wind-firm and deep rooted 3. The species should form a dense canopy 4. As far as possible, the species should be indigenous and locally available 5. Species tolerance to air pollutants like PM2.5 & PM10, SO2 and NO2 should be preferred 6. The species should be permeable to help create air turbulence and mixing within the belt 7. There should be no large gaps for the air to spill through 8. Trees with high foliage density, leaves with larger leaf area and hairy on both the surfaces 9. Ability to withstand conditions like inundation and drought	Complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		10. Soil improving plants (Nitrogen fixing rapidly decomposable leaf litter) 11. Attractive appearance with good flowering and fruit bearing 12. Bird and insect attracting tree species Sustainable green cover with minimal maintenance In accordance with the coastal ecology and environmental sustainability principles, the greenbelt development plan for the proposed residential and hotel project in the coastal zone of Puri, Odisha, shall consist of native, salt-tolerant, and wind-resistant species. The selection has been made keeping in view the following criteria: • Suitability to **coastal sandy soil and saline conditions** • Ability to withstand **strong coastal winds and cyclonic conditions** • **Low water requirement** and high survivability • Promotion of **local biodiversity** and ecological balance • Compliance with CPCB guidelines for greenbelt development **Proposed List of Plant Species submitted in table of its reply** **Maintenance Plan:** • Regular watering using treated STP water. • Periodic replacement of dead or damaged plants. • Use of organic mulch and soil conditioners. • Engagement of a professional horticulture	

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		team for upkeep. This plantation plan will enhance the ecological resilience of the site, reduce air and noise pollution, and contribute to the aesthetics of the coastal development in line with CRZ and MoEF&CC guidelines.	

21. The proposed site was visited by the sub-committee of SEAC on 20.03.2025. Following are the observations of the sub-committee:

    i) No construction made at the site, and it is clear with road from 2 sides.

    ii) Coconut trees are planted at boundary for green belt.

    iii) Fire corridor 20-25 ft available as explained by PP.

    iv) Separate gates are made for hotel and residential with separate parking as required.

    v) There is a drain in one side of main road with a distance of about 100 mts and PP proposed to connect the same by developing a drain side of the road connecting to main road. Hence, NOC for drain to connect the main drain and permission to construct at side of the road to be taken from the appropriate authority along with permission to discharge excess treated water.

    vi) PP informed that they would implement ETP & STP for hotel and STPs for each block separately and attempt for ZLD.

    vii) Recharge pits and OWC need to be implemented.

    viii) All other environmental requirements and statutory measures to be taken up.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of the following from the proponent as same has not been furnished in earlier compliance:

a) Recommendations of the CRZ authority for the proposal.

ITEM NO. 09

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF PROPOSED RESIDENTIAL APARTMENTS BUILDING PROJECT "ANANDAM". B+S+12, BUILT-UP AREA OF 33,296.99SQ.MTS LOCATED AT PLOT NO. 4223, 4224, 4225, 4233, 4234/10293, 4234/10245,KHATA NO- 1988/651, 1988/709 IN MOUZA- GHATIKIA, TAHASIL-BHUBANESWAR ,DISTRICT - KHORDHA OF SRI SUVRANSU SEKHAR MOHANTY & OTHERS – EC.

1. This proposal is for Environmental Clearance of Proposed Residential Apartments Building Project, “Anandam” of ‘B+S+12’ storied over a built-up area 33296.99 sqm at Mouza-Ghatikia, Tahasil- Bhubaneswar, Dist- Khordha, Odisha of Sri. Suvransu Sekhar Mohanty & Others.
2. **Category**: The project falls under category “B” or activity 8 (a) - Building and construction projects, as per the EIA Notification 2006 and amendments thereafter.

3. **Location and Connectivity**: The proposed project is located on Plot Area – 6294.475 Sq.mt or 1.555 Acres over Plot no - 4223, 4224, 4225, 4233, 4234/10293, 4234/10245, Khata No- 1988/651, 1988/709 at Mouza - Ghatikia, Tahasil - Bhubaneswar, District - Khordha. The Project Site is a part of the Survey of India Toposheet No. F45T12 and geo-coordinates are - Latitude: 20° 16' 16.40"N to 20° 21' 20.17" N and Longitude: 85° 46' 37.88" E to 85° 46' 41.31" E. The kissam of land is Patita. Nearest Highway is NH-16 -1.8 km, E, Ghatikia Main Road is at a distance of 0.10 km, N. Nearest Railway Station is Bhubaneswar junction railway station at 7.0 km, E. Nearest Airport is Biju Patnaik International Airport at 4.7 km SE. Nearest Habitation is Ghatikia adjacent. Water Bodies within 10 KM radius are Jhumuka Nala – 7.83 km NNW and Daya Canal -5.16 km SSE.

4. The project site does not fall within Eco Sensitive Zone of Chandaka Dampara Wildlife Sanctuary. Chandaka Dampara Wildlife Sanctuary is at a distance of 8.0 Km. NOC obtained from concerned DFO with letter No.4970/4F(F.C. Act &Lease) -19/2023, Dt. 10.08.2023. The project site does not fall in CRZ area.

5. The site is coming under Bhubaneswar Development Authority, Bhubaneswar. The approval file No. BP-BMC-2023-04-29-016265.

6. Total plot area is 6294.475 Sq.mt or 1.555 Acre/0.629 Ha and net site area is 5468.475Sq.mt with built-up area 33296.99Sq.mt.

7. The proposed project "Anandam" is a Residential Apartment Building of configuration 'B+S+12' Storied.

S. No.	Particulars	Area in Sq. mts
i)	Total Plot Area	6294.475
ii)	Road affected Area	826.0
iii)	Net Plot Area	5468.475
iv)	Total Proposed FAR Area	26531.07
v)	Total Proposed Non-FAR Area	6765.92
vi)	Total Built-up Area	33296.99
vii)	Total Green Area Provided (24.41%)	1335.26
viii)	Parking Area Provided	8000.58
ix)	Height of the Building	39.70
x)	No. of Blocks/ Floors	1/ B+S+12
xi)	No. of Dwelling Unites	165
xii)	Floor built-up Area: 1-11 th floors	2173.56
xiii)	12th Floor built-up Area	2261.32

8. **Statutory Clearances obtained are**:

- **AIRPORT NOC** - BHUB/EAST/B/081623/776827,Dt. 10.10.2023.
- **FIRE NOC** – APPLICATION NO. - RECOMM1204130012023001473 Dt. 11.09.2023
- **CGWA NOC** - NOC No. CGWA/NOC/ INF/ ORIG/2023/19021 Dt.16.08.2023.
- **PROVISIONAL BDA APPROVAL** - BDA Letter No- BP-BMC-2023-04-29-016265.

