

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL  
COMMITTEE, ODISHA HELD ON 04<sup>TH</sup> MARCH 2025**

---

The SEAC met on 04<sup>th</sup> March, 2025 at 04:00 PM through Video Conferencing (VC) in Google Meet 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. Satapathy | - | Member (through VC)   |
| 9. Dr. K.C.S Panigrahi        | - | Member (through VC)   |
| 10. Shri Jayant Kumar Das     | - | Member (through VC)   |
| 11. Dr. Ashok Kumar Sahu      | - | 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 FOR CONSTRUCTION OF WORKING WOMEN'S HOSTEL FOR SEA FOOD PROCESSING PARK ON TOTAL PLOT AREA OF THE PROJECT IS 35856.00 SQM AND TOTAL BUILT UP AREA OF THE PROPOSED PROJECT IS 73485.71SQM. THE SITE IS LOCATED MOUZA - HARIPUR, P.S.- CHANDAKA, BHUBANESWAR, DIST- KHURDA OF SRI JITENDRIYA JYOTIPRAKASH – EC.**

1. This proposal is for Environmental Clearance for construction of Working Women's Hostel for Sea Food Processing Park. The total plot area of the project is 35856.00 sqm, and total built up area of the proposed project is 73485.71sqm. The site is located Mouza - Haripur, P.S.- Chandaka, Bhubaneswar, Dist - Khurda of Sri Jitendriya Jyotiprakash.
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 & Construction Projects
3. **Project details:** Odisha Industrial Infrastructure Development Corporation (IDCO) was set up by the Government of Odisha as a statutory corporation in 1981. IDCO has been acting as the Nodal Agency for providing industrial infrastructure and land for industrial and infrastructure projects in the State. Industrial Development Corporation of Odisha (IDCO) has proposed construction of Working Women's Hostel for Sea Food Processing Park at Deras, Mouza- Haripur, Bhubaneswar, Dist- Khurda, Odisha.
4. **Location and connectivity:** The proposed site is located at Mouza - Haripur, P.S.- Chandaka, Bhubaneswar, Dist - Khurda, Odisha. The Geographical co-ordinate of the project site is: Latitude- 20°16'18.76" N & Longitude- 85°41'32.42" E. The project site is well connected with

Proceedings of the SEAC meeting held on 04.03.2025

**Environmental Scientist, SEAC**

Khurda-Chadaka Road at a distance of approx. 0.4 Km in East direction. The nearest railway station is Bhubaneswar Railway station at a distance of approx. 15.7 Km. The nearest airport is Biju Patnaik Airport at a distance of approx. 12.5 Km from project site.

5. The site is coming under Bhubaneswar Municipal Corporation (BMC).
6. The total plot area is 35856.00 sqm/8.860 Ac./3.585 Ha. with total built-up area 73485.71 sqm.
7. The Building Area Details of the Project in tabulated form

Particular	Proposed	Permissible
Project Name	Proposed construction of Working Women's Hostel for Sea Food Processing Park	
Total Plot Area	35856.00 sqm	--
Ground Coverage	12263.00 sqm (34.20%)	--
FAR Area	71647.75 sqm	--
FAR	2.0	--
<b>Total Built up Area</b>	<b>73485.71 sqm</b>	--
Maximum Height	22.7 m	--
Open Parking Area	7185.0 sqm	
<b>Total Parking Area</b>	<b>7185.0 sqm</b>	
Green Belt Area	7231.00 sqm (20.16%)	7172.00 sqm (20.00%)
Maximum No. of Floor	6	--
Power Requirement	3000 kVA	--
Solar	129.2 KW	
No. of DG sets	3x750 kVA	--
Fresh Water requirement	666.0 KLD	--
Sewage Treatment Plant	STP Capacity- 1000 KLD	--
Solid Waste Generation	3636.7 kg/day	
Estimated Population- Residential, Commercial, Floating/visitors	Residential- 7352 Nos. Visitor- 735 Nos.	--

8. **Water requirement:** Fresh make up of 666 KLD will be required for the project which will be sourced from IDCO Water Supply. Total wastewater generated from the residential building is 871.0 KLD which is treated in STP of Capacity 1000 KLD. Rainwater harvested through 43 nos. of Rain Water recharging pits.

**Table: Water Requirement Operation Phase**

Sl. No.	Description	Total Population	Per Capita Consumption (ltr/day)		Water Requirement (KLD)		
					Domestic	Flushing	Total
1.	Residential	7352 nos.	Fresh (90)	Flushing (45)	661.7	330.8	992.5
2.	Floating	735 nos.	Fresh (5)	Flushing (10)	3.7	7.4	11.1
<b>TOTAL</b>					<b>665.4</b> <b>≈ 666</b>	<b>338.2</b>	<b>1003.6</b>

**Table: Waste Water Calculation**

Details	Water (KLD)
Water requirement for domestic purpose	666.0
Wastewater generated from domestic use (@ 80% of domestic water requirement)	532.8
Water requirement for Flushing Purpose	338.2
Wastewater generated from Flushing (@ 100% of flushing requirement)	338.2
<b>Total Wastewater generated</b>	<b>532.8+338.2 = 871.0</b>
<b>Sewage Treatment Plant Capacity</b>	<b>1000.0</b>
STP Loss (5 % of wastewater generation)	43.5
<b>Recycled water form STP @ 95 % of wastewater generated</b>	<b>827.5</b>
Landscaping	29.0
Dust Suppression	28.0

9. **Power requirement:** Total Power requirement of the proposed building is 3000 KVA, Source is TPCODL, 3x750 KVA DG Sets is provided. Total 129.2 KW Solar Power Generation which is 5.38% of total power required in project.

10. **Rain Water Harvesting:** Total 947.0 cum Rain Water is harvested through 43 nos. of recharge pits.

11. **Parking Requirement:** Total parking area provided is 7185.0 Sq.mt. and total 287 nos. of ECS and location of parking area is Open.

Parking Area Provided			
Open parking	--	--	7185.0 sqm
<b>Total Parking</b>	--	--	<b>7185.0sqm</b>
Equivalent Car Space Provided			
	Area(sqm)	Area/ECS	
Open Parking	7185.0	25	287 ECS
<b>Total Parking Provided</b>			<b>287 ECS</b>
<b>Visitor Parking Provided</b>			<b>270.0 sqm</b>

12. **Firefighting Installations:** Fire Fighting will be provided as per NBC Norms.

13. **Green Belt Development:** Greenbelt is developed over an area of 7231.0 sqm which is 20.16% of the total plot area. Total 153 nos. of plants to be planted and 3 tier plantations.

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

#### Solid waste Generation

S. No.	Category	Counts (heads)	Waste generated (kg/day)
1.	Residents	7352 @ 0.45 kg/day	3308.4
2.	Floating Population	735 @ 0.15 kg/day	110.3
3.	STP Sludge		218.0
<b>Total Solid Waste Generated</b>			<b>3636.7 kg/day</b>

15. **Project cost:** The total project cost is 329 Crores and cost for EMP incurs capital cost of 155 lakhs and recurring cost of 18 lakhs.

Sl. No	Details	Capital Cost in Lakhs (Non-recurring)	Recurring Cost per annum (in lakhs)
1	Air Pollution Control	30	3.0
2	Waste Water Management	45	4.5
3	Water Treatment Plant	35	3.5
4	Solid Waste Management	20	2.0
5	Environmental Monitoring	--	2.5
6	Greenbelt Development	25	2.5
	<b>Total</b>	<b>155</b>	<b>18.0</b>

16. **Environment Consultant:** The Environment consultant **M/s. Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee on 18.10.2024.

17. The SEAC in its meeting held on dated **18-10-2024** recommended the following:

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

- i) NOC/permission from Chandaka DFO that the project does not falls inside the Eco-sensitive Zone (Deras Dam) of Chandaka Wildlife Sanctuary.
- ii) Submit the correct kism of land along with land documents and rectify and submit the checklist, where the kism of land mentioned as Gochar land. Project proponent shall convert the kism of land into Gharabari.
- iii) Project proponent shall intimate regarding the source of water supply proposed to be use in the project, whether the water it is treated water or ground water will be used for domestic purpose. Further, if the PP will use ground water, the PP shall obtain CGWA Permission separately for this project.
- iv) The project comprises of 6952 bedded resident population. Therefore, the SEAC has suggested the Project proponent to explore the possibility to install two STPs with aerator to ensure there is no failure in treatment of waste.
- v) Project proponent shall submit all the statutory clearances such as structural stability, AAI, Fire NOC, permission for source of water and Traffic study report vetted by institute of repute.
- vi) Location of the nearest public drain along with unhindered access to it for facilitating discharges of the excess treated sewage water and the storm water from the project site.
- vii) Necessary permissions or discharge of the excess treated sewage water and storm water from the project site to the nearest public drain.

**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.

18. 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.	NOC/permission from Chandaka DFO that the project does not falls inside the Eco-sensitive Zone (Deras Dam) of Chandaka Wildlife Sanctuary.	NOC form Chandaka Wildlife Division DFO has been obtained vide letter number 8223/4WL (F.C Act & Lease)-27/2024 dated 12 <sup>th</sup> December, 2024. The Letter of the same is attached as <b>Annexure-1</b> .	<b>Annexure-1 is attached and complied</b>
2.	Submit the correct kism of land along with land documents and rectify and submit the checklist, where the kism of land mentioned as Gochar land. Project proponent shall convert the kism of land into Gharabari.	The correct Kism of land along with authenticated land schedule is attached as <b>Annexure-2</b> .	<b>Annexure-2 is attached and complied</b> As per submitted copy of ROR, Kism of land has been mentioned as Patita.
3.	Project proponent shall intimate regarding the source of water supply proposed to be used in the project, whether the water it is treated water or ground water will be used for domestic purpose. Further, if the PP will use ground water, the PP shall obtain CGWA Permission separately for this project.	The source of water supply for the proposed project will be Megha Engineering & Infrastructure Limited source. And the supply water will be treated and suitable for domestic purpose. The permission letter for the same is attached as <b>Annexure-3</b> .	<b>Annexure-3 is attached and complied.</b> Letter No. IDCO/WS & EC-I/D2-190/24-25 1843 dated 21 <sup>st</sup> October 2024 of IDCO states that treated water suitable for domestic purpose is sourced from MEIL. The letter also states that surplus water is available through existing underground reservoir (UGR) and elevated service reservoir (ESR).  Necessary arrangements / contract between IDCO and MEIL for supply of the required quantity of treated water suitable for domestic use to meet the needs of the project during its operational phase needs to be ensured.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
4.	The project comprises of 6952 bedded resident population. Therefore, the SEAC has suggested the Project proponent to explore the possibility to install two STPs with aerator to ensure there is no failure in treatment of waste water.	The Project Proponent will install 2 numbers of STP with aerator to ensure there is no failure in treatment of waste water.	The PP has agreed to the condition.
5.	Project proponent shall submit all the statutory clearances such as structural stability, AAI, Fire NOC, permission for source of water and Traffic study report vetted by institute of repute.	<p>Structural Stability of the project has been vetted by IIT, Madras on dated. 19.12.2024 and attached as <b>Annexure-4</b>.</p> <p>Height Clearance from Airport Authority of India has been obtained and attached as <b>Annexure- 5</b>.</p> <p>Fire Safety recommendation has been issued on 31.08.2024 and attached as <b>Annexure-6</b>.</p> <p>Permission from source of water has already been obtained and attached as <b>Annexure-7</b>.</p> <p>Traffic Study Report vetted by IIT Bhubaneswar is attached as <b>Annexure-8</b>.</p>	<p><b>Annexure-4 is attached and complied</b></p> <p><b>Annexure-5 is attached and complied.</b></p> <p><b>(As per the AAI, Since the requested top elevation 76.96 mts in AMSL is below CCZM permitted top elevation of 183 mts., the NOC for height clearance is not required from Airports Authority of India)</b></p> <p><b>Annexure-6 is attached and complied</b></p> <p><b>Annexure-7 is attached and complied</b></p> <p><b>Annexure-8 is attached and complied</b></p> <p>The letter from IDCO presented under Annexure-7 is same as that presented under Annexure-3 o the ADS pdf. file. Necessary arrangements / contract between IDCO and MEIL for supply of the required quantity of treated water suitable for domestic use to</p>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
			meet the needs of the project during its operational phase needs to be ensured.
6.	Location of the nearest public drain along with unhindered access to it for facilitating discharges of the excess treated sewage water and the storm water from the project site.	The detail permission for facilitating discharge of excess water is attached as <b>Annexure-9</b> .	<p><b>Annexure-9 is attached and complied</b></p> <p>Letter No. IDCO/BCD-II/CIVIL/ESTM/1061/01/2022-23 41 dated 06<sup>th</sup> annuary 2025 is signed by the project proponent, Divisional Head, BCD-II, IDCO stating that the stormwater from the campus of the women's hostel at Deras Seafood Park is to be discharged into the existing drain constructed by IDCO within the Deras Seafood Park area. It is necessary to make necessary arrangements for safe discharge of storm water from the project site to the nearest public drain / natural nallah.</p> <p>The project in its operational phase will generate an estimated quantity of excess 489.3 KL treated sewage water daily (Refer para 8 above). There is no mention how this excess treated sewage water will be discharged from the project site.</p>
7.	Necessary permissions for discharge of the excess treated sewage water and storm water from the project site to the nearest public drain.	Necessary permission for discharging excess storm water has been obtained and attached as <b>Annexure-10</b> .	<p><b>Annexure-10 is attached and partially complied.</b></p> <p><b>As per the permission, "the storm water from the campus of the Women's Hostel at Deras Seafood Park is to be discharged into the existing drain constructed by IDCO within the Deras Seafood Park area"</b></p> <p>There is no mention of discharge of the excess treated sewage water</p>

19. The proposed site was visited by the sub-committee of SEAC on **14.11.2024**. Following are the observations of the sub-committee:

- a) The site is allotted by IDCO and is located inside the IDCO Plot having sea food processing unit. PP explained the layout.
- b) There is wide road at one side having drains and proposed road at another side of the site.
- c) The site is free from any construction having few trees surrounding the boundary.
- d) Water is to be supplied by IDCO as informed by PP.
- e) **Following are needs to be complied by the PP:**
  - i) NOC/Permission for discharge of treated water along with storm water to the adjacent drain to be obtained from the appropriate authority.
  - ii) Internal drainage plan till fall out at Nala.
  - iii) Permission from Land authority with regard to change of Kisam (if any) and change of purpose of utilisation (if any). Land is to be converted to Gharabari if not done.
  - iv) Stack height and emissions to be as per CPCB guideline
  - v) Proper terrane or landscape to be developed to avoid water accumulation during rain.
  - vi) Structural certificate from appropriate authority.
  - vii) All statutory clearances taken to be taken before construction along with fire/safety, traffic study etc.

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 grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) 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.
- ii) 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.
- iii) Letter No. IDCO/WS & EC-I/D2-190/24-25 1843 dated 21st October 2024 of IDCO states that treated water suitable for domestic purpose is sourced from MEIL. The letter also states that surplus water is available through existing underground reservoir (UGR) and elevated service reservoir (ESR). Necessary arrangements / contract between IDCO and MEIL for supply of the required quantity of treated water suitable for domestic use to meet the needs of the project during its operational phase needs to be ensured.
- iv) Letter No. IDCO/BCD-II/CIVIL/ESTM/1061/01/2022-23 41 dated 06th annuary 2025 is signed by the project proponent, Divisional Head, BCD-II, IDCO stating that the stormwater from the campus of the women's hostel at Deras Seafood Park is to be discharged into the



existing drain constructed by IDCO within the Deras Seafood Park area. The proponent shall make necessary arrangements for safe discharge of storm water from the project site to the nearest public drain / natural nallah.