9. **Water Requirement**: Water during operation phase will be sourced from ground water. The fresh water requirement is 91.0 KLD. NOC from Central Ground Water Authority (CGWA) obtained vide NOC No. CGWA/NOC/ INF/ ORIG/2023/19021 for 92.0 KLD. Total Domestic water requirement will be 155 KLD for the project. In this, fresh water requirement and flushing water is 91 KLD and 64 KLD respectively. Wastewater generation will be 120 KLD. STP (MBBR) capacity provided is 150 KLD. 47.5 KLD excess treated water will be discharge to nearest drain in Non Monsoon period and 51.5KLD in Monsoon Period.

S.NO	Water Requirement	QUANTITY (KLD)
i)	Domestic Water	91
ii)	Flushing Water	47
iii)	Gardening	5.0
iv)	Fire,S.Pool & Others	11.5
	Total	155

10. **Power requirement**: - Maximum power demand for the project during operation phase is estimated to be 2700 kW. Specification of Transformer provided is 2 Nos. 1500 KVA, 33KV/ 0.415 KV and 1 Nos. 750 KVA, 33KV/ 0.415 KV. Source of power will be Orissa State Electricity board. DG set of capacitiy 750 KVA, with stack height of 45 mts. will be provided as power back-up during power failure. Solar power generation is 135 kw. Consumption and its contribution are 5 % towards total power requirement in the project.

11. **Rainwater Harvesting** : - Total runoff calculated is 131.78 m^3 and 2 no. of pits is proposed for the project.

12. **Parking requirement**: - Total parking area required 7959.32 Sq.mt (30% of Proposed F.A.R i.e. 26531.07 sq.mt). Total parking area provided is 8000.58 Sq.mt (30.15%)/269ECS and located in Basement Area- 4089.01 Sq.mt/ECS-127 @ 32m^2, Stilt Area- 2676.91 Sq.mt/ECS- 89 @30 m^2 , Open Area -1234.66 Sq.mt/ECS-53 @ 23 m^2. Visitors Parking = 800.06 Sqm (10.0%) has also been provided along with EV parking facility.

13. **Fire fighting installation**: - Fire NOC recommendations have been obtained vide Application NO. RECOMM 120413 0012023001473 on Dt. 11.09.2023. The fire protection system for the building will be designed as per the provisions of National Building Code - 2016 and the directions of local fire service authority.

14. **Green Belt Development**: - Green area will be provided in 1335.26 sq.mt. (24.41 % of net plot area) The no. of trees proposed in the project is 85 trees.

15. **Solid Waste Management**: - Total solid waste generation will be 548 Kg/Day. Garbage will be 531.2 Kg/Day in which Biodegradable Waste 318.72 Kg/Day @ 60% will be treated in in-house Organic Waste Convertor and Non-Biodegradable waste 212.48 Kg/Day @ 40% will be Sent to Authorized Vendors as per SWM Rules 2016. Landscape waste will be 0.07 Kg/Day. STP Sludge generation will be 16.80 Kg/day.

WASTE SOURCE	DISPOSAL
Garbage – 418 Kg/day	▪ Segregation at Source & Disposed properly as per

	SWM Rules 2016 ▪ Bio-Degradable – 250.8 Kgs/day – Organic Waste Convertor ▪ Non-Bio-Degradable – 167.2 Kgs/day – (Authorized Re-cyclers/vendors)
STP Sludge – 14.14Kg/day	▪ Which is used as manure
Landscape waste -0.043	▪ Which is used as manure

16. **Traffic Study**: Traffic study report was prepared by School of Civil Engineering, KIIT Deemed to be University, Bhubaneswar. LOS for the project is "A" with or without project.

17. **Project cost**: The estimated project cost is INR 97.82 Crores. Cost for Environmental protection measures during construction phase - Rs.12 Lakhs as capital cost and Rs.5.5 Lakhs as recurring and during operation phase - Rs.57 Lakhs as capital cost and Rs.8.0 Lakhs as recurring cost.

Sl. No	Activity	Capacity /Area/Nos.	Capital Cost (Lakhs)	Recurring Cost (Lakhs)
i)	STP	150 KLD	40.0	4.0
ii)	Landscaping & Planting trees	85.0	4.0	0.5
iii)	Solid waste Management	548 Kg/Day	6.0	1.0
iv)	RWH Pit Installation	2.0	2.0	0.5
v)	Environmental Monitoring	Air, Water, Soil & Noise	5.0	2.0
Total			57.0	8.0

18. **Environment Consultant**: The Environment consultant **M/s Rightsource Industrial Solutions Pvt. Ltd., Hyderabad** along with the proponent made a presentation on the proposal before the Committee on 27.12.2023 and the SEAC recommended the following:

A. The proponent may be asked to submit the following for further processing of EC application:

i) The PP shall preserve the trees present in the proposed site. If the PP is planning to cut it, necessary permission shall be taken from the concerned authority.

ii) Permission copy from Chief Engineer, Drainage Department for discharge of treated water and storm water to the nearest municipal drain.

iii) Layout of proposed internal drainage connecting to main municipal drain to be submitted along with necessary approval of the competent authority.

iv) Kisam of the land is “Patita” which needs to be converted into kisam “Gharabari” and submit the document.

v) Revisit the calculation of Rainwater harvesting pits by considering the highest rainfall of that area.

vi) Detailed calculation of Solar generation through PV Cell to be submitted.

vii) Structural Stability Certificate certified by authorized structural Engineer.

viii) Revisit the water balance as the treated water discharge is very high. Justify why the discharge is high although the greenbelt percentage is 24%.

ix) The PP shall provide filter press for STP sludge drying.

x) In water Balance, fresh water requirement mentioned is 94KLD (91Domestic+3KLD (Swimming Pool) while it is mentioned 91 KLD as per PPT is the fresh water requirement. CGWA NOC obtained for 92KLD. Which one is correct? This shall be clarified.

xi) Total solid waste generation will be 548 Kg/Day as per online document and 432.18kg/Day as per PPT. Submit the correct one. This shall be clarified.

xii) Source of water and its quantity during construction / project execution phase to be provided.

B. The proposed site shall be visited by Sub-Committee of SEAC to verify the followings

i) Environmental settings of the project site.

ii) Verify if the site is a flood prone area.

iii) Construction activity if any started at the site and extent of construction activity.

iv) Road connectivity to the project site.

v) Drainage network at the site.

vi) Discharge point for discharge of treated water and distance of the discharge point from the project site.

vii) Any other issues including local issues.