- v) NOC/Permission for discharge of treated water along with storm water to the Canal to be obtained from the appropriate authority including passing the Govt land.
- vi) Internal drainage plan with RWH/Re-charge Pits to be taken up based on requirement and with approval of the authority.
- vii) Care to be taken in developing land scape to avoid flood situation.
- viii) The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.
- ix) The proponent shall obtain permission from concerned Fire Safety Authority.
- x) The commercial block to be used only for the residents of that apartment as mentioned by PP.
- 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 to explore the possibility to install two STPs with aerator to ensure there is no failure in treatment of waste water.
- 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) 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.
- xvi) 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.
- xvii) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

## **ITEM NO. 02**

### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BAITARANI RIVER SAND BED, BUDHIKUD, OVER AN AREA OF 12.50 ACRES OR 5.058 HECTARES IN VILLAGE BUDHIKUD UNDER ANANDAPUR TAHASIL OF KEONJHAR DISTRICT OF SRI JOGENDRA BEHERA - EC**

1. This proposal is for Environmental Clearance for Baitarani River Sand Bed, Budhikud, over an area of 12.50 acres or 5.058 hectares in village Budhikud under Anandapur Tahasil of Keonjhar District of Sri Jogendra Behera.
2. **Category:** This is a Category – B project which falls under schedule 1(a) - Mining of Minerals as per the EIA Notification 2006 and amendments thereafter.

Proceedings of the SEAC meeting held on 04.03.2025

**Environmental Scientist, SEAC**

3. **Mining lease details:** The mining lease of the proposed quarry has been granted to Sri Jogendra Behera, S/o-Shri Gouranga Behera for five financial Years via letter no. 5421 dated 31/05/2021.
4. The mining plan was approved by O/o Joint Director Geology, Keonjhar, Odisha vide letter no.- 945.Dt dated 28/06/2021.
5. This is a new mine and mining lease is an identified sairat source in the DSR page No.2, Sl.no.10, Annexure - I.
6. **TOR details:** Terms of Reference (TOR) was issued by SEIAA, Odisha, vide proposal Letter No. 3681/SEIAA, on dated 27/12/2021.
7. **Public Hearing Details:** Public hearing for the proposed project was conducted on 29.10.2022 at 11.00 AM at Village Budhikuda. Issues raised during public hearing are provisions of livelihood for local villagers in sand mining, repair & maintenance of village road during transportation of sand and support to villagers for development of education & contributions for functions and cultural activities. Budget for CER activities is Rs. 30000.
8. **Location and Connectivity:** The proposed project is located at Khata no-112, Plot No-183 in Village - Budhikuda under Anandapur Tahasil of Keonjhar district; Kisam - Nadi featured in Survey of India Toposheet no. F45O3 bounded by geo coordinates Latitude: N21°20'55.8"to N21°21'6.1" N and Longitude: E86°03'16.1" to E86°03'23.9" E. The Nearest Railway Station is Sagadapata Railway Station 19 Km, SW and Nearest Airport is Biju Patnaik International Airport, Bhubaneswar about 124 km, SW. The Nearest Highway is SH- 53 is 6.0 km SE; NH- 20 is 2.0 km, SW; Nearest distance of Approach Road is 0.2km E; Nearest road Bridge / Railway Bridge is Anandapur Barrage- 18 km; River embankment is 4 km and Electric transmission Pole is 0.6 km Kolimati Village SW. Hadagarh Wildlife Sanctuary is about 26 km ESE.
9. **Total Reserves and Proposed Production** - The proposed production is 17,502cum/Year.

As per Approved Mining Plan		As per Approved Mining Plan
Geological Reserve	Mineable Reserve	Production
1,01,180	87,510	17,502cum/Year

Type of land use	Area in Ha.	
	At present (Existing)	During Plan period
Area under excavation	Nil	4.33
River water	Nil	Nil
Quarry Safety Zone Area	Nil	0.728
<b>Total</b>	5.058	5.058

10. **Replenishment study report details:** Replenishment Study Report has prepared by Drone method. Date of Pre-monsoon Survey is 23.06.2023. Date of Post Monsoon Survey is

18.11.2023. Total 539 nos. of grid points were analysed during Pre-monsoon and post-monsoon period to know the average thickness of sand replenished inside the quarry area.

11. Average thickness during Pre-monsoon period measured from contour value of 539 numbers of grid points - 47.10612245m & average thickness during post-monsoon period is 47.60638219m. Deposit of sand thickness is 47.60638219m - 47.10612245m = 0.50025974 or say 0.5m and 14415.6663 cum of sand has been replenished.

12. **Mining Method:** Open cast manual mining method is proposed for the project with maximum of 17,502 cum/year of production.

Mining Lease	Year	Surface Area in m <sup>2</sup>	Thickness in m	Production (m <sup>3</sup> )
	A	B	C	D=B*C
Baitarani River Sand Bed, Budhikuda	1st Year	8751	2.0	17502
	2nd Year	8751	2.0	17502
	3rd Year	8751	2.0	17502
	4th Year	8751	2.0	17502
	5th Year	8751	2.0	17502
Total				87,510 cum

13. **Water requirement:** Total water requirement is 5KLD [1KLD - Dust Suppression (on haul roads etc), 2.0KLD - Green Belt Development/ Plantation and 2.0KLD - Drinking/Domestic & Sanitation] for the proposed project. Water requirement will be met from nearby available water resource and drinking water will be sourced from tanker.

14. **Baseline study details:** Baseline study of the study area was conducted during winter season from 1st October 2021 to 31 December 2021 for Baitarani River Sand Quarry, Budhikuda.

- a. **Air:** PM10 levels were ranging from 61.2 to 84.9µg/m<sup>3</sup>. PM2.5 levels were ranging from 18.5 to 27.2µg/m<sup>3</sup>. SO<sub>2</sub> levels were ranging from 6.5 to 10.4µg/m<sup>3</sup>. NO<sub>x</sub> levels were found ranging from 9.8 to 15.6µg/m<sup>3</sup>.
- b. **Noise:** The noise levels varied in the study area during day time from 48.3 dB (A) Leq to 65.7 Leq dB (A). The night time noise level in the study area is in the range of 36.2 dB (A) Leq to 63.1 Leq dB (A).
- c. **Ground water monitoring results:** The ground water analysis for all the 7 sampling stations shows that pH varied from 7.02 to 7.28, total hardness varied from 132 mg/l to 249 mg/l & total dissolved solids varied from 125mg/l to 237 mg/l. The water samples contain chloride 12.26 mg/l to 25.06 mg/l, Ca from 22.14mg/l to 37.61mg/l, Magnesium varies from 2.66 mg/l to 6.20 mg/l.
- d. **Surface water monitoring results:** All samples were colourless meeting desirable norms (<5 Hazen). All samples meet the desirable standards pH ranges from 7.34-7.61. TDS in samples ranges from 35 mg/l to 83 mg/l. all the samples meet the permissible limit of 2000 mg/l. Total hardness in the water ranges from 14 mg/l to 62 mg/l. All the samples meet the permissible limit of 600mg/l. Calcium content in the water ranges from 8.1 mg/l to 29.5 mg/l, all the samples meet the permissible limit of 200 mg/l. Magnesium content in the water ranges from 2.4 mg/l to 11.9 mg/l, all the samples meet the permissible limit of 100 mg/l.

- e. **Soil monitoring results:** All soil samples indicate pH value ranging from 6.89 - 7.72, Organic Matter ranges found BDL in the soil samples. Nitrogen is found BDL and Phosphorous from 183 mg/kg- 254 mg/kg, whereas the Potassium is found to be ranging from 183 mg/kg -254 mg/kg.
15. **Greenbelt Development:** 50 trees per year is proposed for the greenbelt development of the project.
16. **Manpower:** 29 persons is required as manpower for the proposed project.
17. **Project Cost & EMP cost:** Total estimated cost of the proposed project is Rs. 0.5 crore, EMP incurs Capital Cost of Rs. 2, 55,000 and Recurring Cost of Rs.1,50,000.
18. **Environment Consultant:** The Environment consultant **M/s Green Circle Inc., Vadodara, Gujarat** along with the proponent made a presentation on the proposal before the Committee.
19. The SEAC in its meeting held on dated **10-07-2024** decided to take decision on the proposal after receipt of the following 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
1.	Measurement Error in X, Y, Z axis of Camera location and GCP points in both Pre-monsoon and post-monsoon.	Submitted at page no. 53-65.
2.	Reduced level of the surface sand, water level and river level.	The proponent has submitted the digital terrain map, ortho map, contour map and surface geological map for pre & post-monsoon season survey at page no. 67-76

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Green Circle Inc., Vadodara**, the SEAC observed the following:

- i) The pdf file submitted in the ADS contains the replenishment study report RSR). Page 19 of RSR (Pdf file page 24) under para "Common safe workable area" states that most of the lease area was waterlogged during pre-monsoon survey compared to post monsoon survey. Drone survey could not be processed in waterlogged area. Safe workable area is stated to be 48027.2718 m<sup>2</sup> based on post-monsoon survey result. This area is same as that mentioned in the surface geological map of the ML area based on the post monsoon survey (Refer page 76 of the pdf file). Surface geological map of the ML area based on pre-monsoon survey (Refer page 71 of the pdf file) mentions the sand area to be 48986.58 m<sup>2</sup> and does not mention presence of any water body. This is in contradiction of the above-mentioned statement of page 19 of the RSR.
- ii) Table No.07 of the RSR mentions 539 grid points Easting, Northing and Elevations, the readings of which are stated to be based on the pre and post monsoon drone surveys. The basis of pre-monsoon drone survey grid points data is not understood as the same report mentions the pre-monsoon drone survey could not be processed as most of the ML areas were waterlogged.

- iii) The reported elevations of the riverbed sand in the ML area in the Table No.07 of the RSR are noted to vary in the range of 42 m to 51 m which cannot be considered as a true surface feature of the ML area. Riverbed sand surfaces are flat with very small gradient.
- iv) The RSR states two sets of ground control points (GCP) totalling to 09 numbers and none of these GCPs have been fixed as per the procedure mentioned under para “Ground control point establishment and monumentation” of the SOP submitted by ORSAC vide letter No. ORSAC/PR/0951/21/2588 dated 02<sup>nd</sup> June 2023.

20. The SEAC in its meeting held on dated **19-10-2024**, opined that the Replenishment Study Report (RSR) submitted by the proponent is not considered proper and decided to take decision on the proposal after receipt of the detailed clarification from the proponent along with modified RSR as observed by the Committee at para i) to iv) above.

21. 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 pdf file submitted in the ADS contains the replenishment study report RSR). Page 19 of RSR (Pdf file page 24) under para “Common safe workable area” states that most of the lease area was waterlogged during pre-monsoon survey compared to post monsoon survey. Drone survey could not be processed in waterlogged area. Safe workable area is stated to be 48027.2718 m <sup>2</sup> based on post-monsoon survey result. This area is same as that mentioned in the surface geological map of the ML area based on the post monsoon survey (Refer page 76 of the pdf file). Surface geological map of the ML area based on pre-monsoon survey (Refer page 71 of the pdf file) mentions the sand area to be 48986.58 m <sup>2</sup> and does not mention presence of any water body. This is in contradiction of the above-mentioned statement of page 19 of the RSR.	The rectified Replenishment study report is attached below.	Replenishment study report is attached.  As per the replenishment study report (RSR) received as ADS, the pre-monsoon survey is done on 23 <sup>rd</sup> June 2024 and post monsoon survey is done on 18 <sup>th</sup> November 2024. The common safe workable area is stated to be 30352 m <sup>2</sup> (30.8% less than the mineable area stated in the approved mining plan dated 18 <sup>th</sup> June 2021) in the RSR.
ii)	Table No.07 of the RSR mentions 539 grid points Easting, Northing and Elevations, the readings of which are stated to be based on the pre and post monsoon drone surveys. The basis of pre-monsoon drone survey grid points data is not understood as the same report mentions the pre-monsoon drone survey could not be processed as most of the ML areas were waterlogged.	Table no.07 is rectified as per modified Replenishment study report.	Replenishment study report is attached.  Table no.07 of the RSR based on 2024 surveys mentions 539 grid points Easting, Northing and Elevations.
iii)	The reported elevations of the riverbed sand in the ML area in the Table No.07 of the RSR are noted to vary in the range of 42 m to 51 m which cannot be considered as a true surface feature of the ML area. Riverbed sand surfaces are flat	Rectified RSR is attached below.	Replenishment study report is attached.  The reported elevations of the riverbed sand in the

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	with very small gradient.		<p>ML area in Table No.07 of 2024 RSR are noted to vary in the range of 40.42 m to 44.97 m (40.42 m to 44.97 m in pre-monsoon and 41.06 m to 44.95 m in post-monsoon).</p> <p>As per the approved mining plan, the riverbed sand surface in the ML area 47 m above MSL and the thickness of the deposited sand is varying in the range 1.8 m to 2,2 m. The quarry level after mining is stated to be 45 m above MSL.</p>
iv)	The RSR states two sets of ground control points (GCP) totaling to 09 numbers and none of these GCPs have been fixed as per the procedure mentioned under para "Ground control point establishment and monumentation" of the SOP submitted by ORSAC vide letter No. ORSAC/PR/0951/21/2588 dated 02 <sup>nd</sup> June 2023.	Rectified RSR is attached below.	<p>Replenishment study report is attached.</p> <p>Page 08 of 2024 RSR mentions the method of fixing GCPs and the details of 6 nos. GCPs are given under Table No-06 (Taken for reference for calculation). Site orthometric heights are stated in the following page 09 of the same RSR.</p> <p>The GCPs are not fixed as per para "Ground control point establishment and monumentation" of the standard operating procedure (SOP) for study of rate of replenishment of sand using drone survey prepared by ORSAC for SEIAA, Odisha and submitted vide letter No. ORSAC/PR/0951/21/2588 dated 02<sup>nd</sup> June 2023.</p>

22. The Committee observed the following:

Proceedings of the SEAC meeting held on 04.03.2025

Environmental Scientist, SEAC

- i) The RSR of the riverbed sand mining lease site has been prepared by the same ORSAC empanelled agency based on photogrammetry survey using drone / UAV. for two consecutive years i.e. 2023 and 2024.
- ii) The 2023 RSR is based on pre- and post-monsoon surveys being done on 23<sup>rd</sup> June 2023 and 18<sup>th</sup> November 2023. (Refer para 10 above). As per the ADS, 2024 pre and post monsoon surveys are carried out exactly after a year i.e. on 23.06.2024 and 18.11.2024. The mining site is not under operation awaiting EC grant order. The reported average elevations of the riverbed sand surface based on the pre and post monsoon surveys in 2023 is 47.106 m and 47.606 m respectively whereas for 2024, the RSR states 42.498 m as average pre-monsoon surface elevation and 43.087 m as that during post monsoon.
- iii) Based on the reported results of 2023 and 2024 RSRs the elevation of the riverbed sand surface has fallen by about 5.1 m during seven months contrary to the rational expectation that the pre monsoon riverbed sand surface elevation of 2024 must be same as that of 2023 post-monsoon.
- iv) The 2024 RSR is not based on proper photogrammetry surveys. The surveys care not done as per the the standard operating procedure (SOP) for study of rate of replenishment of sand using drone survey prepared by ORSAC for SEIAA, Odisha and submitted vide letter No. ORSAC/PR/0951/21/2588 dated 02<sup>nd</sup> June 2023.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Green Circle Inc., Vadodara** on behalf of the proponent, the SEAC observed that the Replenishment Study conducted by the lessee is not satisfactory and recommended that the SEIAA, Odisha may take a decision on this proposal for grant of Environmental Clearance.