19. The SEAC in its meeting held on dated **27.12.2023** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	The PP shall preserve the trees present in the proposed site. If the PP is planning to cut it, necessary permission shall be taken from the concerned authority.	There are five existing trees in the proposed site out of which one tree may cause construction interference, and that will be relocated to the site boundary. No cutting will be	Complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		involved.	
ii)	Permission copy from Chief Engineer, Drainage Department for discharge of treated water and storm water to the nearest municipal drain.	Permission copy from Chief Engineer, Drainage Department for discharge of treated water and storm water to the nearest drain has been attached for your reference as **Annexure- I**.	The unit has submitted copy of letter with drawing of Chief Engineer, Drainage to Planning Member, BDA, Bhubaneswar. It is not copy of permission for discharge.
iii)	Layout of proposed internal drainage connecting to main municipal drain to be submitted along with necessary approval of the competent authority.	Layout of proposed internal drainage connecting to main municipal drain which has been submitted for approval near the authority has been attached for your reference as **Annexure- II**.	They have submitted lay out map for internal drainage, but it is not approved. **To be stipulated as condition in EC**.
iv)	Kisam of the land is “Patita” which needs to be converted into kisam “Gharabari” and submit the document.	The Kissam of land has been changed to Gharabari Kissam which has been submitted for your reference as **Annexure- III**.	Complied
v)	Revisit the calculation of Rainwater harvesting pits by considering the highest rainfall of that area.	The revised calculation of Rainwater harvesting pits by considering the highest rainfall of that area has been submitted for your reference as **Annexure- IV**.	In revised calculation they have mentioned recharging pits as 2 nos. But, as per volume calculation it is coming as 22 nos. The PP needs to be rectify it.
vi)	Detailed calculation of Solar generation through PV Cell to be submitted.	The Detailed calculation of Solar generation through PV Cell has been submitted for your reference as **Annexure- V**.	Complied
vii)	Structural Stability Certificate certified by authorized structural	Structural Stability Certificate is vetted by NIT, Rourkela which copy has been submitted for your	Complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	Engineer.	reference as **Annexure- VI**.	
viii)	Revisit the water balance as the treated water discharge is very high. Justify why the discharge is high although the greenbelt percentage is 24%.	The revised water balance detail justifying the discharge of treated water has been submitted for your reference as **Annexure- VII**.	---
ix)	The PP shall provide filter press for STP sludge drying.	STP will be provided with filter press for STP Sludge drying purpose. The STP Flow chart has been submitted for your reference as **Annexure- VIII**.	Complied
x)	In water Balance, fresh water requirement mentioned is 94KLD (91Domestic+3KLD (Swimming Pool) while it is mentioned 91 KLD as per PPT is the fresh water requirement. CGWA NOC obtained for 92KLD. Which one is correct? This shall be clarified.	The swimming pool makeup water also shown in PPT. The total domestic water requirement is 138 KLD, which includes 91 KLD for domestic use and 47 KLD for flushing. Additionally, 3 KLD is required for swimming pool makeup. Therefore, the total freshwater requirement will be 141 KLD. 92 KLD CGWA NOC was obtained and balance fresh water for swimming pool will be purchased on necessity basis.	Complied.
xi)	Total solid waste generation will be 548 Kg/Day as per online document and 432.18kg/Day as per PPT. Submit the correct one. This shall be clarified.	The revised calculation of Total solid waste generation has been submitted for your reference as **Annexure- IX**.	Complied
xii)	Source of water and its quantity during construction / project execution phase to be	The water will be sourced through tankers during construction Phase.	a) They have mentioned the source of water during construction phase, but the quantity is not mentioned. b) During Execution phase the water requirement 141

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
			KLD. Source is ground water.

20. The proposed site was visited by the sub-committee of SEAC on 01.03.2024. Following are the observations of the sub-committee:

    a) The site is connected with approach road of about 100ft.

    b) As green belt is not adequate, the PP needs to submit revised layout by relocating visitor parking and showing green belt of minimum 20%. In the same layout location of recharge pits to be shown and submitted.

    c) Drain connection for excess treated water to be submitted with required permission letter from the authority. There is an existing drain in opposite side of the road.

    d) Layout of basement parking with ramp for entry and exist with width of passage to be shown and submitted.

    e) Any bigger tree if required to be cut (as there are few), may be taken up with appropriate authority.

    f) All other points asked during presentation to be complied.

Considering the information furnished and the presentation made by the consultant, **M/s Rightsource Industrial Solutions Pvt. Ltd., Hyderabad** along with the project proponent, the SEAC recommended for grant of Environmental Clearance to the project valid for 10 years with stipulated conditions as per **Annexure – E** in addition to the following specific conditions**.**

i) The PP shall preserve the trees present in the proposed site. If the PP is planning to cut it, necessary permission shall be taken from the concerned authority.

i) The project proponent shall develop greenbelt over 20% of the total plot area.

ii) The proponent shall obtain permission from the Chief Engineer, Drainage Department for discharge of treated water and storm water to the nearest municipal drain.

iii) Layout of proposed internal drainage connecting to main municipal drain shall be approved from the competent authority for implementation.

iv) The PP shall provide filter press for STP sludge drying.

v) The Proponent before implementation of the project shall convert the land to Gharabari and shall take the ownership of the land if not already taken.

vi) The Proponent shall obtain permission/NOC from Executive Engg. (PHD) and / or from the appropriate authority for disposal of excess STP treated water to the nearest drain without which the Proponent will not start construction work. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission and possession as the case may be.

vii) Internal drainage plan with RWH/Re-charge Pits to be taken up based on requirement and with approval of the authority.

viii) Care to be taken in developing land scape to avoid flood situation.

ix) The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.

x) The proponent shall obtain permission from concerned Fire Safety Authority.

xi) Trees located within the project area shall be transplanted to alongside the boundary green development area.

xii) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.

xiii) The project proponent shall maximise utilisation of treated water in flushing, plantations and ground washings etc. as per need to reduce water discharge to drain. This shall be verified in future compliance report.

xiv) The PP will not commence construction unless the drain lay out is finalized and permission given for the same by the authority to discharge excess treated water & storm water.

xv) Before starting the construction project physical properties as well as engineering properties of the soil along with its bearing capacity should be undertaken and the report should be submitted.

xvi) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

xvii) The proponent will explore and promote sustainable livelihood opportunities for the local community.

ITEM NO. 10

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S RNG INFRASTRUCTURE PVT. LTD FOR PROPOSED RESIDENTIAL BUILDING PROJECT OF 'B+S1+S2+18' STORIED OVER AN AREA 23472.00 SQMT AT MOUZA - SUNDARPUR, TAHASIL - BHUBANESWAR, DIST- KHORDHA OF SRI MANORANJAN BISWAL - EC

1. This proposal is for Environmental Clearance of M/s RNG Infrastructure Pvt. Ltd. for Proposed Residential Building Project of 'B+S1+S2+18' storied over an area 23472.00 Sqmt at Mouza- Sundarpur, Tahasil- Bhubaneswar, Dist- Khordha of Sri Manoranjan Biswal.
2. **Category**: The project falls under category "B" or activity 8 (a) - Building and construction projects, as per the EIA Notification 2006 and amendments thereafter.
3. **Location and Connectivity**: The proposed project is located at Plot no- 2387(P), 2388(P), 2432(P) (sub plot No-38), Khata No- 153,553 at Mouza- Sundarpur, Tahasil- Bhubaneswar, District Khordha. The Project Site is a part of the Survey of India Toposheet No. F45T15. The geo-coordinates of the project site is - Latitude: 20° 21' 06.99"N to 20° 21' 09.42" N, Longitude: 85° 46' 48.05" E to 85° 46' 51.10" E. The kissam of land is Gharabari. Nearest Habitation is Sundarpur at 1.5 km,N. Nearest Highway is NH-16 -.8.0 km, Khandagiri Chandaka Road is at a distance of 1.5 km. Nearest Railway Station is Bhubaneswar junction

railway station at 11.5 km. Nearest Airport is Biju Patnaik International Airport at 11.7 km. Nearest water body is Jhumuka Nala is at 0.8 km,N.

4. The site is coming under Bhubaneswar Development Authority. The approval has been taken vide Letter No.- 13072/BDA, Bhubaneswar dated 25-04-2023.

5. Total plot area is 3836.20 sqm/ 0.948 Acres/0.383 Ha. with built-up area 23472.0 Sq.mt.

6. The building area details of the project is:

S.No	Particulars	Area in Sq.mts
i)	Total Plot Area	3836.20 sqm
ii)	Total Proposed FAR Area	16057.0 sqm
iii)	Total Proposed Non-FAR Area	7415
iv)	Total Built-up Area	23472.0 sqm
v)	Total Green Area Provided (24.41%)	1335.26
vi)	Parking Area Provided	5282.00
vii)	Height of the Building	60.98
viii)	No. of Blocks/ Floors	1/ B+S1+S2+18
ix)	No. of Dwelling Units	102
x)	Each Floor built-up Area: 1-17th floors	1003.80
xi)	18th Floor built-up Area	573.40

7. **Water Requirement**: Water during operation phase will be sourced from ground water. The fresh water requirement is 63.0 KLD. NOC from Central Ground Water Authority (CGWA) obtained vide NOC No. CGWA/NOC/INF/ORIG/2023/19438 Dt.17.10.2023. Domestic water requirement will be 105 KLD. In this, freshwater requirement and flushing water is 60 KLD and 31 KLD respectively. Wastewater generation will be 79 KLD. The STP, MBBR, capacity provided is 100 KLD. Discharge of treated wastewater quantity to nearest drain will be 29.0 KLD in Non-Rainy season and 31 KLD in Rainy Season.

S.NO	REQUIREMENT	QUANTITY (KLD)
i)	Domestic Water	63
ii)	Flushing Water	31
iii)	Gardening	3.0
iv)	Fire, Swimming Pool & Others	8.0
	Total	105

8. **Power requirement**: The total power requirement for the proposed residential building is 689.0 KW. The power will be sourced from State Electricity Board, Odisha. The premise is connected by 800 KVA 11/0.433 KV, Copper Wound, DY-11 ONAN Outdoor with Off load Tap Changer 1 no. of Transformer. In case of power cut, 100% power backup generators will be provided for common uses only. 180 KVA 2 DG Sets has been proposed for the residential project with stack height of 64 mts. to provide backup supply. Solar power generation is 34.5 kw with 23 PV cells. Consumption and its contribution are 5 % towards total power requirement in the project.

9. **Rainwater Harvesting**: - Total Runoff is 93.89 m^3 and 13 no. of pits is proposed for the project.

10. **Parking requirement**: - Total parking area required is 4817.10 Sq.mt (30% of 16057 sq.mt). The provided parking area is 5282 Sq.mt (32.90%) i.e. covered area - 4970.4 Sq.mt, ECS-155 @ 32m^2, Open Area -311.6 Sq.mt, ECS-13 @ 23 m^2. Total parking proposed in terms of ECS is 168. EV parking provided is 73 ECS.
11. **Firefighting installation**: - Fire NOC recommendations obtained vide No. RECOMM1204130052023001593 Dt. 04.11.2023. The fire protection system for the building will be designed as per the provisions of National Building Code - 2016 and the directions of local fire service authority.
12. **Green Belt Development**: - Green area will be provided in 767.24 sq.mt. (20 % of net plot area). The no. of trees proposed in the project is 55 trees.
13. **Solid Waste Management**: - Total solid waste generation will be 356 Kg/Day. Garbage will be 356Kg/Day in which Biodegradable Waste 213.6Kg/Day @ 60% will be treated in In-house Organic Waste Convertor and Non-Biodegradable waste 142.4 Kg/Day @ 40% will be sent to Authorized Vendors as per SWM Rules 2016. Landscape waste will be 0.038 Kg/Day. STP Sludge generation will be 11.06 Kg/day.
14. **Traffic Study**: Traffic Composition after development of the project will be very good. Traffic study report was prepared by School of Civil Engineering, KIIT Deemed to be University, Bhubaneswar. LOS for the project is "A" with or without project.
15. **Project cost:** The estimated project cost is INR 47.42 Crores. Budget allocated for Environmental protection measures during construction phase - Rs.13 Lakhs as capital cost and Rs.7.5 Lakhs as recurring and during occupation phase - Rs.47 Lakhs as capital cost and Rs. 12 Lakhs as recurring cost.

S.No	Activity	Capacity /Area/Nos.	Capital Cost (Lakhs)	Recurring Cost (Lakhs)
i)	STP	100 KLD	30.0	6.0
ii)	Landscaping & Planting trees	55 nos	3.0	1.0
iii)	Solid waste Management	356 Kg/Day	4.0	2.0
iv)	RWH Pit Installation	13 nos	5.0	1.0
v)	Environmental Monitoring*	Air, Water, Soil & Noise	5.0	2.0
Total			47.0	12.0

16. **Environment Consultant**: The Environment consultant **M/s Rightsource Industrial Solutions Pvt. Ltd. Hyderabad** along with the proponent made a presentation on the proposal before the Committee on 17.12.2023 and the SEAC recommended the following:

    A. The proponent may be asked to submit the following for further processing of EC application:

i. Supporting documents i.e. Land documents or agreement papers with private owners with PP indicating the ownership of the Project Proponent for the land use for connecting drain from project site to nearest municipal drain.

ii. Revisit the Rainwater harvesting pits by considering the highest rainfall of that region.

iii. Detailed calculation of Solar generation through PV Cell.

iv. Structural Stability Certificate certified by authorized structural Engineer.

v. Permission copy from Chief Engineer, Drainage Department for discharge of treated water and storm water to the nearest municipal drain.

vi. Layout of proposed internal drainage connecting to main municipal drain to be submitted.

vii. Analysis report of wastewater including total coliform.

viii. The PP shall build the structural protection for the drain and submit the layout of the same.

ix. Layout of proposed internal drainage connecting to main municipal drain to be submitted along with necessary approval of the competent authority.

x. Source of water and its quantity during construction / project execution phase to be provided.