### **ITEM NO. 03**

#### **PROPOSAL OF ENVIRONMENTAL CLEARANCE OF M/S PERFECTUS TECHNOLOGY SOLUTIONS PRIVATE LIMITED FOR COMMERCIAL “I- HUB TECH PARK” IT BUILDING OF 2B+LG+UG+7 STORIED OVER AN BUILT-UP AREA 36274.05 SQ.MT PROJECT LOCATED AT MOUZA- CHANDRASHEKHARPUR, TAHASIL- BHUBANESWAR, DISTRICT- KHORDHA OF SRI SUSHANT PATTNAIK - EC**

1. This proposal is for Environmental Clearance of M/s Perfectus Technology Solutions Private Limited for Commercial “i- Hub Tech Park” IT Building of 2B+LG+UG+7 storied over a total Built up area 36274.05 Sq.mt project located at Mouza- Chandrashekharapur, Tahasil- Bhubaneswar, District- Khordha of Sri Sushant Pattnaik.
2. **Category:** This is a Category – B project which falls under schedule 8(a) - Building & Construction Projects as per the EIA Notification 2006 and amendments thereafter.
3. **Location and Connectivity:** The proposed project is located at IDCO Plot No -E/43, Revenue Plot No, - 1(P), Khata No- 612 in Mouza- Chandrashekharapur, Tahasil - Bhubaneswar, District Khordha, Odisha. The Project Site is a part of the Survey of India Toposheet No. F45T15 and geo coordinates of project area is - Latitude: 20° 20' 15.72" N to 20° 20' 20.42" N, Longitude: 85° 47' 50.26" E to 85° 47' 59.53" E. The project will be constructed on IDCO Land. Nearest Habitation is Chandrashekharapur adjacent. Nearest Highway is NH-16 -.5.5 km, SH-57 at a distance of 24.0 km and Nandankanan Road at a distance of 2.6 km. Nearest Railway Station is Bhubaneswar junction railway station at 9.3 km. Nearest Airport is Biju Patnaik International

Airport at 10.0 km. The project site does not fall within Eco Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by MoEF&CC.

4. The site is coming under Bhubaneswar Municipal Corporation (BMC).
5. The Project was approved for setting up an IT Infrastructure Hub at Info City, IDCO's Industrial Area, Chandika from State Level Single Window Clearance Authority (SLSWC) vide letter no. SJ/SLSWCA-217(2)/1300 dated 06.03.2024 in favor of M/s Perfectus Technology Solutions Pvt. Ltd.
6. The Total plot area is 35005.0 sqm/ 8.65 Acre/3.50 Ha with built-up area 36274.05 Sq.mt
7. The building area details of the project in tabulated form
8. The Building Area Details of the Project in tabulated form –

S. No	Particulars	Area in Sq.mts
i)	Total Plot Area	35005.00 sqm
ii)	Total Proposed FAR Area	20751.07 sqm
iii)	FAR Area Consumed	0.598
iv)	Total Built-up Area	36274.05 sqm
v)	Total Green Area Provided (21.0 %)	7350
vi)	Parking Area Provided	9236.45
vii)	Height of the Building	42.8
viii)	No. of Blocks/ Floors	1/ 2 B+LG+UG+7

9. **Water Requirement:** Water during operation phase will be sourced from ground water. The fresh water requirement is 48.0 KLD. Applied for NOC from Central Ground Water Authority (CGWA) vide application no. 104257. Domestic water requirement will be 89 KLD. In this, fresh water requirement and flushing water is 48 KLD and 41 KLD respectively. Wastewater generation will be 79 KLD. The STP, SBR, capacity provided is 150 KLD. Discharge of treated wastewater quantity to nearest drain will be 29.0 KLD.
10. **Power requirement:** The total power requirement for the proposed commercial office building is 1905.3 KW. The power will be entirely supplied by State Electricity Board, Odisha. The premise is connected by 1985.69 KVA. In case of power cut, 100% power backup generators will be provided. 1250 KVA 2 DG Sets has been proposed for the Office building project with stack height of 50 mts. to provide supply considering the critical loads for each application. Solar power generation is 385 kw. Consumption and its contribution are 20.2 % towards total power requirement in the project.
11. **Rainwater Harvesting System:** - Rainwater harvesting will be capture a total runoff of 788.59 m<sup>3</sup> using 35 no. of pits.
12. **Parking requirement:** - Total parking area required is 8300.43 Sq.mt (40% of 20751.07 sq.mt). The provided parking area is at basement in an area of 9236.45 Sq.mt (44.51%). Total parking proposed in terms of ECS is 288.
13. **Firefighting installation:** -Fire NOC recommendations obtained vide RECOMM1204130052024002279 Dt. 02.8.2024. 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

Proceedings of the SEAC meeting held on 04.03.2025

Environmental Scientist, SEAC



service authority.

14. **Green Belt Development:** - Green area will be provided in 7350 sq.mt. (21 % of net plot area). The no. of trees proposed in the project is 440 trees.
15. **Solid Waste Management:** - Total solid waste generation will be 309 Kg/Day. Biodegradable waste will be converted to manure by Organic Waste Converter and Non-Biodegradable waste will be Sent to Authorized Vendors as per SWM Rules 2016. Landscape waste will be 0.036 Kg/Day. STP Sludge generation will be 11.06 Kg/day.
16. **Details of court cases if any:** There are no cases against the proposed project site.
17. **Traffic Study Report:** Traffic Composition after development of the project will be good (LOC B or better than C). Traffic study report was prepared by School of Civil Engineering, KIIT Deemed to be University, Bhubaneswar.
18. **Project cost:** The estimated project cost is INR 164.0 Crores. Budget allocated for Environmental protection measures during construction phase - Rs.12 Lakhs as capital cost and Rs.7.0 Lakhs as recurring and during occupation phase - Rs.83 Lakhs as capital cost and Rs. 14 Lakhs as recurring cost.
19. **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 27.08.2024.
20. The SEAC in its meeting held on dated **27-08-2024** recommended the following:
  - A. **The proponent may be asked to submit the following for further processing of EC application:**
    - a) Previous approved BDA plan for Phase I.
    - b) Revise KML file showing clearly demarcation of Phase II in KML file.
    - c) Justify why the project shall be considered as single project and not 4 projects when the Project Proponent has mentioned for plan for Phase – III & IV in future.
    - d) Original lease documents/Land Documents and layout plan approved by IDCO for the entire land proposed by IDCO clarifying each phase will be treated as single entity.
    - e) Percentage of green belt with layout for Phase II.
    - f) NOC/permission from concerned Drainage Department to discharge excess treated water/storm water along with internal drainage plan showing the point off discharge to the nearest public drain.
    - g) Provided Soil analysis contains only some chemical parameters like pH, organic carbon, conductance, potassium etc. These are not sufficient enough for construction projects. Following physical and mechanical properties of soil may be analysed by the parties. Soil Analysis parameters: Procter's compaction test, Atterberg Limits, Texture analysis, Moisture test, Specific gravity, Dry density and Permeability test should be carried out and report submitted.

**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.

21. 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.	Previous approved BDA plan for Phase I.	The approval letter and occupancy letter from BDA, Bhubaneswar has been obtained for Phase- I which copy has been attached for your reference as Annexure-I.	<p>-----</p> <p>Annexure-I of ADS has three BDA letters and there is no mention of Phase-I in these letters.</p> <p>Letter No.16235/ BP BDA, Bhubaneswar dated 11<sup>th</sup> November 2011 is permission or constructing Ground + 3 storied building for I.T. purpose in the project site. Approved cover area is 10399.00 m<sup>2</sup></p> <p>Letter No. 29021/ BDA Bhubaneswar dated 02<sup>nd</sup> August 2022 is for regularizing Ground + 4 stories building to be used for I.T. purposes on the project site. The approved built-up area is 11747</p>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
			m <sup>2</sup> . Letter No. 30336/BDA Bhubaneswar dated 17 <sup>th</sup> August 2022 is for occupancy certificate for above-mentioned constructed building.
2.	Revise KML file showing clearly demarcation of Phase II in KML file.	Revised KML file showing the total area and Phase- II area of the project has been attached for your reference. Red marked line is the total area and pink marked line is proposed Phase- II area.	Revised KML file is submitted to office mail – Id.
3.	Justify why the project shall be considered as single project and not 4 projects when the Project Proponent has mentioned for plan for Phase – III & IV in future.	Letter regarding application of Phase-II project has been attached for your reference as Annexure-II.	----- The constructed area of the existing building at the project site does not mandate grant of EC prior to construction.  In principle approval letter of IPICOL dated 06 <sup>th</sup> March 2024 communicating the “Proceedings of 128 <sup>th</sup> SLSWCA meeting held on 23.02.2024” states that the company (PP) must submit its action plan within 90 days and the company (PP) will follow the prescribed procedure of IDCO for final allotment. (Refer conditions No. 4 and 5 mentioned in the above-mentioned IPICOL letter.
4.	Original lease documents/Land Documents and layout plan approved	Original lease documents/ land documents and layout plan approved	----- The PP has

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	by IDCO for the entire land proposed by IDCO clarifying each phase will be treated as single entity.	by IDCO has been attached for your reference as Annexure-III.	<p>executed lease deed with IDCO on 17<sup>th</sup> April 2012 for the land parcel of the project site for establishment of a private software technology park and the lease is valid up to 22<sup>nd</sup> annuary 2072.</p> <p>Para 2 of the lease deed states that reckoning from the date of possession the company has to start construction within six months and start commercial production within two years.</p>
5.	Percentage of green belt with layout for Phase II.	<p>Revised calculation of greenbelt with breakup has been given below:            Total plot area-35005sqm.            Total greenbelt area proposed-7350sqm which is 21.2% of total plot area.            Total plot area of phase-II project-10157.60sqm.            Total greenbelt for phase-II project-2050sqm which is 20.18% of plot area.</p>	-----
6.	NOC/permission from concerned Drainage Department to discharge excess treated water/storm water along with internal drainage plan showing the point off discharge to the nearest public drain.	Permission from the E.E drainage department has been applied for discharge of excess treated water/storm water along with internal drainage plan which copy of acknowledgement has been attached for your reference as Annexure-IV.	They have submitted the application to the E.E drainage department.
7.	Provided Soil analysis contains only some chemical parameters like pH, organic carbon, conductance, potassium etc. These are not sufficient enough for construction projects. Following physical and mechanical properties of soil may be analysed by the parties. Soil Analysis parameters: Procter"s compaction test, Atterberg Limits, Texture analysis, Moisture test, Specific gravity, Dry density and	They will submit the soil analysis report before start of work during the pilling test. Kindly consider it.	-----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	Permeability test should be carried out and report submitted.		

22. The proposed site was visited by the sub-committee of SEAC on **28.09.2024**. Following are the observations of the sub-committee:

- a) The site is located inside Info city, Patia and the land was allotted by IDCO. The land has roads both sides. One side of road has a drain as explained by PP in Layout Plan.
- b) PP explained that, they are currently operating at Phase-1 and progressively go for Phase-2 to Phase-4 based on their requirement. Building plan approval is pending with IDCO.
- c) There are sufficient Trees planted surrounding the boundary as green belt both across the land as well as surrounding the Phase-1 activity.
- d) There is STP and good land scaping. PP explained that there is zero liquid discharge as all treated water is used for plantation.
- e) Site for Phase-2 was visited and found no construction work done. PP has informed that they have submitted the IDCO allotment.
- f) Site conditions and compliance to be incorporated/sought as conditions:**
  - i) NOC/Permission for discharge of treated water of Phase-2 along with storm water to be obtained from the appropriate authority
  - ii) Internal drainage plan with RWH/Re-charge Pits to be taken up based on requirement and with approval of the authority
  - iii) Parking to be taken care of for both Phase-1 and Phase-2 in the basement.
  - iv) OWC to be installed for treatment of STP solid wastes for Phase-1&2
  - v) Provisional building plan letter from IDCO to be submitted along with IDCO terms of allotment.
  - vi) Copy of allotment and land agreement (if not submitted) to be submitted showing the terms of allotment by IDCO to comply the current construction.
  - vii) All statutory clearances to be taken up before construction.

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 valid for 10 years with stipulated conditions as per **Annexure – B** in addition to the following specific conditions.

- i) 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.
- ii) 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.

- iii) NOC/Permission for discharge of treated water along with storm water to the Canal to be obtained from the appropriate authority including passing the Govt land.
- iv) Internal drainage plan with RWH/Re-charge Pits to be taken up based on requirement and with approval of the authority.
- v) Care to be taken in developing land scape to avoid flood situation.
- vi) The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.
- vii) The proponent shall obtain permission from concerned Fire Safety Authority.
- viii) Trees located within the project area shall be transplanted to alongside the boundary green development area.
- ix) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.
- x) 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.
- xi) 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.
- xii) 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.
- xiii) NOC/Permission for discharge of treated water of Phase-2 along with storm water to be obtained from the appropriate authority
- xiv) Internal drainage plan with RWH/Re-charge Pits to be taken up based on requirement and with approval of the authority
- xv) Parking to be taken care of for both Phase-1 and Phase-2 in the basement.
- xvi) OWC to be installed for treatment of STP solid wastes for Phase-1&2
- xvii) Provisional building plan letter from IDCO to be obtained along with IDCO terms of allotment to SEIAA for showing the compliance with the EC.
- xviii) Copy of allotment and land agreement (if not submitted) to be submitted to SEIAA showing the terms of allotment by IDCO to comply the current construction.
- xix) The company needs to obtain necessary permission from IDCO to execute their proposed plan of construction in four phases in the lease hold site.
- xx) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

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

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S TEAM MEDIA & HOSPITALITY PRIVATE LIMITED FOR PROPOSED (2B+G+7) COMMERCIAL-CUM-MULTIPLEX (BLOCK-A) AND PROPOSED FIVE FLOORS HOTEL ABOVE EXISTING (G+2) PRINTING PRESS (BLOCK-B) OVER IDCO PLOT NO – 7/7, REVENUE PLOT NO – 6 (P) UNDER KHATA NO – 474/1607 WITH PLOT AREA OF 6070.28 SQM AND BUILT-UP AREA OF 24817.75 SQM [LUXER MALL] AT MOUZA–CHANDRASEKHARPUR, CHANDAKA INDUSTRIAL AREA, BHUBANESWAR, DIST – KHURDA OF SRI SATYA PRIYA JAYASINGH - EC**

1. This proposal is for environmental clearance of M/s Team Media & Hospitality Private Limited for Proposed (2B+G+7) Commercial-Cum-Multiplex (Block-A) and Proposed Five Floors Hotel above Existing (G+2) Printing Press (Block- B) over IDCO Plot No – 7/7, Revenue Plot No – 6 (P) under Khata No – 474/1607 with Plot area of 6070.28 sqm and built-up area of 24817.75 sqm [LUXER MALL] at Mouza–Chandrasekharapur, Chandaka Industrial Area, Bhubaneswar, Dist – Khurda of Sri Satya Priya Jayasingh.
2. **Category:** This proposal falls under Category B, 8(a) – Building and Construction projects in the schedule of EIA Notification 2006 and its subsequent amendments.
3. **Location and connectivity:** The proposed project site is located at Khata No. – 474/1607, Revenue Plot No. – 6(P), IDCO Plot no.- 7/7, Mouza - Patia, Tahasil - Bhubaneswar, Dist - Khordha, State - Odisha. The location of the project area can be seen in Survey of India Open Series No. F45T15. The Geographical co-ordinates of the project site are Latitude: 20° 20' 35.68" to 20° 20' 39.21" N and Longitude: 85° 48' 45.65" to 85° 48' 48.12" E. The Ground elevation is 40 mRL. The Project site is situated adjacent to the service road which connected to Nandankanan Road and Infocity. The project site accessible from the NH at a distance of 7.7 Km-W from NH-16, Nandankanan Road is at a distance of 1.04 KM in East direction. Bhubaneswar Railway Station is @ 9 Km from the site. Biju Pattnaik International Airport is @ 12 Km from the Site. Nearest water body is Kuakhai River at 5.3km. Nearest Sanctuaries are Chandaka WildLife Sanctuary (ESZ): = 1.6 km (aerial distance) and Nandankanan (zoological Park) = 6.0 km (aerial distance).
4. The site is coming under Bhubaneswar Development Authority.

#### **Reason for EC Application earlier existing building details:**

5. Initially, the Land was allotted by-IDCO through Article IA-35 Lease Deed in favor of M/s Team Media & Hospitality Pvt. Ltd for starting an Industry i.e. establishment of printing press for publication for daily newspaper on IDCO Plot No. 7/7, Rev Plot No. 6(P) Khata No. 474/1607, Village- Patia, Industrial Area Chandaka, Chandrasekharapur, Bhubaneswar.
6. Accordingly, the project had been granted Pre-Planning Approval from Bhubaneswar Development Authority vide letter No. 38737/BDA, Bhubaneswar dated 22/12/2014 having total built up area of **2802.43 sqm.** consisting of 3 building blocks (Press Block (G+2), Stock Yard cum Canteen Ground Floor and Staff Quarters (G+1).
7. Again, BDA approval was granted on 23.06.2021 for regularization of existing building with revised proposal with a built-up area of 2827.79 sqm. consisting of 3 building blocks (Press Block (G+2), Stock Yard cum Canteen Ground Floor with basement and Staff Quarters (G+2).

Proceedings of the SEAC meeting held on 04.03.2025

**Environmental Scientist, SEAC**

8. The pre built up area does not attract Environmental Clearance as the approved built-up area is less than 20,000 sqm. Construction of the project was initiated as per approved Built-up area and till date building are constructed with total constructed area is 2827.79 sq m.
9. As per present requirement, the project proponent has modified the proposal from Industrial Building to Commercial or Mixed-Use Building by submitting the existing plot area with the modification.
10. Accordingly, the lessor has pleased to agree in principle to approve inclusion of additional activity for Commercial Complex and leisure & Entertainment Complex in addition to the been existing activities i.e. Offset Printing Books & Magazines, Hotel & Hospitality activities unit in favor of M/s. Team Media & Hospitality Pvt Ltd vide letter No-17429 dt.02.06.2023.
11. The proposed project is an inclusion of two blocks A & B. A Block consist of 2B+G+7 floors Commercial-Cum-Multiplex building and revised existing G+2 with proposed 5 floors (3rd,4th, 5th, 6th & 7th) above the said building (Block- B) and it is proposed to demolish the existing staff quarters (G+2).
12. DP & BP Committee approved the proposal in its meeting held on 23.02.2024 subject to submission of certain documents i.e. Environmental Clearance etc.
13. The project "LUXOR MALL" site is spread over area of 6070.28 sqm. After proposed modification Total built-up area of the project will be **24817.75 sqm**.
14. Since the built-up area of the project is more than 20,000 sqm, the project falls under Activity 8 (a) as per Schedule of EIA Notification, 2006 as its subsequent amendments and attract provision of EC.

#### 15. STATUTORY CLEARANCES OBTAINED:

S. No.	Date	Details of the Letter/Order
i)	26/11/2011 02/06/2023	Land allotted by-IDCO through Article IA-35 Lease Deed for establishment of printing press for publication for daily newspaper in favour of M/s.Team Media Pvt Ltd. in consideration of representation dt.10.02.2020, the lessor has pleased to agree in principle to approve inclusion of additional activity for Commercial Complex and leisure & Entertainment Complex in addition to the been existing activities in favor of M/s Team Media & Hospitality Pvt Ltd.
ii)	22/12/2014 23/06/2021	Approval from Bhubaneswar Development Authority for construction of printing press with total built up area of 2802.43 sqm. BDA approval for regularization of existing building with revised proposal with a built-up area of 2827.79 sqm.
iii)	28/12/2023	Obtained Consent to Establish from Regional Officer, Bhubaneswar, State Pollution Control Board, Odisha.
iv)	11/10/2023	Obtained NOC From Airport Authority of India for Construction of the proposed Structure.
v)	08/01/2024	Obtained Fire Safety Recommendation from Odisha Fire & Emergency Service.
vi)	08/01/2024	Obtained Structural Stability Certificate from registered Structural Engineer.
vii)	23/02/2024	DP & BP Committee approved the proposal subject to submission of certain documents i.e. Environmental Clearance etc. (Proceeding)

16. The total plot area is spread over 6070.28 sqm/1.499 ac / 0.6070 ha. After proposed modification, total built-up area of the project will be 24817.75 sqm.



**17. Building Area Details:**

TOTAL FAR AREA =16330.21 Sqm. (BLOCK A +BLOCK B)

TOTAL BUILT UP AREA = 24817.75 Sqm.

FAR = 2.69

GROUND COVERAGE: PLOT A =1593.46(39.97%) / PLOT B = 792.04 (38.00%)

MAXIMUM HEIGHT OF BUILDING: - BLOCK-A-39.9 M & BLOCK-B-26.40M

Configuration Of Building - Block A:- 2B+G+7 floors commercial-cum-multiplex building

Block-B:- Revised existing G+2 press with proposed 5 floors (G+7)

Estimated Population – 2450 Persons

<b>BLOCK A</b>			
<b>PLOT – ‘A’ AREA: 0.985 Acres = 3986.15 Sqm.</b>			
<b>TYPE</b>	<b>BUILT UP AREA</b>	<b>EXEMPTED AREA</b>	<b>F.A.R. AREA</b>
LOWER BASEMENT	3372.18 Sqm.	*3194.05 Sqm. + 1215.00 Sqm. (81 Stack Parking = 4409.05 Sqm. *82.54 (Deduct: Fire staircase)	95.59 Sqm.
UPPER BASEMENT	3372.18 Sqm.	* 2994.92 Sqm. + 885.00 Sqm. (59 Stack Parking) = 3879.92 Sqm. * 285.41 (Deduct: Fire staircase, Lift, Cutout)	91.85 Sqm.
GROUND FLOOR (shops)	1524.38 Sqm.	254.66 (Deduct: Fire staircase, Lift, Cutout & Duct)	1269.72 Sqm.
FIRST FLOOR (shops)	1524.38 Sqm.	119.53 (Deduct: Fire staircase, lift & Duct)	1404.85 Sqm.
SECOND FLOOR (shops)	1524.38 Sqm.	119.53 (Deduct: Fire staircase, lift & Duct)	1404.85 Sqm.
THIRD FLOOR (shops)	1593.46 Sqm.	128.59 (Deduct: Fire staircase, lift & Duct)	1464.87 Sqm.
FOURTH FLOOR (Food court)	1593.46 Sqm.	128.59 (Deduct: Fire staircase, lift & Duct)	1464.87 Sqm.
FIFTH FLOOR (Multiplex)	1593.46 Sqm.	745.76 (Deduct: Fire staircase, lift, Cutout & Duct)	847.70 Sqm.
SIXTH FLOOR (Office)	1593.46 Sqm.	128.59 (Deduct: Fire staircase, lift & Duct)	1464.87 Sqm.
SEVENTH FLOOR (Office)	1126.24 Sqm.	119.53 (Deduct: Fire staircase, lift & Duct)	1006.71 Sqm.
<b>TOTAL</b>	18817.58 Sqm.	6188.97 Sqm. (Normal parking area) 2100 Sqm. (Stack parking area) 2112.73 Sqm. (Deduct: Fire staircase, Lift, Cutout & Duct)	10515.88 Sqm.

<b>PLOT – ‘B’ AREA: 0.515 Acre = 2084.13 Sqm.</b>						
<b>TYPE</b>	<b>APPROVED AREA</b>	<b>EXTING BUA AREA</b>	<b>PROPOSED BUA AREA</b>	<b>EXEMPTED AREA (EX. LIFT, YOU)</b>	<b>F.A.R AREA</b>	<b>BULT UP AREA</b>
GROUND FLOOR	743.30 Sqm.	743.56 Sqm.	48.48 Sqm.	-	792.04 Sqm.	792.04 Sqm.
FIRST FLOOR	408.73 Sqm.	407.41 Sqm.	48.48 Sqm.	12.42 Sqm.	443.47 Sqm.	455.89 Sqm.
SECOND FLOOR	743.30 Sqm.	743.56 Sqm.	48.48 Sqm.	12.42 Sqm.	779.62 Sqm.	792.04 Sqm.
THIRD FLOOR	-	-	792.04 Sqm.	16.08 Sqm.	775.96 Sqm.	792.04 Sqm.
FOURTH	-	-	792.04 Sqm.	36.23 Sqm.	755.81 Sqm.	792.04 Sqm.

FLOOR						
FIFTH FLOOR	-	-	792.04 Sqm.	36.23 Sqm.	755.81 Sqm.	792.04 Sqm.
SIXTH FLOOR	-	-	792.04 Sqm.	36.23 Sqm.	755.81 Sqm.	792.04 Sqm.
SEVENTH FLOOR	-	-	792.04 Sqm.	36.23 Sqm.	755.81 Sqm.	792.04 Sqm.
TOTAL	1895.33 Sqm.	1894.53 Sqm.	4105.64 Sqm.	185.84 Sqm.	5814.33 Sqm.	6000.17 Sqm.

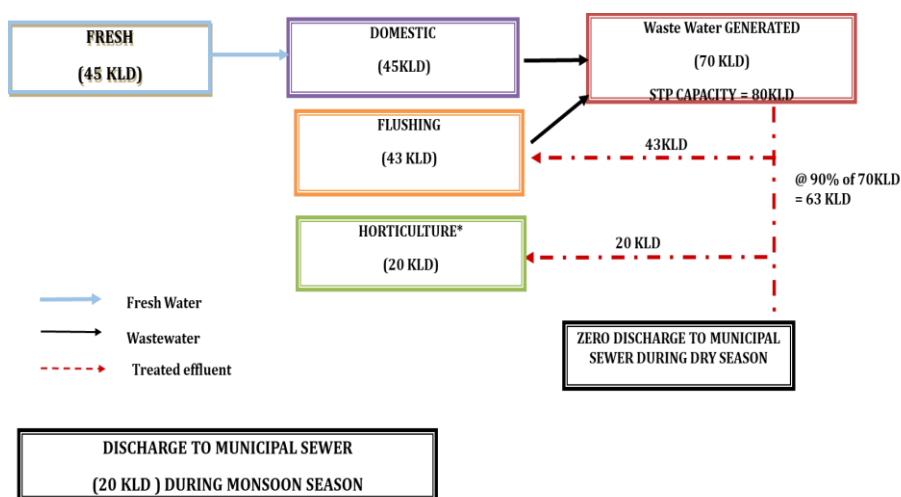
18. Land Use Pattern of The Area:

LULC OF PROJECT SITE	AREA IN SQM	%
Ground Coverage	2385.5	39.2
Internal Road	1214.056	20
Green Belt and Open Space	1335.4616	22
Other Services	1135.2624	18.8
<b>TOTAL</b>	<b>6070.28</b>	<b>100</b>

19. **Water requirement and waste water management: Total Fresh Water requirement is 45 m<sup>3</sup>/day.** Source of water: IDCO Supply Water. Total Flushing Water requirement is 43 m<sup>3</sup>/day. Total Water requirement is 88 m<sup>3</sup>/day (fresh water + flushing water).

20. **Total Waste water generate** is 70 m<sup>3</sup>/day. STP Capacity: - 80 KLD- with MBBR Technology. Treated water recovered is 63 m<sup>3</sup>/day. Reuses of treated water 63 m<sup>3</sup>/day in dry seasons. During monsoon season 20 KLD water discharge required in nearest drain.

WATER BALANCE DIAGRAM



21. **Rainwater harvesting Pits:** Total 18 no of recharge pit of volume 110 cubic m. capacity of rain water harvesting structures are being proposed for artificial rain water recharge within the project premises. The surface storm water shall be discharged through a separate drainage

network and shall be used to augment the ground water table through rainwater harvesting pits with desilting chamber.

22. **Power requirement:** The power supply shall be supplied by TPCODL. The maximum demand load is estimated at 1750 KVA. There is provision of Power backup for the proposed project will be through DG sets of total capacity (2 X1010 KVA) + (1X500 KVA) **CPCB IV Diesel Generators** (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.
23. **Details of Solar Power generation,** consumption and its contribution in percentage (%) towards total power required in project:

SELECTION OF SOLAR SYSTEM – (AS PER ODISHA BY LAW)			
a	Total connected load in KW	1893.0	KW
b	Solar power required in KW (5% of the connected load)	95	KW
c	No. of solar Panel	190	Nos
SUGGESTED SOLAR SYSTEM: 190 Nos. of Solar Panels suitable for 90 KW Connected Load, AREA REQUIRED: 2.4 Sq.m Per Panel			

24. **Total Solid waste generation and management:** The solid waste generated from project will be mainly domestic in nature and the quantity of the waste will be 0.395 Ton/day. Solid wastes generated will be segregated into biodegradable 0.268 T/Day (waste vegetables and foods etc.) and non-biodegradable or recyclable 0.127 Ton/day. (papers, cartons, thermo-cool, plastics, glass etc.) Components will collect in separate bins. The biodegradable organic wastes will be treated inside the premises by OWC (Organic Waste Converter). having capacity of 270 kg/day. Horticultural Waste is proposed to be composted and will be used for gardening purposes. Recyclable and non-recyclable wastes will be disposed through Govt. approved agency.
25. **Green belt:** Total green area measures 1335.42 m<sup>2</sup> (22 % of the total plot area). Trees like Azadirachta indica, Cassia fistula, Terminalia arjuna, Butea monosperma etc. and flowering and ornamental plants have been proposed to be planted inside the premises. No of trees required: 76 nos. (One tree every 80 sqm of plot area as per regulation -30 of ODA (P& BS) REGULATION, 2020.
26. **Parking area:** Total Parking Area provided will be 8583.72 Sqm (52.56%) consisting of Upper Basement Area in Block A= 3879.92 Sqm. (ECS = 122), Lower Basement Area in Block A=4409.05 Sqm. (ECS = 138). Thus, Parking Area in Block A =8288.97 Sqm. (50.76%) and Open Parking=294.75 Sqm. (1.80%).
27. **Firefighting details:** Fire Safety Recommendation from Odisha Fire & Emergency Service has been obtained on 08.01.2024. After completion of the construction work including installation of fixed firefighting measures as suggested, the applicant shall be required to apply for Fire Safety Certificate as per Rule-13 (1) of Odisha Fire Prevention and Fire Safety Rules, 2017.
28. **Project cost:** The total cost of project is 34.92 crores and cost of Environment management is capital cost - 121.0 lakhs & 7.8 lakhs as recurring cost.