B. The proposed site shall be visited by Sub-Committee of SEAC to verify the followings

i. Environmental settings of the project site.

ii. Verify if the site is a flood prone area.

iii. Construction activity if any started at the site and extent of construction activity.

iv. Road connectivity to the project site.

v. Drainage network at the site.

vi. Discharge point for discharge of treated water and distance of the discharge point from the project site.

vii. Any other issues including local issues.

17. The SEAC in its meeting held on dated **27.12.2023** decided to take decision after receipt of the following information and documents from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Supporting documents i.e. Land documents or agreement papers with private owners with PP indicating the ownership of the Project Proponent for the land use	The land documents are in the name of company & Director Mr. Manoranjan Biswal. The copy of RoR has been attached for your	There is land dispute as per site visit report

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	for connecting drain from project site to nearest municipal drain.	reference as **Annexure-I**.	
ii)	Revisit the Rainwater harvesting pits by considering the highest rainfall of that region.	The Rainwater harvesting pit requirements have been revised considering the highest recorded rainfall in the region. Total 14.0 number of RWH pits will be developed for the proposed project. The updated details have been attached as **Annexure-II**.	Complied
iii)	Detailed calculation of Solar generation through PV Cell.	Detailed solar generation through PV cell has been attached as **Annexure – III.**	Complied
iv)	Structural Stability Certificate certified by authorized structural Engineer.	Structural Stability certificate is vetted by IIT, Bhubaneswar has been attached for your reference as **Annexure-IV**.	Complied
v)	Permission copy from Chief Engineer, Drainage Department for discharge of treated water and storm water to the nearest municipal drain.	Permission letter for discharge of treated water to the nearest municipal drain from the Competent Authority vide letter No.-105/EM dtd.-29.01.2022 has been attached for your reference as **Annexure-V**.	The Engineering Member, BDA in his letter dtd. 29.01.2022 mentioned that The PP shall obtain necessary NOC from concerned Department to discharge excess treated STP water and storm water to nearest natural nallah. Also, the PP shall construct external drain along the village road and the drain is connecting to a natural nallah near culvert. The unit has not submitted any document for discharge to said

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
			nallah.
vi)	Layout of proposed internal drainage connecting to main municipal drain to be submitted.	Layout drain of internal drainage has been attached for your reference as **Annexure-VI**.	Complied
vii)	Analysis report of wastewater including total coliform.	Waste water analysis report of NABL Laboratory including total coliform has been attached for your reference as **Annexure- VII**.	----
viii)	The PP shall build the structural protection for the drain and submit the layout of the same.	Sir we are agreed for construct the drain with as per your recommendation. Kindly allow us for submitting layout plan before start of construction.	Not complied. **Condition to be stipulated in EC**.
ix)	Layout of proposed internal drainage connecting to main municipal drain to be submitted along with necessary approval of the competent authority.	Layout of proposed internal drainage connecting to main municipal of plan for your reference has been attached as **Annexure-VIII**.	Complied
x)	Source of water and its quantity during construction / project execution phase to be provided.	The water will be sourced from the ground water source during project execution phase and during construction phase it will be sourced from the nearest village by tanker.	Source of water mentioned but not mentioned regarding quantity of water.

18. The proposed site was visited by the sub-committee of SEAC on 01.03.2024. Following are the observations of the sub-committee:

    a) There was initially a resistance by a group of people working inside the plot including the guard at gate not to allow. After our introduction, they allowed but explained that there is a legal issue in the land and area of construction for which the PP has applied needs to be settled; else they will not allow any construction. The PP was not there but his representative was there keeping silent.

    b) The land has inside roads, a part of land is having several duplexes constructed at different stages of completion, balance plot is empty. As there are certain issues with regard to Land ownership or POA, the PP needs to comply and submit the following;

        i) Land ownership document with ROR mentioning the area and layout (revenue and BDA approved both) with certification of govt. authority.

        ii) Copy of BDA approved plan and layout on above part of land where the proposed building to be constructed.

        iii) Layout showing duplex already done, proposed building, internal roads, drains and the outlet of drain falling in existing Nala.

iv) There is a Nala at a distance of few feet of the land, thus PP needs to provide document in respect of passing of drain over the land (Public or Private) with ownership (in case of private land) of land and permission of authority to discharge excess treated water.

v) Layout showing green belt minimum 20%, parking for visitors, recharge pits, etc. of the project.

vi) Width of road connecting the land.

vii) **Also 'no dispute agreement "with existing contractor and people who were objecting is also necessary in addition to above documents.**

viii) All other points asked during presentation to be complied.

19. The SEAC observed the following from site visit report of the Sub-Committee of SEAC:

a) There was initially a resistance by a group of people working inside the plot including the guard at gate not to allow. After our introduction, they allowed but explained that there is a legal issue in the land and area of construction for which the PP has applied needs to be settled; else they will not allow any construction. The PP was not there but his representative was there keeping silent.

b) The land has inside roads, a part of land is having several duplexes constructed at different stages of completion, balance plot is empty. As there are certain issues with regard to Land ownership or POA, the PP needs to comply certain information / documents related to land, ownership as pointed out in the site visit report of the Sub-Committee of the SEAC.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of the following from the proponent:

i) Land ownership document with ROR mentioning the area and layout (revenue and BDA approved both) with certification of govt. authority.

ii) Copy of BDA approved plan and layout on above part of land where the proposed building to be constructed.

iii) Layout showing duplex already done, proposed building, internal roads, drains and the outlet of drain falling in existing Nala.

iv) There is a Nala at a distance of few feet of the land, thus PP needs to provide document in respect of passing of drain over the land (Public or Private) with ownership (in case of private land) of land and permission of authority to discharge excess treated water.

v) Layout showing green belt minimum 20%, parking for visitors, recharge pits, etc. of the project.

vi) Width of road connecting the land.

vii) **Also 'no dispute agreement "with existing contractor and people who were objecting is also necessary in addition to above documents.**

viii) The Engineering Member, BDA in his letter dtd. 29.01.2022 mentioned that the Project Proponent shall obtain necessary NOC from concerned Department to discharge excess treated STP water and storm water to nearest natural nallah. Also, the PP shall construct external drain along the village road and the drain is connecting to a natural nallah near culvert. The unit has to submit such permission document for discharge to said nallah.

MEMBER SECRETARY, SEAC

ANNEXURE -A

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR DECORATIVE STONE MINES & STONE QUARRY

A. Specific conditions

1. The Project Proponent shall obtain consent from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.
2. Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; All the old age people of the surrounding villages may be provided medical facilities.
3. Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages. The Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
4. Project Proponent shall ensure the safeguard and wellbeing of villagers and school, regular health monitoring of all residents in the area and the compliance Report shall be submitted to the Regional office of the Ministry and SEIAA, Odisha.