Source	Capital Cost (In Lacs)	Recurring Cost (In lacs)
Landscaping	10	2
Rain Water Harvesting	8	0.5
Solid Waste Management	10	0.7
STP	60	1
Acoustic Enclosure & DG Set Stack	20	0.4
Environmental Monitoring	3	3
SOLAR	10	0.2
<b>Total</b>	<b>121</b>	<b>7.8</b>

29. **Environment Consultancy:** The proponent along with the consultant **M/s Srushti Seva Pvt. Ltd. Nagpur** made a detailed presentation before the SEAC on 22.11.2024.

30. The SEAC in its meeting held on dated **22-11-2024** recommended the following:

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

- i) Copy of land allotment letter of IDCO.
- ii) The proponent has proposed to construct another 5 floors over existing building, which has been constructed 10 years back. Brief presentation regarding the safety, stability of proposed structure with its design and specifications along with safety and stability of existing building shall be made after site visit of the sub-committee of SEAC. **The presentation shall be made before the Committee in presence of a representative from IDCO and technical expert from IIT Mumbai, who have vetted the present proposed project for safety and stability.**
- iii) Justify as to why this will not come under violation for construction of the building when there was initial proposal more than 20,000 m<sup>2</sup>.
- iv) Details on change of land use.
- v) Copy of Structural certificate and plan approval of IDCO of the existing and proposed project.
- vi) Safety and stability certificate for the existing building that will withhold the additional load and proposed design for the roof.
- vii) All the statutory clearances obtained for the proposed project as mentioned in para 15 table to be submitted.
- viii) Parking layout alongwith detail calculation for commercial unit.
- ix) Traffic Study to be vetted from Institute of Repute.
- x) Details of commercial activities to be carried out.
- xi) Expected population after expansion.
- xii) Details of layout of drain for facilitating safe discharge of stormwater along with excess treated sewage water to the nearest public drain along with permission of appropriate authority for the same.

xiii) Soil analysis report should be submitted with respect to physical, chemical and engineering properties of soil.

**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) Greenbelt development in the existing plant.
- vi) Solid waste management practice of the existing plant.
- vii) Vacant land available.
- viii) Any other issues including local issues.

31. The proposed site was visited by the sub-committee of SEAC on **25.12.2024**. Following are the observations of the sub-committee:

- a) While no construction was carried out, soil excavation was under taken
- b) The site is located in info city road and the road has a drain at the side.
- c) The PP explained the layout and construction plan with additional columns etc to sustain load of additional 5 floors on the existing building.
- d) One side width is about 20-25 ft and other side 25-30 ft
- e) PP was asked to submit a layout showing how to accommodate green belt, Fire corridor, recharge pits, after considering area of additional columns in all sides, so as to meet the environment regulations, which they submitted and the same is submitted in hard copies and also will be submitted by PP in compliance report as reported.
- f) Separate entry ramps and exit in parking have been advised for safety
- g) Permission for disposal of treated water in drain to be taken
- h) Fire safety, structural stability safety to be taken from the appropriate authority before starting construction.
- i) All statutory clearance to be taken as required for building projects.

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

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Copy of land allotment letter of IDCO.	<ul style="list-style-type: none"> <li>• Initially, the Land was allotted by IDCO for establishment of printing press for publication of daily newspaper in favour of M/s Team Media Private Ltd. on 03.10.2006. (Copy enclosed as <b>Annexure- 1A</b>),</li> <li>• On 07.07.2011, IDCO was pleased for Inclusion of additional activities of Hotel, Hospitality &amp; Media and reconstitution of Director of the Company &amp; Change of</li> </ul>	-----

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		<p>name &amp; style to M/s Team Media &amp; Hospitality Private Limited. (Copy enclosed as <b>Annexure- 1B</b>),</p> <ul style="list-style-type: none"> <li>• Again, on 02.06.2023, IDCO pleased to agree in principle to approve Inclusion of additional activities of Commercial Complex and Leisure &amp; Entertainment Complex in addition to the existing activities i.e. Offset Printing of Books &amp; Magazines, Hotel &amp; Hospitality activities. (Copy enclosed as <b>Annexure- 1C</b>)</li> </ul>	
2.	<p>The proponent has proposed to construct another 5 floors over existing building, which has been constructed 10 years back. Brief presentation regarding the safety, stability of proposed structure with its design and specifications along with safety and stability of existing building shall be made after site visit of the sub-committee of SEAC. <b>The presentation shall be made before the Committee in presence of a representative from IDCO and technical expert from IIT Mumbai, who have vetted the present proposed project for safety and stability.</b></p>	<p>The Structural plan of the proposed building has been designed by M/s Rath Architectonic in association with M/s Gloentech Private Limited, which is a reputed structural firm established in Mumbai having offices across 7 different countries in the world. They are one of the pioneers in structural designing work and has completed more than 180+ commercial project across the Globe.</p> <p>The analysis and design of building is found to be in order as per relevant Indian standard. Accordingly, the designs &amp; drawing have been vetted by Dr RS Jangid, Professor, Dept. Of Civil Engineering, IIT, Mumbai.</p> <p>There are two nos. of buildings in the drawing. Block -A is a commercial building and Block - B is a hotel, which needs to be constructed over an existing 2 storied building. While the existing building was made, the foundations were designed keeping the future expansion. Now the Block -B will be constructed in MS steel, which is much stronger than RCC. There will be separate foundations for the MS steel structure, which will act as additional support to the current foundation.</p> <p>The structural vetting has been done, keeping all these parameters in place and load calculation is at par the standards. Vetted Drawing &amp; Designs are enclosed as <b>Annexure – 2</b>.</p>	<p>They have submitted the layout and floor plan vetted by IIT, Bombay.</p>
3.	<p>Justify as to why this will not come under violation for construction of the building when there was initial proposal more than 20,000 m<sup>2</sup>.</p>	<p>There was never any proposal more than 20,000 m<sup>2</sup>. The project had been granted Pre-Planning Approval from Bhubaneswar Development Authority on dated 22/12/2014 for total built up area of <b>2802.43 sqm</b>. Consisting of 3 building blocks (Press Block (G+2), Stock Yard cum Canteen Ground Floor and Staff Quarters (G+1). (Copy enclosed as <b>Annexure- 3A</b>)</p>	<p>-----</p>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		<p>Again, BDA approval was granted on 23.06.2021 for regularization of existing building with revised proposal with a built-up area of <b>2827.79 sqm</b>. Consisting of 3 building blocks (Press Block (G+2), Stock Yard cum Canteen Ground Floor with basement and Staff Quarters (G+2). (Copy enclosed as <b>Annexure- 3B</b>).</p> <p>The additional construction only came into picture after conversion of land to commercial land i.e., on and after dated 02.06.2023. The pre-built up area does not attract Environmental Clearance as the approved built-up area is less than 20,000 sqm.</p> <p><b>Hence, the proposed project will not come under violation.</b></p>	
4.	Details on change of land use.	<p>Initially, the Land was allotted for establishment of printing press for publication of daily newspaper. Later as per requirement, we had modified the proposal from Industrial Building to Commercial or Mixed-Use Building by submitting the existing plot area with the modification.</p> <p>The <b>final land-use</b> will be Commercial Complex, Leisure &amp; Entertainment Complex in addition to the existing activities i.e. Offset Printing of Books &amp; Magazines, Hotel &amp; Hospitality activities. <b>Accordingly, lease has been executed on 18.07.2024.</b> (Copy enclosed as <b>Annexure-4</b>)</p>	<p>-----</p> <p>The lease deed dated 18<sup>th</sup> July 2024 executed by IDCO with the PP for the parcel of land comprising the project site is valid up to 13<sup>th</sup> February 2076. The land is leased for commercial complex and leisure and entertainment complex in addition to the existing activities that is Offset printing, books and magazines, Hotel and hospitality activity units.</p>
5.	Copy of Structural certificate and plan approval of IDCO of the existing and proposed project.	<p>Development Plan &amp; Building Plan (DP &amp; BP) Committee of Khurda-SPA <b>approved</b> the project in their meeting held on 23.02.2024 for proposed (2B+G+7) Commercial-Cum-Multiplex Block-A Building and proposed 5 floors Hotel over existing G+2 Printing Press Block-B Building. (Proceeding enclosed as <b>Annexure- 5A</b>).</p> <p>The Structural Plan &amp; details of the building satisfy the structural safety requirements for all situation as stipulated under para-6 (Structural design) of the National Building Code of India, 2005. Structural Stability has been <b>certified</b> by Structural Engineer, Town Planning, Odisha,</p>	<p>-----</p> <p>IDCO letter No. CIV/ARCH/E-4038/01-21 dated 12<sup>th</sup> March 2024 stating the minutes of 15<sup>th</sup> meeting of DP &amp; BP committee Khurda-SPA held on 23.02.2024 has approved that ground coverage of</p>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		Bhubaneswar. (Copy enclosed as <b>Annexure-5B</b> ).	Block-A (Commercial cum multiplex) is required to be restricted to 40% of the plot area 0.985 acres (Change of activity area). Area statements for Block A and Block B (Printing press) to be shown separately.
6.	Safety and stability certificate for the existing building that will withhold the additional load and proposed design for the roof.	The structural plan of proposed building has been designed in such a manner that the additional load will not be withhold on existing building. Structural design has been vetted by IIT Mumbai and the same is submitted in IDCO for review. Only after successful approval, the plan was approved by the committee. Structural design of Block-B along with Foundation layout is enclosed as <b>Annexure – 6</b> .	-----
7.	All the statutory clearances obtained for the proposed project as mentioned in para 15 table to be submitted.	<ul style="list-style-type: none"> <li>• Land allotment by-IDCO &amp; inclusion of additional activities (enclosed earlier as Annexure – 1A, 1B &amp; 1C).</li> <li>• BDA approval for construction of total built up area of 2802.43 sqm with revised proposal with a built-up area of 2827.79 sqm. (enclosed earlier as Annexure – 2A &amp; 2B).</li> <li>• DP &amp; BP Committee of Khurda-SPA approved the project in their meeting held on 23.02.2024.(Proceeding enclosed earlier as Annexure-5A).</li> <li>• Structural Stability has been certified. (Copy enclosed earlier as Annexure-5B).</li> <li>• Fire Safety Recommendation from Odisha Fire &amp; Emergency Service. (Copy enclosed as Annexure – 7A)</li> <li>• NOC From Airport Authority of India for Construction of the proposed Structure. (Copy enclosed as</li> <li>• Annexure – 7B)</li> <li>• Consent from RO-OSPCB for existing activities. (CTE enclosed as Annexure – 7C)</li> </ul>	-----
8.	Parking layout alongwith detail calculation for commercial unit.	Provision of parking has been be proposed in accordance to Rule-37 of Odisha Development Authorities (Planning and Building Standards) Rules, 2020. Hence, total Parking Area is provided 8583.72 Sqm (52.56%).  Layout plan with parking details is enclosed as <b>Annexure - 8</b> .	-----



Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
9.	Traffic Study to be vetted from Institute of Repute.	Traffic Study has been carried out and dully vetted by IIT, Bhubaneswar. (Report enclosed as <b>Annexure – 9</b> )	-----
10.	Details of commercial activities to be carried out.	The proposed project is an inclusion of two blocks A & B. A Block consist of 2B+G+7 floors Commercial-Cum-Multiplex building and Block B is the revised existing G+2 Offset Printing Press with proposed 5 floors (3rd,4th, 5th, 6th & 7th) above the said building.  Floor-wise commercial activities are enclosed as <b>Annexure - 10.</b>	-----
11.	Expected population after expansion.	As per National Building Code of India, 2005, the expected population has been calculated about 2450. Activities-wise break up is enclosed as <b>Annexure- 11.</b>	-----
12.	Details of layout of drain for facilitating safe discharge of stormwater along with excess treated sewage water to the nearest public drain along with permission of appropriate authority for the same.	The treated water from STP will be recycled for toilet flushing, horticulture & road washing purpose. However, in rainy season about 20 KLD of storm water will be discharged only into the nearest drain.Layout plan showing internal drainage plan with final disposal point of storm water is enclosed as <b>Annexure-12.</b>  As per the lease deed agreement, IDCO will provide all common facilities like roads, public health works, drainage, sewerage disposal system etc.and lessee shall pay the maintenance charge as decided by IDCO.	-----
13.	Soil analysis report should be submitted with respect to physical, chemical and engineering properties of soil.	Soil testing has been carried out by certified Lab. Soil investigation report is enclosed as <b>Annexure-13.</b>	-----

Considering the information furnished and the presentation made by the consultant, **M/s Srushti Seva Pvt. Ltd. Nagpur** 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 Proponent before implementation of the project shall convert the land to Gharabari and shall take the ownership of the land if not already taken.
- ii) 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.

- iii) NOC/Permission for discharge of treated water along with storm water to the nearest public drain to be obtained from the appropriate authority including passing the Govt land.
- iv) Internal drainage plan with RWH/Re-charge Pits to be taken up based on requirement and with approval of the authority.
- v) Care to be taken in developing land scape to avoid flood situation.
- vi) The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.
- vii) The proponent shall obtain permission from concerned Fire Safety Authority.
- viii) Trees located within the project area shall be transplanted to alongside the boundary green development area.
- ix) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.
- x) 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.
- xi) 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.
- xii) 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.
- xiii) Separate entry ramps and exit in parking have been advised for safety
- xiv) Permission for disposal of treated water in drain to be taken
- xv) Fire safety, structural stability safety to be taken from the proper govt authority, Gloentech Private Limited and IIT, Mumbai after completion to certify the safety and structural stability of the building. Fire safety needs to be clearly vetted considering all activities and population. Responsibility and accountability to be owned by the authorities and stakeholders.
- xvi) The activities proposed are- Commercial, Multiplex, Hotel and Print Media with a population of 2500. As the activities are huge and free space available are limited, fire and safety aspects need to be taken into account by the authorities before approving the final building plan.
- xvii) The proponent shall obtain necessary permissions from appropriate authorities for discharge of stormwater and excess treated sewage water to the nearest public drain / natural nullah.
- xviii) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

## **ITEM NO. 05**

### **PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR GIRISOLA STONE QUARRY WITH PROPOSED EXCAVATION OF 5600 CUM/YEAR OF STONE OF TAHASILDAR CHIKITI HAVING AN AREA OF 20.510 HA. LOCATED AT KHATA NO: 897, PLOT NO: 1, 2, 3, 4, AT - GIRISOLA, TAHASIL - CHIKITI, DISTRICT - GANJAM OF TAHASILDAR, CHIKITI – EC.**

1. The SEAC in its meeting held on 20-11-2023 observed that mining lease area is covered with forest growth as seen in KML file. The SEAC decided to consider this proposal for EC after joint verification from forest officials regarding the forest growth and mining activity in proposed lease area.
2. The project proponent has submitted joint verification report which states that:
  - (i) There is no forest growth in the proposed lease area.
  - (ii) There is no valuable tree growth in the proposed lease area.
  - (iii) There are no mining activities in the proposed lease area.
3. The SEAC in its meeting held on **29-01-2024** decided to call for a detailed presentation for the proposal. The PP gave detailed presentation on dated **18-05-2024**.
4. This proposal is for Environmental Clearance of Girisola Stone Quarry with proposed excavation of 5600 CUM/year of stone of Tahasildar Chikiti having an area of 20.510 Ha. Located at Khata No: 897, Plot No: 1, 2, 3, 4, At- Girisola, Tahasil - Chikiti, District- Ganjam of Tahasildar, Chikiti.
5. **Category:** This project falls under Category “B” or Schedule 1(a): Mining of Mineral as per EIA Notification dated 14th Sept, 2006 and its amendments.
6. The Mining Lease has been granted by Tahasildar, Chikiti & successful bidder is Tahasildar Chikiti, Ganjam.
7. Mining Plan was approved by Joint Directorate of Geology South Zone, Berhampur, letter No. 814/SZ, Dtd. 25.08.2021.
8. This is a new mine. Mining lease is an identified sairat source in the DSR page No.- 102, Para Serial No.- 234, Map location page No.- 156
9. **ToR details:** The ToR was issued by SEIAA, Odisha vide proposal letter No. 3673/SEIAA, Dtd. 27.12.2021.
10. **Public hearing details:** Public hearing was held on Dtd. 15.03.2023 over Govt. land having plot No.- 660 & 796 in Mouza Jagannathpur under Chikiti Tahasil, Ganjam District. Issues raised during the public hearing are environmental protection, air pollution, control blasting, local employment, plantation and availability of raw materials at cheaper price. A total of Rs. 3,50,000 is allotted for the action plan of public hearing.
11. **Location and connectivity** The mine lease area is located in Khata No- 897, Plot No- 1,2, 3 & 4, At- Girisola, under Chikiti Tahasil of Ganjam District with geographical coordinates bearing Latitude: 19° 10' 30.7"N To 19° 10' 46.6"N Longitude: 84° 42' 26.0" E To 84° 42' 49.9" E with Toposheet No: 74A/12, 74/A/16, Kisam-Parabat, From the proposed site, nearest SH29 is 7.8 km, NH16 is 1.7 km, Airport Bhubaneswar is 187 km, Water Body is Ghodahad Dam- 48.8

km, RF- Mahulia Reserve Forest- 134 km, Biju Patanaik Setu, Jagapur Road - 3.1 km, River Embankment- 9.2 km, Electric Transmission Pole- 1 km, Nearest village Girisola - 1.0 km.

12. The lease area doesn't come under DLC land and there are no other quarries within 500 metres of the site.
13. **Total reserves:** The total Geological Reserve is 83,05,258 cum and Mineable Reserve is 78,83,996 cum.
14. **Mining Method:** The proposed method is Opencast Semi Mechanised, Production capacity per annum is 5600 cum, Total production in 5 years is 28000 cum. Maximum mineable depth is 8.00 mRL as per the approved mining plan. Transportation will be through Dumper, Tipper & Tractor.
15. **Baseline study conducted:** Baseline Study conducted during 1st Dec 2021 to 28th Feb 2022
16. **Water requirement:** Total quantity of water requirement for the project is 20 KLD.
17. **Greenbelt Development:** A total of 250 saplings over an area 0.11 Ha. are proposed to be planted for the Proposed Site.
18. **Total Employment:** Total employment proposed is 13 nos. of manpower for the project.
19. **Project Cost:** The estimated cost is ₹18 Lacs and Proposed EMP cost is 2 lakhs.
20. **Environment Consultant:** The Environment consultant **M/s Green Circle, INC, Vadodara, Gujrat.** with the proponent made a presentation on the proposal before the Committee.
21. The SEAC in its meeting **18-05-2024** decided to take decision on the proposal after receipt of the following 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
1.	Submit the satisfactory compliance report of the Specific ToR.	Specific ToR compliance report is enclosed herewith as <b>Annexure – A.</b>	Annexure – A is attached and complied.
2.	Detailed note on Magazine management, hiring agency, blasting frequency, and management of flying rocks.	Blasting will be carried out by third party explosive license holder on contractual basis but during the blasting the preventive measures taken for flying rocks enclosed herewith as <b>Annexure – B.</b>	Annexure – B is attached and complied.
3.	Layout of Garland drain, retaining wall, settling pit etc. and drainage map of that area.	There is no dump, so it is not applicable for the Garland drain, retaining wall, setting pit during the plan period. Drainage map of that area is given in Chapter-3, fig3-3 of EIA Report.	PP has not submitted and replied there is no dump in the lease area.
4.	Distance certificate of nearest habitation and water bodies/ Nallah.	Distance Certificate from Tahasildar is enclosed herewith as <b>Annexure – C.</b>	Annexure – C is attached and complied.
5.	Traffic study report vetted by reputed institute.	The road is connected to state high (SH-29) way at distance of 7.8 Km	Traffic study report is not attached.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		which is directly connected to quarry only, hence no traffic on the quarry road.	

21. The SEAC in its meeting held on dated **19-10-2024** decided to take the decision on the proposal after receipt of the following 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
1.	Traffic study report vetted by reputed institute.	Submitted
2.	Layout of Garland drain, retaining wall, settling pit etc. and drainage map of that area.	Submitted

Considering the information furnished and the presentation made by the consultant, **M/s Green Circle, INC, Vadodara, Gujrat** along with the project proponent, the SEAC recommended for grant of Environmental Clearance upto lease period with stipulated conditions as per **Annexure – D 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.
- 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 – E** shall be followed by the lessee.

## **ITEM NO. 06**

### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR ALIPINGAL-ADHANGA DEVI NADI SAND QUARRY OVER AN AREA OF 22.06 ACRES OR 8.93 HECTARE AT VILLAGE-ALIPINGAL - ADHANGA, TAHASIL - JAGATSINGHPUR, DISTRICT - JAGATSINGHPUR OF SRI SUBASH ROUT - EC**

1. This proposal is for environmental clearance for Alipingal-Adhanga Devi Nadi Sand Quarry over an area of 22.06 acres or 8.93 hectare at Village- Alipingal- Adhanga, Tahasil- Jagatsinghpur, District- Jagatsinghpur of Sri Subash Rout.
2. **Category:** This proposal falls under Category "B1", 1(a) - Mining of Minerals as the Mining lease area is more than 5.0 Ha. as per the EIA notification 2006 and its subsequent amendments.
3. The proposed mining project is sand mining project for Alipingal & Adhanga Devi Nadi sand Quarry at village Alipingal & Adhanga under Jagatsinghpur Tahasil of Jagatsinghpur district, Odisha, over an area of 22.06 acres or 8.93 ha. The successful bidder for the project is Sri Subash Chandra Rout.
4. The present mines is new mines granted by the Tahasildar Jagatsinghpur through Form F vide Letter No. 60 dated 08-01-2021 to intimate Sri Subash Chandra Rout, as the successful bidder.
5. The period of lease is 5 years, as mentioned in approved mining plan. Mining lease is an identified sairat source in the DSR of Annexure II & sl.no. 6 which shows it is a working mine. The lease area has no other mines within 500 meters.
6. **TOR details:** The EIA/EMP study for Alipingal-Adhanga river sand bed Mines is being prepared in accordance with the TOR approved by SEIAA, Odisha vide letter no. 2321/SEIAA dated 31.08.2021.
7. The mining plan has been approved by the Govt of Odisha Directorate of Geology Bhu-Bigyan Bhawan, Bhubaneswar, Odisha vide memo no. **GXCII (g) - 913/ 19-8285 on dated 21.12.2020.**
8. **Public hearing details:** The Public Hearing in respect of Environment Clearance for Alipingal-Adhanga Devi Nadi Sand Quarry on River Devi over an area of 8.93Ha. under the Tahasildar of Jagatsinghpur of Jagatsinghpur district, Odisha was conducted on 22.06.2022 at 10.30 A.M. at Ground near Market Complex of Alipingal village in Jagatsinghpur, Odisha. Air pollution control, employment, livelihood, maintenance of Mahira village road, provision towards Repair and Maintenance of village Tube wells in Alipingal Village, provision of Assistance to Alipingal Primary School.and plantation were the main issues raised during public hearing. Budget allocated for public hearing issues is Rs. 6.5lakhs.
9. **Location & Connectivity:** The Lease area is located at village Alipingala-Adhanga under Jagatsinghpur tahasil of Jagatsinghpur district, which comes under Survey of India Topo Sheet No.- 73-L/4 and the area is bounded by Latitude: 20° 13' 02.00" to 20° 13' 20.40" North & Longitude: 86° 08' 24.00" to 86° 08' 52.70" East. The Alipingal-Adhanga Devi Nadi Sand Quarry is well connected to Jagatsinghpur town by pucca road. The nearest railway station is at Gopalpur which is situated at 15.5 Km from the lease area. There is an existing river bridge at Galupada (Alipingal) in the block B of the lease area. The mining activity will be carried out only in **block A** and there will be no mining activity proposed in block B **due to existence of River**

**Bridge.** However, the area is approachable from Alipingal by Tarakani road which is located at 0.7 Km. Nearest national highway NH -55 at 0.5km. Nearest airport is Biju Pattnaik International Airport at 35.70km. Nearest hospital, education institute at 5.5km. Nearest water body Gobari river at 5.90km. No Wild Life Sanctuary/ Biosphere reserve, wild life corridor or other Eco sensitive zone present within 10 Km radius of lease area.

10. **Topography:** Topographically, the area is plain area, so there is no chance of stagnant water at the lower level of the lease area. If any water will generate during excavation, that will be channelled to the river course.
11. **Replenishment Study** – The rate of replenishment of sand is finalized by conventional volumetric survey with hand GPS, Total station & Measuring tape. Thickness of sand deposit has been taken by considering the pre-monsoon and post-monsoon survey in different part of the lease area. The first survey was carried out in December'2020 for recording the level of mining lease before the mining. The second survey was carried out in May'2021 for starting of monsoon season. This survey provided the quantity of the material excavated before the offset of monsoon. The third survey has been carried out after the monsoon on November/December'2021 to know the quantum of material deposited/replenished in the mining lease. As the above area is not operational till now, hence it is studied that the **Replenishment is absolutely 50%** during the year 2021-22, which will lead for the production capacity of 7,570 m<sup>3</sup>/annum. Once one part will excavate for one year, will not come further during next year plan period. So, rest part of mineable area will be excavated as per approved mining.
12. **Reserves** - The reserve has been estimated based on surface exposure of riverbed by surface area method. The Geological Reserve is 1, 33,802 m<sup>3</sup>. The mineable reserve has been calculated by excluding the reserve blocked under the pit slope of 7.5m safety all along the lease boundary and 500 m safety zone from bridge and 10 safety measures from water course and found to be 49048 m<sup>3</sup>.
13. **Mining method:** The method of mining will be adopted as open cast manual method with mechanical carriage to achieve the targeted production of 22,000m<sup>3</sup>/annum and total production is 110000 m<sup>3</sup> during the plan period.
14. **Land use:** During mining operation 2.56 ha of area will be utilized for mining and allied activities and remaining 6.37 ha will remain undisturbed as safety zone along lease boundary and 500 m safety zone from bridge and 10 meters safety measures from water course.
15. **Baseline study** was conducted during November 2021 – January 2022. Following results were obtained.

AAQ PARAMETERS AT 5 LOCATIONS	PM2.5 –22.9 to 49.1 µg/cu.m	60 µg/cu.m
	PM10 – 45.8 to 76.3 µg/cu.m	100 µg/cu.m
	SO2 – 5.6 to 11.5 µg/cu.m	80 µg/cu.m
	Nox – 11.7 to 22.4 µg/cu.m	80 µg/cu.m
Ground water Quality at 3 Location	pH – 7.3 to 8.1	6.5 to 8.5
	Total Hardness – 80 to 128 mg/l	600 mg/l
	Chloride - 10 to 20 mg/l	250 mg/l

	Fluorides – 0.73 to 0.82 mg/l	1.5 mg/l
	TDS – 140 to 160 mg/l	1000 mg/l
	Heavy metals: BDL (Cd <0.001, As <0.01, Hg<0.0001) mg/l Detection limits of analysis method	Heavy metals: (Cd <0.003, As <0.01, Hg<0.001) mg/l
Surface water at 2 locations	pH – 8.35 to 8.4	
	Dissolved Oxygen – 6.6 to 6.7 mg/l	
	Biochemical Oxygen Demand – <2 mg/l	
	Chemical Oxygen demand – <5 mg/l	
Noise at 5 locations	Day (dBA Leq) 32.4 to 50.8	55
	Night (dBA Leq) - 25.6 to 37.6	45
Soil Quality at 4 locations	pH –5.6 to 6.3, Potassium –235.2 to 395.1 mg/ kg, Phosphorous –5.0 to 9.9 mg/ kg, Organic Carbon % – 0.56 to 1.42, Electrical Conductivity- 71 to 124 μshos/Cm	

16. **Employment generation:** Due to the proposed sand mining, there will be generation of employment for 39 persons. Out of which, 02 nos. are skilled, 10 nos. are semi-skilled and 25 nos. are unskilled and 02 supervisor.
17. **Water requirement:** Total water requirement for the project will be 5 KLD. For drinking & domestic purpose, water requirement will be 1.5 KLD, water requirement for green belt development will be 1.5 KLD and dust suppression will be 02 KLD.
18. **Power requirement:** No electrical power shall be required for operations as the mining will be worked out during daytime only. Minimal power required for office shall be taken from the General Electric supply of the area.
19. **Green Belt:** As the area comes under the riverbed so, no plantation programme is incorporated. So, the plantation will be carried out along the river bank to protect the bank erosion over an area of 0.0625Ha. (250m long River Bank x 2.5m width) with 250nos of local native species of plants to be planted.
20. **Project cost:** The estimated cost of the project is Rs 10 lakhs approximately and cost for EMP is Rs 3 lakhs.
21. The proponent along with the consultant **M/s Kalyani Laboratories Private Limited, Bhubaneswar**, made a detailed presentation before the SEAC on 12.12.2022.
22. The SEAC in its meeting held on dated **12-12-2022** decided to take decision on the proposal after receipt of the following 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
1.	As revealed from the KML file, mining has been carried out earlier. So, compliance to EC conditions certified by the Tahasildar if EC granted earlier.	There is no such mining carried out earlier though KML file shows sign of mining. No EC was granted earlier as it is a new source. So, no such



Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		compliance to EC conditions may be considered.
2.	Rate of replenishment is 50% as per replenishment study conducted during the year 2021-22, which will lead for the production capacity of 7,570m <sup>3</sup> /annum instead of capacity approved in ToR and mining plan i.e. 22,000 m <sup>3</sup> /annum. Hence, revised approved mining plan according to the replenishment study to be submitted.	<p>Revised approved Mining Plan for the production capacity of 12,838m<sup>3</sup>/annum according to the replenishment study report prepared by drone survey method for the year 2024-25 has been submitted.</p> <p>The revised mining plan is approved on 11<sup>th</sup> July 2024 for five years based on clarification raised by SEAC in its meeting held on 22<sup>nd</sup> December 2022. This was communicated to the PP vide letter No.01 / SEAC (Misc-28) dated 04<sup>th</sup> January 2023 for revising the mining plan as per the replenishment study report.</p> <p>As per the approved revised mining plan the proposed source consists of 2 patches i.e. Block A of 10 acre and Block B of 12.06 acre. A bridge passes over Block B and hence 500 m on either side of the bridge is excluded from sand mining. Hence the lifting of sand is only proposed in Block A of 10 Acre after giving due allowances of 500 m distance from the bridge and 10 m distance submerged in river water. Both Blocs A &amp; B have different plot numbers.</p> <p>As per the approved revised mining plan, the ML area has gentle slope, almost flat terrain with an average altitude of 15 m above the MSL. 1.5 m depth of sand excavation is approved and accordingly quarry floor level is stated to be 13.5 m RL. The river water level is stated to be 12 m RL.</p>
3.	Replenishment Study Report should be certified by the concerned Tahasildar. NoC from the concerned Tahasildar that they don't have any objection if the sand extraction quantity will be revised as per replenishment study.	<p>Revised Replenishment study Report prepared using Drone Survey method certificate by the Mining Officer is submitted for your consideration.</p> <p>The RSR is based on pre and post monsoon surveys done on 05<sup>th</sup> June 2024 and 14<sup>th</sup> November 2024 respectively.</p>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		<p>Two different sets of GCPs, five numbers in each, have been used for the pre- and post-monsoon surveys. The process / method of fixing these GCPs is mentioned under para “3.4 Survey procedure”. Para “Reference point” states that a reference point is established of near bridge.</p> <p>The quality report section of the RSR states the RMS errors in absolute geolocation variance during the pre and post monsoon surveys. These are mentioned to be 8 mm for X, 12 mm for Y and 4mm for Z both in pre- and post-monsoon surveys.</p> <p>The pre- and post- monsoon elevations of grid points in the safe workable area presented in Table No. 4.2 are in line with the RLs stated in the approved revised mining plan.</p>
4.	Submit all the reading points data for sand replenishment.	All the reading points data has been incorporated in new Replenishment study Report prepared by using Drone Survey method.