B. Standard conditions

1. A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the SEIAA, Odisha 5 years in advance of final mine closure for approval.
2. No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
3. No change in mining technology and scope of working should be made without prior approval of the SEIAA, Odisha.
4. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
5. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) for the project.
6. Mining shall be carried out as per the provisions outlined in the approved mining plan as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
7. Protection of vegetation in the surrounding areas, and proper storage of solid waste, subgrade ore and their use have to be given priority during mining operation.
8. Digital processing of the entire lease area using remote sensing technique shall be

carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office and SEIAA, Odisha.

9. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.

10. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. The monitoring shall be carried out four times in a year pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board.

11. Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The project proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.

12. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

13. Sufficient number of Gullies to be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

14. There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.

15. The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/leveling with the help of dozer/compactors.

16. The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic

parameters and allows only species adopted to that micro climate.

17. The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

18. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working,mineral and OB dumps toprevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.

19. Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department and as per CPCB Guidelines. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.

20. The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to acquiring grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded against felling and plantation of such trees should be promoted.

21. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

22. As per the Company Act, the CSR cost should be 2 % of average net profit of last three years. Hence CSR expenses should be as per the Company Act/Rule for the Socio

Economic Development of the neighborhood Habitats which could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

23. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

24. Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.

25. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

26. The project authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

27. The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.

28. A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.

29. State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.

30. The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the Regional Office.

31. The SEIAA, Odisha may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

32. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

33. The above mentioned stipulated conditions shall be complied in a time-bound manner. Failure to comply with any of the conditions mentioned above may result in cancellation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

Environmental Scientist, SEAC

5.5. HAZARDS AND RISK MANAGEMENT

5.5.1 Explosives

Blasting is done by means of explosives which are hazardous during of handling, storage and blasting.

5.5.1.1. Storage and Handling

The Applicant is advised to store the explosives as per the Indian Explosives Act, 1958 and the Explosive Rules, 1983. Necessary permissions should be obtained from the Joint Controller of Explosives to store and uses of explosives in the quarry in the magazine permit under Form - 23 or Agreement shall be made with holder of Form - 22 who can supply and fire explosives as per safety practices. However blasting in the mine or quarry shall be done as per the MMR, 1961 under the supervision of Mines Blaster certificate holder, appointed under Reg. 160 of Metalliferous Mines Regulations, 1961.

5.5.1.2. Blasting

Poorly designed shots can result in misfires early ignition and flying rock. Safety can be ensured by planning for round of shots to ensure face properly surveyed, holes correctly drilled, direction logged, the weight of explosion for good fragmentation. Blast design, charge and fire around of explosives should be carried out by a trained person.

5.5.1.3. Drilling

Slipping and Falling of labours from the edge of a bench during drilling is possible. Part of training should include instructions to face towards the open edge of the bench so any inadvertent backward step is away from the edge. Suitable portable rail fencing which can be erected between the drilling operations and the edge of the mine can be provided. Attachment of a safety line to the drilling rig and provide harness for the driller to wear can be done. Newer drill machines are provided with cabin which controls noise level within cabins. Driller operators should be protected with ear protection.

5.5.2. Loading

Possible risks during loading of mined rocks are falling of rock on the driver, plant toppling aver due to uneven ground, failure of hydraulic system, fires, fall while gaining access to operating cabin, electrocution in Draglines, failure of wire ropes in Dragline. In order to overcome these risks:

- Operator cabin should be of suitable strength to protect the driver in event of rock fall.
- Electrical supply to dragline should be properly installed with adequate earth continuity and earth leakage protection.
- Wire rope should be suitable for work undertaken and be examined periodically.
- Ensure that loaders are positioned sufficiently away from face edges

5.5.3. Transportation

Brake failure, lack of all-around visibility from driver position, vehicle movements particularly while reversing, rollover, Vibrations, Noise, Dust and improper / no signalling are some of the factors causing risk. This can be avoided by following measures:

- Visibility defects can be eliminated by the use of visibility aids such as closed circuit television and suitable mirrors.
- Edge protection is necessary to prevent inadvertent movement.
- Seatbelt to protect driver in event of vehicle rollover.
- Good maintenance and regular testing necessary to reduce possibility of brake failure.
- Avoid driving at the edge of roadway under construction
- Heavy earth moving equipment and vehicle drivers and those giving signals should be well trained.

5.5.4. Unstable face

Chances of Rock fall or slide exists. Regular examination of face must be done and remedial measures must be taken to make it safe if there is any doubt that a collapse could take place. Working should be advanced in a direction taken into account the geology such that face and quarry side remain stable.

5.5.5. General safety measures

Provisions of the Mines Act, Rules and Regulations orders made there under shall be complied with, so that the safety of the mine, machinery and persons will be ensured. Permission, relaxation or exemption wherever required for the safe and scientific mining of the deposit will be obtained from the Department of Mine Safety. Copy of Agreement for handling of Explosives under License Holder at Proposed site is given in additional document.

- Safety kits should be located in easily accessible place with major first aid materials in it.
- Entry of any unauthorized person into mine and plant areas shall be completely prohibited
- Arrangements for fire fighting in the mine's office complex and mining area

- Provision of all the safety appliances such as safety boot, helmets, goggles, ear plugs etc. shall be made available for the employees
- Mining will be undertaken in coexistence with the requirements of the Mining Plan which shall be updated from time to time
- Handling of explosives, charging and blasting shall be undertaken only by a competent person
- Adequate safety equipment shall be provided at the explosive magazine

All the mining equipment shall be maintained as per the guidelines of the manufacturer.

ANNEXURE- C

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF M/S ESSAR MINMET LIMITED FOR SETTING UP OF 14.3 MTPA GREENFIELD IRON ORE BENEFICIATION PLANT AT TIKARPADA, KENDUJHAR DISTRICT OF SRI AMOL DANGORE - EC

I. Statutory compliance:

(i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

(ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

(iii) The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report, (incase of the presence of schedule-I species in the study area)

(iv) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board.

(v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority and other concerned authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.

(vi) The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

(i) The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.

(ii) The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

(iii) Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply

prescribed stack emission and fugitive emission standards.

(iv) The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.

(v) Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

(vi) Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

(vii) The project proponent shall carry out conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.

(viii) Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of air pollutants such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the National ambient air quality standards.

(ix) The transportation of mineral shall be carried out through the covered trucks. Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in beneficiation operations and in transportation of ore to the beneficiation plant. The vehicles carrying the mineral shall not be overloaded.

(x) Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.

(xi) Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. Health records of the workers shall be maintained.

(xii) Regular Ambient Air Quality Monitoring shall be carried out. The monitoring stations will be set up in consultation with the SPCB. At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of $PM_{2.5}$, PM_{10}, SO_2 and NOx are anticipated in consultation with the State Pollution control Board. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions. The instruments used for ambient air quality monitoring shall be calibrated regularly.

(xiii) Data on ambient air quality ($PM_{2.5}$, PM_{10}, SO_2, NOx) shall be regularly submitted to the Ministry including its Regional office located at Bhubaneswar and the State Pollution Control Board/Central Pollution Control Board once in six months.