23. The Committee observed the following:

- i) The GCPs in the pre and post monsoon surveys are not fixed as per para “Ground control point establishment and monumentation” of the standard operating procedure (SOP) for study of rate of replenishment of sand using drone survey prepared by ORSAC for SEIAA, Odisha and submitted vide letter No. ORSAC/PR/0951/21/2588 dated 02<sup>nd</sup> June 2023.
- ii) The reported grid points elevations of the safe workable area based on pre- and post-monsoon surveys are in line with those mentioned in the revised approved mining plan and the RMS geolocation errors for X, Y and Z are stated to be in acceptable ranges.
- iii) The replenishment volume of sand mentioned in the RSR may please be accepted and needs to be reconciled with that excavated during the current season prior to onset of monsoon in 2025.
- iv) It is always advisable to carry out surveys based on standard operating procedures, in this case ORSAC prepared SOP or drone survey as the survey results are reproducible and verifiable. Adoption of standard SOP eliminates subjective factors and makes the process transparent. Mere outcome of seemingly correct results is no guarantee that the adopted survey method is an alternative to the SOP prepared by designated agencies. In future the surveying agencies must adhere to the ORSAC SOP for carrying out photogrammetry surveys using drones.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Kalyani Laboratories Private Limited, Bhubaneswar** on behalf of the proponent, the SEAC recommended for grant of Environmental Clearance valid upto lease period with stipulated conditions as per **Annexure – F** in addition to the following specific conditions:

- a) Amended EIA Notification dated 25th July, 2018, Guidelines for sustainable sand mining, 2016 and Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India shall be adhered to in execution of Mining as per **Annexure- G**.
- b) Sand extraction shall be limited to quantity and depth as per replenishment study report for only the first year of mining. Regular replenishment study as per guidelines to be conducted and report to be submitted.
- c) Provision of Bio-toilet shall be made at the site.
- d) Avenue plantation and plantation on both sides of the haulage road in consultation with/ on the advice of concerned Forest Department, Government of Odisha & W.R. Department Government of Odisha as well.
- e) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.

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

#### **PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF DELANGA SAND QUARRY (TIGIRIA, VANSAR & BASUMANDAL) OVER AN AREA OF 14.63 HA. AT MOUZA TIGIRIA, VANSAR & BASUMANDAL OF TAHASIL DELANGA IN THE DISTRICT OF PURI OF TAHASILDAR DELANGA UNDER CLUSTER APPROACH - EC**

1. This proposal is for Environmental Clearance of Delanga Sand Quarry (Tigiria, Vansar & Basumandal) over an area of 14.63 ha. at Mouza Tigiria, Vansar & Basumandal of Tahasil Delanga in the district of Puri of Tahasildar Delanga.
2. **Category:** As per EIA notification, 2006 and subsequent amendments, the project is coming under B1 Category under Schedule of item 1(a)-Mining of minerals.
3. **Project details:** The proposed mining project is under cluster approach of three sand sairat sources to be mined on river Daya over an area of 14.63 Ha. or 36.17 Acres (Including three lease area) under Delanga Tahasil of Puri District, Odisha. The Quarry leases River Sand Tigiria over an area of 3.66 Ha. and River Sand Vansar over an area of 9.15 Ha. has been granted to the applicant Sri Kulamani Mantri (successful bidder) by Tahasildar Delanga vide letter no. 3217 on dated 28.08.2020 & vide letter no. 4096 on dated 23.11.2020 respectively. The Quarry lease River Sand Basu mandal over an area of 1.82Ha. has been granted to the applicant Sri Subala Dhal (successful bidder) by Tahasildar, Delanga vide letter no. 4096 on dated 28/08/20 for minor mineral (River Sand) for five years (2021-2025).
4. This is a new mining cluster quarry and production is yet to start. Mining plan for the project is prepared on the basis of depth of mineral to be excavated.
5. The mining plan has been approved by the O/o Deputy Director of Geology, Bhubaneswar, Odisha vide letter no.4301/DZ, on dated 25.06.2020 for Basumandal, vide letter no.4311/DZ, on dated 25.05.2020 for Tigiria and vide letter no.4466/DZ, on dated 26.06.2020 for Vansar.

Proceedings of the SEAC meeting held on 04.03.2025

**Environmental Scientist, SEAC**

6. **ToR details:** The Terms of Reference has been issued by SEIAA, Odisha vide Letter No. 1251/SEIAA on dated 09.04.2021.
7. **Public hearing details:** The Public Hearing in respect of Environment Clearance for Delanga Sand Quarry under Cluster approach (Tigiria, Vansar and Basumundal Sand Quarries) on river Daya over total area of 14.63 Ha. in Tigiria, Vansar and Basumundal villages under the Delanga Tahasil of Puri District, Odisha was conducted on 24.06.2022 at 11.00 A.M at Community Hall at Vansar under Delanga Tahsil of Puri district, Odisha. Major Issues Raised during the meeting are increasing sand deposition on the river bed, lift irrigation points are not working properly and if Govt. allow permission to the quarry; then there will be free flow of the river not only benefit the agricultural land in the nearby area but also almost save nearby area protecting from possible flood water. Total expenses to be incurred for time bound action plan to address issues raised in compliance with public hearing is 11.10 Lakh.
8. **Location and connectivity:** The project is in survey of India toposheet no. (73H/12&73H/16). The cluster area is bounded between the latitudes of 20°07'33.08"N to 20°08'6.84" N and longitudes of 85°44'38.97"E to 85°45'9.45"E. The cluster area includes three sand beds such as Tigiria sand bed and Basumandal sand bed which are adjacent to each other. Vansar sand bed is located at a distance of meter from Tigiria sand bed. Tigiria sand quarry of 3.66 Ha is bounded between Latitudes 20°07'57.37"N to 20°08'05.13" N and longitudes 85°44'59.80"E to 85°45'12.88"E bearing Khata No-54 and Plot No-03. Basu Mandal sand quarry of 1.82 Ha is bounded between Latitudes 20°07'55.18"N to 20°08'02.49" N and longitudes 85°44'55.04"E to 85°45'01.05"E bearing Khata No-8 and Plot No-85. Vansar sand quarry of 9.15 Ha is bounded between Latitude: - 20°07'45.79"N to 20°07'49.31" N Longitudes: - 85°44'31.96"E to 85°44'51.84"E bearing Khata No-594 and Plot No-2932. The site is well connected to NH-203 at 10 Km. and SH 13 at a distance pf 900 meter. Nearest railway station is Khordha road railway station which is located at distance of 4.5 Km from the lease area. Nearest airport is Bhubaneswar airport which is located at distance of 30 Km from the lease area. The site is located at 32 km from Puri Head quarter. Nearest river embankment and road bridge is 0.3 kms and 3km respectively from the project site.
9. As Certified by the Tahasildar, Delanga Tahasil, the distance of the Daya river embankment from the lease area is about 300 meters. Transportation road has already been constructed from Quarry lease area to SH 13. The maintenance of the road will be done by lessee. The road is situated on the outskirts of the village. The nearest village Surangapur is situated at a distance of 420 meters from the lease quarry. No habitation area is found on the transporting route of sand from lease area to connecting main road.
10. **Topography:** The land is the government land leased for excavation of river sand. There will be no change in land use pattern after the end of plan period as the land will remain as the part of Daya river bed and the quarry area will be replenished during the rainy season. The Sand bed is on the river Daya. The sand bed deposit represents a gently sloping to almost flat terrain. The general slope is towards south. The highest mRL of the Tigiria sand bed and Basumandal sand bed is 9m, whereas, the highest mRL of the Vansar sand bed is 8.5 m. Vegetation is scanty with small bushes existing in the auction hold areas. There is no human settlement within the lease areas.

11. **Replenishment study:** Replenishment Study was carried out during May 2021 - Pre – Monsoon & November 2021- Post Monsoon.

Lease area/ Attributes	Basumandal	Tigiria	Vansar
Base point Co-ordinates	2226804.492 N and 369247.051E	2226894.130 N and 369464.626E	2226532.951 N and 368757.496E
Basepoint RL	11.15 m	9.31 m	9.39
Width of River at lease area	178.4	151.02	111
Sections considered	5 CS and 1 LS	5 CS and 1 LS	11 CS and 1 LS
No of measurement points	110	165	385
Elevation in Pre monsoon	9.0 mRL – 11.25 mRL (Avg. 9.16 mRL)	8.0 mRL – 9.15 mRL (Avg. 8.32 mRL)	7.0 mRL – 9.45 mRL (Avg. 8.32 mRL)
Elevation during Post monsoon	8.0 mRL – 9.85 mRL (Avg. 9.51 mRL)	8.0 mRL – 9.85 mRL (Avg. 8.87 mRL)	7.0 mRL – 9.95 mRL (Avg. 8.87 mRL)
Annual rate of replenishment	1502 Cu.m	8852 Cu.m	16205 Cu.m
Proposed production as per Mining Plan	1571 Cu.m	7024 Cu.m	8190 Cu.m

12. **Baseline study:** Baseline data was collected from December 2020 to February 2021.

PERIOD	December 2020 to February 2021	Applicable Standards
AAQ PARAMETERS AT 8 LOCATIONS	PM2.5 – 19.2 to 36.2 µg/cu.m	60 µg/cu.m
	PM10 – 41.8 to 72.1 µg/cu.m	100 µg/cu.m
	SO2 – 5.3 to 9.9 µg/cu.m	80 µg/cu.m
	Nox – 10.3 TO 22.4 µg/cu.m	80 µg/cu.m
Ground water Quality at 7 Locations	pH – 6.5 to 7.9	6.5 to 8.5
	Total Hardness – 60 to 192 mg/l	600 mg/l
	Chloride - 26.8to 7.8 mg/l	250 mg/l
	Fluorides – 0.17 to 0.92 mg/l	1.5 mg/l
	TDS – 80 to 410 mg/l	1000 mg/l
	Heavy metals: BDL (Cd <0.001, As <0.01, Hg<0.0001) mg/l Detection limits of analysis method	Heavy metals: (Cd <0.003, As <0.01, Hg<0.001) mg/l
Surface water at 8	pH – 6.9 TO 7.9	

PERIOD	December 2020 to February 2021	Applicable Standards
locations	Dissolved Oxygen – 5.7 to 6.9 mg/l	
	Biochemical Oxygen Demand – 1 to 2.5 mg/l	
	Chemical Oxygen demand – 5 to 18 mg/l	
Noise at 8 locations	Day (dBA Leq) 30 to 50	55
	Night (dBA Leq) - 21 TO 41	45
Soil Quality at 8 locations	pH –5.1 TO 6.4, Potassium –134 to 501 mg/ kg, Phosphorous –24.9 to 48.1 mg/ kg, Total Organic Carbon % –0.18 to 0.70, Electrical Conductivity- 41 to 353 µmho / Cm.	

13. **Reserves:** As estimated, geological reserve of Tigiria, Basumandal and Vansar is 73248 Cum, 17234 Cum, and 121796 Cum respectively. Thus, the total geological resource of Daya River sand bed over the cluster lease area has been estimated as 212278 Cum. Mineable Reserve of Tigiria, Basumandal and Vansar is 58536 Cum, 13090 Cum, and 68250 Cum respectively. Extractable mineable reserve of Tigiria, Basumandal and Vansar is 35122 Cum, 7854 Cum and 40950 cum respectively (total extractable mineable reserves-83926 cum). Rate of production of Tigiria, Basumandal and Vansar is 7024 Cum per annum (35120cum for 5 years), 1571 Cum per annum (7855cum for 5 years), and 8190 Cum per annum (40950cum for 5 years) respectively with a total of 83,925cum for 5 years in the cluster.

Mining area in the Cluster	Production Quantity in cubic meter					
	1 <sup>st</sup> year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	Total
<b>Tigiria</b>	7024	7024	7024	7024	7024	<b>35120</b>
<b>Basumandal</b>	1571	1571	1571	1571	1571	<b>7855</b>
<b>Vansar</b>	8190	8190	8190	8190	8190	<b>40950</b>
<b>Grand Total</b>						<b>83925</b>

14. **Mining method:** This is a new mining cluster. Mining shall be undertaken manually to extract sand, mainly through an open pit spread over the river course devoid of water or nominal water that may be encountered below. The mode of the deposit, geomorphology of the area and its hydrological condition are some of the factors that favours the open cast method of mining. Mining will be done with manual excavation & loading into trucks/ tractors and transportation from Daya River sand bed to the users/destination will be through trucks/tractors. The mining will be undertaken on single shift basis. The local manpower shall be engaged in the mine.
15. **Water requirement:** For the Delanga sand cluster 4KLD of water will be required. For drinking & domestic purpose, water requirement will be 2.5 KLD, water requirement for green belt development and dust suppression will be 1 KLD. A 10 KLD water tanker will be hired by the lessee for fulfilling both domestic and non-domestic water requirement for the mining.
16. **Greenbelt:** It is proposed for planting suitable species by the lessee in vicinity of the riverbank as avenue plantation which is to be undertaken in consultation with the concerned authority. There is the proposal for development of green belt towards both side of the river bank within the first year of mining.

S.N.	Year	Location	Types of saplings	No. of Sapling
1	1 <sup>st</sup> Year	Towards both side of river bank	Neem, Jamun, Teak, Sisoo, Arjuna	1000

17. **Employment Generation:** Due to the proposed sand mining, there will be generation of employment for 28 persons (Tigiria-11, Basumandal-03 and Vansar-14) in the cluster area. This manpower will be engaged from local area.

18. **Project cost:** Cost of the project for Tigiria, Basumandal and Vansar is 10 lakhs, 10 lakhs and 30 lakhs respectively. So total estimated project cost for the cluster is 50 Lakhs.