III. Water quality monitoring and preservation

(i) The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant

and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

(ii) Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

(iii) Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

(iv) The project proponent shall practice rainwater harvesting to maximum possible extent.

(v) The effluent from the ore beneficiation plant shall be treated in the tailing thickener and the tailings slurry shall be transported through a closed pipeline to the tailing pond.

(vi) The tailing pond shall be lined with appropriate impervious lining on all sides as well as the bottom to prevent any leachate going from the tailing pond into groundwater.

(vii) The garland drain shall be constructed around the tailing pond before the starting operation on the project.

(viii) The decanted water from the tailing pond shall be re-circulated and there should be zero discharge from the tailing pond.

(ix) Appropriate technology shall be used for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing pond.

(x) Garland drains with appropriate size, gradient and length shall be constructed to arrest silt and sediment flows from ore dumps and directly into the water bodies. The water so collected shall be utilized for watering the roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.

(xi) Effluents containing Cr+6 shall be treated to meet the prescribed standards before reuse. Effluent Treatment Plant should be provided for treatment of wastewater generated from the beneficiation plant.

(xii) Run off from the mineral and reject dumps and other surface run off should be analyzed for Cr+6 and in case its concentration is found higher than the permissible limit the water should be treated before reuse.

(xiii) Adhere to “Zero Liquid Discharge”.

(xiv) Regular monitoring of water quality for surface water sources as well as ground water sources shall be carried out. The groundwater shall be monitored downstream of beneficiation plant as well as tailing pond upto groundwater table and record of monitoring data should be maintained and submitted on six monthly basis to the Ministry of Environment and Forests, its Regional Office, Bhubaneswar, the Central Ground Water Authority, the Regional Director Central Ground Water Board and the State Pollution Control Board.

(xv) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.

Environmental Scientist, SEAC

(xvi) Appropriate mitigative measures shall be taken to prevent pollution of the nearby surface water source in consultation with the State Pollution control Board.

IV. Noise monitoring and prevention

(i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Office, MoEF&CC, Govt. of India, Bhubaneswar as well as SEIAA, Odisha as a part of six-monthly compliance report.

(ii) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

(i) Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

(ii) Provide LED lights in their offices and residential areas.

VI. Waste management

(i) The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016

(ii) Kitchen waste shall be composted or converted to biogas for further use.(/o be decided on case to case basis depending on type and size of plant)

(iii) Separate impervious concrete pits for disposal of sludge shall be provided for the safe disposal of sludge generated from the beneficiation operation.

VII. Green Belt and EMP

(i) Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

(ii) The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

(iii) Plantation shall be raised all around the beneficiation plant site and the tailing pond around the plant, tailing disposal area, roads etc. by planting the native species in consultation with the local DFO/ Agriculture Department.

VIII. Human Health Issues

(i) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

(ii) The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

Environmental Scientist, SEAC

(iii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile

a) STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

(iv) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

(i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1 A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

(ii) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the Regional Office, MoEF&CC, Govt. of India, Bhubaneswar as well as SEIAA, Odisha as a part of six-monthly report.

(iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

(iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Regional Office, MoEF&CC, Govt. of India, Bhubaneswar as well as SEIAA, Odisha along with the Six Monthly Compliance Report.

(v) Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out

(vi) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.

X. Miscellaneous

(i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this

shall also be displayed in the project proponent's website permanently.

(ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

(iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

(iv) The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".

(v) The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2 , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

(vi) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

(vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

(viii) The project proponent shall inform the Regional Office, MoEF&CC, Govt. of India, Bhubaneswar as well as SEIAA, Odisha the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

(ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

(x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the State Level Expert Appraisal Committee.

(xi) No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Odisha.

(xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

(xiii) The SEIAA, Odisha may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

Environmental Scientist, SEAC

(xiv) The SEIAA, Odisha reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

(xv) The Regional Office, MoEF&CC, Govt. of India, Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

(xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

(xvii) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Environmental Scientist, SEAC

ANNEXURE - D

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S SUMMA REAL MEDIA PVT. LTD FOR PROPOSED PHARMACEUTICAL MANUFACTURING & RESEARCH UNIT COMPRISING PHARMACEUTICAL FORMULATION & DEVELOPMENT CENTER OVER A TOTAL BUILT-UP AREA 46061.50M^2 AT MOUZA - GOTHAPATANA, BHUBANESWAR, DIST - KHORDHA OF SRI ANURAG NAYAK – EC.

PART A - SPECIFIC CONDITIONS:

1. Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc. as per National Building Code including protection measures from lightening etc.
3. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
4. The project proponent shall ensure that the guidelines for building and construction projects issued vide this Ministry's OM NO.19-2/2013-IA.III dated 9th June, 2015, are followed to ensure sustainable environmental management.
5. The proponent shall obtain prior clearance from the Standing Committee of the National Board for Wild Life if the project will be located within any Eco-Sensitive Zone of Wild Life Sanctuary.

TOPOGRAPHY AND NATURAL DRAINAGE

6. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape and other Sustainable Urban Drainage Systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
7. The permission from competent authority will be obtained to discharge the excess storm water to drain if any. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially.
8. Permission for construction of drain alongside the adjacent NH under construction for allowing the proponent to discharge the treated waste water as well excess runoff water during monsoon from NH Authority shall be obtained. The construction of drains shall be synchronized with the completion of the construction of the Housing Project.

WATER REQUIREMENT, CONSERVATION, RAIN WATER HARVESTING, AND GROUND WATER RECHARGE

9. As proposed, fresh water requirement from ground water shall not exceed 400 KLD.
10. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available.

This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

11. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha along with six monthly Monitoring reports.
12. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
13. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
14. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
15. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
16. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pit of 01 no. shall be provided.
17. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.
18. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

SOLID WASTE MANAGEMENT

19. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
20. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
21. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
22. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
23. A certificate from the competent authority handling municipal solid wastes, indicating the

existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

SEWAGE TREATMENT PLANT

24. Sewage shall be treated in STP of capacity 50 KLD. The treated effluent from STP shall be reused for flushing, landscaping, floor & car washing.
25. Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.
26. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point.
27. Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.
28. No sewage or untreated effluent water would be discharged through storm water drains.
29. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
30. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
31. The proponent shall obtain permission from the concerned authority to discharge the liquid waste to any drain i.e. the competent authority of the drain and “Nala” before commencement of any activity at the project site.

ENERGY

32. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
33. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

34. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 5% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.

35. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

36. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

37. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project shall be submitted.

AIR QUALITY AND NOISE

38. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, morram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, morram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

39. AII construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

40. **Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.**

41. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

42. For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.

43. Ambient noise levels shall conform to residential standard both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed approx. 20242 m^2 (20 % of the net plot area) shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

45. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

TRANSPORT

46. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
    - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    - Traffic calming measures
    - Proper design of entry and exit points.
    - Parking norms as per local regulation

47. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project.

48. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

49. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

50. A dedicated entry/exit and parking shall be provided for commercial activities.
51. Barricades shall be provided around project boundary.
52. Speed of the vehicles shall be restricted upto 15 kmph by erecting speed bumps at regular intervals at project site and proper signage shall be provided for guided vehicular movement and speed restrictions.
53. Parking shall be prohibited on the access road to the proposed project site.
54. Footpath shall be seamless with sufficient width.
55. No vehicles shall be allowed to stop and stand in front of the gate on main access.
56. A buffer of minimum 10 m shall be maintained between the entry/exit gate and the road to avoid traffic congestion.
57. The Traffic Management Plan prepared by the proponent shall be duly validated and certified by the State Concerned Competent Authority and shall have also their consent before implementation.

ENVIRONMENT MANAGEMENT PLAN

58. An Environmental Management Plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

OTHERS

59. Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
60. A First Aid Room shall be provided in the project both during construction and operations of the project.
61. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
62. As per the MoEF&CC, Govt. of India Office Memorandum F.No.22-65/2017-IA.III dated 1st May 2018, the project proponent is required to prepare and implement Corporate Environment Responsibility (CER) Plan. As per para 6(ll) of the said O.M. appropriate funds shall be earmarked for the activities such as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire

activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

PART B – GENERAL CONDITIONS

1. A copy of the Environmental Clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
2. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to the SEIAA, Odisha and MoEF&CC, Govt. of India and its concerned Regional Office.
3. Officials from the Regional Office of MoEF&CC, Bhubaneswar who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection.
4. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, Odisha.
5. The SEIAA, Odisha reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
6. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
7. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.
8. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the SEIAA, Odisha. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the Regional Office of MoEF&CC, Bhubaneswar.
9. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
10. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The

clearance letter shall also be put on the website of the company by the proponent.

11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

12. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.

Environmental Scientist, SEAC

ANNEXURE - E

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR PROPOSED RESIDENTIAL APARTMENTS BUILDING PROJECT "ANANDAM". B+S+12, BUILT-UP AREA OF 33,296.99 SQ.MTS LOCATED AT PLOT NO. 4223, 4224, 4225, 4233, 4234/10293, 4234/10245, KHATA NO- 1988/651, 1988/709 IN MOUZA - GHATIKIA, TAHASIL - BHUBANESWAR, DISTRICT - KHORDHA OF SRI SUVRANSU SEKHAR MOHANTY & OTHERS - EC.

PART A - SPECIFIC CONDITIONS:

1. Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc. as per National Building Code including protection measures from lightening etc.
3. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
4. The project proponent shall ensure that the guidelines for building and construction projects issued vide this Ministry's OM NO.19-2/2013-IA.III dated 9th June, 2015, are followed to ensure sustainable environmental management.
5. The proponent shall obtain prior clearance from the Standing Committee of the National Board for Wild Life if the project will be located within any Eco-Sensitive Zone of Wild Life Sanctuary.

TOPOGRAPHY AND NATURAL DRAINAGE

6. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape and other Sustainable Urban Drainage Systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
7. The permission from competent authority will be obtained to discharge the excess storm water to drain if any. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially.
8. Permission for construction of drain alongside the adjacent NH under construction for allowing the proponent to discharge the treated waste water as well excess runoff water during monsoon from NH Authority shall be obtained. The construction of drains shall be synchronized with the completion of the construction of the Housing Project.

WATER REQUIREMENT, CONSERVATION, RAIN WATER HARVESTING, AND GROUND WATER RECHARGE

9. As proposed, fresh water requirement from ground water shall not exceed 91 KLD.
10. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available.

This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

11. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha along with six monthly Monitoring reports.
12. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
13. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
14. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
15. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
16. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits of 22 nos. shall be provided.
17. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.
18. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

SOLID WASTE MANAGEMENT

19. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
20. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
21. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
22. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

23. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

SEWAGE TREATMENT PLANT

24. Sewage shall be treated in STP of capacity 150 KLD. The treated effluent from STP shall be reused for flushing, landscaping, floor & car washing.
25. Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.
26. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point.
27. Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.
28. No sewage or untreated effluent water would be discharged through storm water drains.
29. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
30. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
31. The proponent shall obtain permission from the concerned authority to discharge the liquid waste to any drain i.e. the competent authority of the drain and “Nala” before commencement of any activity at the project site.

ENERGY

32. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
33. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

34. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 5% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.

35. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

36. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

37. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project shall be submitted.

AIR QUALITY AND NOISE

38. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, morram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, morram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

39. AII construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

40. **Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.**

41. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

42. For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.

43. Ambient noise levels shall conform to residential standard both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed approx. 1335.26 sq.mt. (24.41 % of net plot area) shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

45. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

TRANSPORT

46. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
    - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    - Traffic calming measures
    - Proper design of entry and exit points.
    - Parking norms as per local regulation

47. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project.

48. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

49. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

50. A dedicated entry/exit and parking shall be provided for commercial activities.
51. Barricades shall be provided around project boundary.
52. Speed of the vehicles shall be restricted upto 15 kmph by erecting speed bumps at regular intervals at project site and proper signage shall be provided for guided vehicular movement and speed restrictions.
53. Parking shall be prohibited on the access road to the proposed project site.
54. Footpath shall be seamless with sufficient width.
55. No vehicles shall be allowed to stop and stand in front of the gate on main access.
56. A buffer of minimum 10 m shall be maintained between the entry/exit gate and the road to avoid traffic congestion.
57. The Traffic Management Plan prepared by the proponent shall be duly validated and certified by the State Concerned Competent Authority and shall have also their consent before implementation.

ENVIRONMENT MANAGEMENT PLAN

58. An Environmental Management Plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

OTHERS

59. Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
60. A First Aid Room shall be provided in the project both during construction and operations of the project.
61. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
62. As per the MoEF&CC, Govt. of India Office Memorandum F.No.22-65/2017-IA.III dated 1st May 2018, the project proponent is required to prepare and implement Corporate Environment Responsibility (CER) Plan. As per para 6(ll) of the said O.M. appropriate funds shall be earmarked for the activities such as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire

activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

PART B – GENERAL CONDITIONS

1. A copy of the Environmental Clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
2. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to the SEIAA, Odisha and MoEF&CC, Govt. of India and its concerned Regional Office.
3. Officials from the Regional Office of MoEF&CC, Bhubaneswar who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection.
4. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, Odisha.
5. The SEIAA, Odisha reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
6. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
7. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.
8. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the SEIAA, Odisha. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the Regional Office of MoEF&CC, Bhubaneswar.
9. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
10. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The

clearance letter shall also be put on the website of the company by the proponent.

11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

12. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.

Environmental Scientist, SEAC