Sl. No.	Particulars	Cost/ Annum (in Lakhs) Tigiria Sand Quarry	Cost/ Annum (in Lakhs) Basu Mandal Sand Quarry	Cost/ Annum (in Lakhs) Vansar Sand Quarry
1.	Environmental Monitoring: Ambient air quality, Surface water quality of river, Ground water quality and mining depth	Rs. 1.00	Rs. 1.00	Rs. 1.00
2.	Water sprinkling on the haul road	Rs. 1.00	Rs. 1.00	Rs. 1.00
3.	Green belt development in river bank	Rs. 0.20	Rs. 0.20	Rs. 0.20
4.	Occupational health	Rs. 0.50	Rs. 0.50	Rs. 0.50
<b>Total</b>		<b>3.00</b>	<b>3.00</b>	<b>3.00</b>

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

20. The SEAC in its meeting held on dated **12-04-2024** recommended the following:

**A) The proponent may be asked to submit the followings for further processing of EC application;**

- i) Resubmit replenishment study report as replenishment study points should be done where the mining will be carried out and not in the periphery.
- ii) Number of cross sections taken for Replenishment Study Report with details of erosion and accreditation levels.

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

- i) Suitability for mining activity and availability of sand as major part of the proposed site is inside the river and lease area is present in the concave side of the river which is prone to erosion.
- ii) Environmental settings of the cluster and individual lease areas.

- iii) Mining activity, if any carried out in any of the lease area.
- iv) Sand deposit in lease areas as KML file shows less sand deposit in two leases.
- v) Road connectivity to the leases.
- vi) Distance of the road and railway bridge from the boundary of the leases.
- vii) Distance of embankment from sand deposit.
- viii) Any other issues including local issues.

21. 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
1.	Resubmit replenishment study report as replenishment study points should be done where the mining will be carried out and not in the periphery.	Replenishment study report attached as <b>Annexure - I</b>
2.	Number of cross sections taken for Replenishment Study Report with details of erosion and accreditation levels.	Details attached as <b>Annexure - II</b>

22. The proposed site was visited by the sub-committee of SEAC on **10.08.2023**. Following are the observations of the sub-committee:

- a) RI, Project proponent and Consultant representatives were present and shown the 3 quarries in cluster. RI shown the site.
- b) It was observed that the river was full of water and therefore extent of sand available could not be seen.
- c) As the sites were having water streams flowing through, it is expected that there would be sand available after rainy season.
- d) There is a muddy road connected to the riverside road. There is no high-tension line and a bridge is there more than 0.5 km. The sand availability would be away from the embankment (over 200 meters)
- e) The PP is required to submit the KML file and photograph of all the 3 quarries certified by Tahasildar/RI after rainy season when there would be no water flow.

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

- i) KML file and photograph of all the 3 quarries certified by Tahasildar/RI after rainy season when there would be no water flow as during site visit, it was observed that the river was full of water and therefore extent of sand available could not be seen.
- ii) Replenishment Study of Tigris mine is only enclosed. This study is of 2021 and not as per guidelines. PP shall submit complete and latest Replenishment study as per Guidelines of MoEF by clearly showing concave portion and corresponding assessment.
- iii) The RSR presented in the ADS is for the year 2021 only for Tigris ML area, one of three MLs in the cluster. Earlier the PP submitted RSR for all three MLs in the cluster for review by



SEAC. The most important issue to be addressed is availability of riverbed sand in the three MLs in cluster. The Vansar sand quarry in the cluster is located in a river bend portion where mining of is not recommended as per the sustainable sand mining guidelines.

iv) The RSR has done by RQP and not by ORSAC empanelled firm.

**ITEM NO. 08**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR MUNDILO-PATENIGAON SAND QUARRY OVER AN AREA OF 15.86 ACRES / 6.42 HECTARE ON RIVER BED OF DEVI RIVER AT VILLAGES - MUNDILO AND PATENIGAON, TAHASIL & DISTRICT – JAGATSINGHPUR OF SRI SUSHIL KUMAR MOHANTY - EC**

1. This proposal is for Environmental Clearance of Mundilo-Patenigaon Sand Quarry over an area of 15.86 acres / 6.42 hectare on river bed of Devi River at Villages - Mundilo and Patenigaon, Tahasil & District – Jagatsinghpur of Sri Sushil Kumar Mohanty
2. **Category:** As per the MoEF, New Delhi Gazette dated 14th September 2006 amended in December 2009 and April 2011, this project falls under category B under Schedule of activity 1(a)-Mining of Minerals.
3. There is another mining lease sand quarry in other side of Devi River at 350m named as Kulashree Devi nadi sand quarry over an area of 11.403 acres / 4.613 Ha, located under Niali Tahasil of Cuttack district located within 500 metre radius periphery of proposed mining lease area of the proposed Mundilo - Patenigaon sand quarry. (Total cluster area – 11.033 Ha. /27.263 Acre).
4. Letter of Intent has been issued by Tahasildar, Jagatsinghpur vide letter no 2053 dated 25.06.2021.
5. The Mining plan has been approved by the Deputy Director Geology, Authorized Officer, Directorate of Geology, Bhubaneswar vide letter no - 8280 on dated 21.12.2020.
6. TOR details: Terms of Reference (ToR) was granted by SEIAA vide letter no. 3613/SEIAA dated 18.12.2021
7. **Public hearing details:** Public hearing was successfully executed on date 07.09.2022 at Ground Near Biju Pattanayak Smruti Bidyapitha, Patenigaon in Jagatsinghpur District, Odisha, as per the guidelines given in EIA Notification 14th September' 2006 and its subsequent amendment. Issues raised during the hearing are during transportation tarpaulin covering should be done on sand loaded vehicles to prevent the sand dust being air borne, employment, prevention of road accident due to spillage of sand from overloaded vehicles, proper maintenance of road, air pollution control, dust suppression, protection of river embankment and plying of transportation vehicles in a regulated speed within permissible limit. CER Budget has been allocated is Rs. 1.2lakhs/annum towards public hearing issues.

S. No	Activities	Cost (Lakh/Annum) of CER budget				
		1st year	2nd year	3rd year	4th year	5th year

Distribution of Books & Educational Kits	Mundilo Village 0.40 lakh	Mundilo Village 0.40 lakh	Mundilo Village 0.40 lakh	Mundilo Village 0.40 lakh	Mundilo Village 0.40 lakh
Health Awareness Camp for local Community	Patenigaon Village 0.50 lakh	Patenigaon Village 0.50 lakh	Patenigaon Village 0.50 lakh	Patenigaon Village 0.50 lakh	Patenigaon Village 0.50 lakh
Financial Assistance for Construction of Toilets in Consultation with Gram Panchayat.	Mundilo Village 0.30 lakh	Mundilo Village 0.30 lakh	Mundilo Village 0.30 lakh	Patenigaon Village 0.30 lakh	Patenigaon Village 0.30 lakh
<b>Total</b>	<b>1.2 Lakhs</b>	<b>1.2 Lakhs</b>	<b>1.2 Lakhs</b>	<b>1.2 Lakhs</b>	<b>1.2 Lakhs</b>

8. **Location and connectivity:** The mine lease area is located in Villages - Mundilo and Patenigaon, Tahasil & District - Jagatsinghpur, Odisha, is on Khata no- 496 & 807, Plot no- 791 & 821(P) of Devi river covered in the Survey of India Toposheet No – 73H/15, 73H/16, 73L/3 & 73L/4 and is bounded between the Latitude - 20° 14' 21.60" N to 20°14'32.90" N and Longitude – 86°05'09.30" E to 86°05'20" E. Nearest railway bridge and river embankment is 24 km and 0.38 Km away from the mining lease boundary. River bridge passes though the lease area. Nearest Railway Station is Banbihari Gwalipur Railway Station is approx 17.0 km towards NE direction. Nearest Airport is Biju Patnaik International Airport is approx 28 km towards W direction. Nearest Highway is SH-60 is approx 8.0 km in SW direction. NH-55 is approx 14.0 km in NNE direction. No Ecological Sensitive Areas are present within 10 Km distance from the site.
9. **Topography and drainage:** Mundilo & Patenigaon Devi Nadi Sand Quarry is an undulating topographical feature having ground elevation difference of average 1m above 16 m MSL respectively. The lease area here is a river sand quarry. Drainage system in the region is dendritic. General flow direction of Devi River is from North to South.
10. **Reserves:** The total Geological Reserve of cluster is 131048 cum i.e. (Mundilo - Patenigaon Devi Nadi Sand Quarry = 60538 cum + Kulashree Devi River Sand Quarry = 70510 cum). Total Mineable Reserve is 105775 cum (Mundilo - Patenigaon Devi Nadi Sand Quarry = 45475cum + Kulashree Devi River Sand Quarry = 60300 cum).
11. **Total production:** The cluster sand mines lie on river bed Devi. The total production of sand from the cluster is 115374 cum. The average production of Mundilo – Patenigaon Devi Nadi Sand Quarry is proposed to be 8000 cum/year and 40000 cum is the total production during the plan period. The other operating quarry Kulashree Devi River Sand Quarry which is within 500 meters having an average production of 15078 cum/year and 75374 cum is the total production.

Year	Production (m <sup>3</sup> )
1 <sup>st</sup> Year	8000
2 <sup>nd</sup> Year	8000
3 <sup>rd</sup> Year	8000

4 <sup>th</sup> Year	8000
5 <sup>th</sup> Year	8000
<b>Total</b>	<b>40000</b>

12. **Baseline study:** Baseline Study has been conducted for Winter Season i.e., from Dec 2021 to Feb, 2022. Following observations were made:

- a) **Ambient Air Quality:** Ambient Air Quality Monitoring reveals that the minimum & maximum concentrations of PM<sub>10</sub> for all the 7 AQ monitoring stations were found to be 58.54 µg/m<sup>3</sup> at AQ2 and 82.73 µg/m<sup>3</sup> at AQ7, respectively. The minimum & maximum concentrations of PM<sub>2.5</sub> for all the 7 AQ monitoring stations were found to be 25.01 µg/m<sup>3</sup> at AQ2 and 48.44 µg/m<sup>3</sup> at AQ4, respectively as far as the gaseous pollutants SO<sub>2</sub> and NO<sub>x</sub> are concerned, the prescribed CPCB limit of 80µg/m<sup>3</sup> for residential and rural areas has never surpassed at any station. The maximum & minimum concentrations of SO<sub>2</sub> were found to be 14.58 µg/m<sup>3</sup> at AQ1 & 6.03 µg/m<sup>3</sup> at AQ2, respectively. The maximum & minimum concentrations of NO<sub>x</sub> were found to be 22.50 µg/m<sup>3</sup> at AQ1 & 10.40 µg/m<sup>3</sup> at AQ 2, respectively.
- b) **Ground water Quality:** Analysis results of ground water reveal that the pH varies from 7.19 at GW4 to 7.64 at GW5 during study period. Total hardness varies from 229.70 mg/l at GW4 to 300.78 mg/l at GW5 during study period. Total dissolved solids vary from 288 mg/l at GW3 to 320 mg/l at GW1 during study period.
- c) **Surface water Quality:** The analysis results indicate that the pH ranges between 6.87 and 7.45. Dissolved Oxygen (DO) was observed in the range of 6.2 to 6.9 mg/l against the minimum requirement of 4 mg/l. BOD values were observed to be in the range of 3.8 – 4.0 mg/l. The chlorides and Sulphates were found to be in the range. Bacteriological examination of surface water samples revealed the presence of total coliform in range of 1.4×10<sup>3</sup> MPN/100 ml to 2.0×10<sup>3</sup> MPN/100 ml.
- d) **Soil Quality:** Samples collected from identified locations indicate the soil is sandy type and the pH value ranging from 6.87 to 7.59, which shows that the soil is alkaline in nature. Potassium is found to be from 74.61 mg/kg to 82.56 mg/kg. The water holding capacity is found in between 27.65 % to 33.12%.
- e) **Noise Quality:** Noise monitoring reveals that the maximum & minimum noise levels at day time were recorded as 59.85 Leq. dB (A) at NQ1 & 42.61 Leq. dB (A) at NQ5, respectively. The maximum & minimum noise levels at nighttime were found to be 48.66 dB (A) at NQ1& 31.38 dB (A) at NQ5. There are several other sources in the 10 km radius of study area, which contributes to the local noise level of the area. Traffic activities as well as activities in nearby villages and agricultural fields add to the ambient noise level of the area.

13. **Replenishment report:** - The methodology used for Replenishment study is based on the measurement of Reduced Level (RL) at selected points as monitoring stations within the lease area in Pre-monsoon season & Post Monsoon season respectively. For the said project replenishment study has been done during the Pre-Monsoon (April-2022) and post-monsoon season (Nov - 2022) by field survey (volumetric survey) method. It has been observed that

there is an average increase in river bed level by 1.15m in post monsoon due to deposition of sand via river flow. Therefore, replenished quantity of sand is 52,296.25 cum (surface area of Block A is 45,475 sqm \* 1.15m)

14. **Mining method:** The sand will be excavated by open cast manual method with mechanical carriage. Since the depth of sand deposit is 1.0 m, excavator, handpicks, spade, hand shovel will be used by laborers for extracting & loading of sand. Quarry floor level (RL) at the end of the lease period will be 15 m from the Mean Sea Level (MSL).
15. **Water requirement:** The water requirement for workers for drinking purpose will be around 0.17 KLD & the total water requirement will be around 8.0 KLD. Water requirement for the total cluster is 11KLD (Kulashree Devi sand quarry-3KLD+ Mundilo- Patenigaon Devi nadi sand quarry is 8 KLD).

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10 lpcd per labor 10*17/1000= <b>0.17 KLD</b>	0.17
Dust Suppression	<b>Total approach road to be water sprinkled = 218.51 m</b> 218.51 m*6m*0.5 *2 times/1000= 1.31 KLD Total water required is = <b>1.31 KLD</b>	1.31
Plantation	2187 plant (during plan period) @ 3 L/per plant= 2187*3 lts= 6561/1000= <b>6.56 KLD</b>	6.56
<b>Total</b>		<b>8.04 ~ 8.0 KLD</b>

16. **Traffic study:** The V/C ratio will be modified from 0.033 (SH 60) to 0.050 with LOS being "A" i.e. "Excellent". So, the additional load on the carrying capacity will be affected to a minimum level.
17. **Greenbelt:** About 2187 saplings are proposed to be planted. Plantation will be done along transport route and buffer zone during first year. Plantation will be carried out after consulting local authorities or gram panchayat. Plantation work will be carried out on both side of haul road i.e., 218.51 m. Plantation shall be done with suitable local species like teak, mango, neem, jamun, jhaun etc.per year.

Year	Plantation along the road side		No. of Plants in Schools	No. of Plants in Panchayat	No. of Plants in Aanganwadi	Species
	Area (Ha.)	Number of Plants	Number of Plants	Number of Plants	Number of Plants	
1st	0.087	87	1000	600	500	Guava, Mango, Jamun, Chakunda Jhau, Neem etc.
2nd	Maintenance		Maintenance			
3rd						
4th						
5th						
	0.087	87	2100			
<b>Total</b>	<b>2187</b>					

18. **Manpower requirement:** A total of 17 nos. of manpower are to be employed in the lease area for mining 8000 cum/year of sand. Indirect employment through creation of shops/

stalls, hired vehicles, etc. can be generated to full fill the day-to-day requirements of the mining personnel. Employment Generation from the Mundilo - Patenigaon Devi Nadi Sand Quarry = 17nos and cluster project is 30 nos. of people. (Mundilo - Patenigaon Devi Nadi Sand Quarry = 17nos + Kulashree Devi River Sand Quarry = 13 nos)

19. **Project cost:** The estimated cost of project is around Rs. 60 lakhs. CER cost will be 2.0% of the total amount. Budget for occupational health is 3 lakhs per year. Budget for water, shelter and sanitation for mine worker carries capital cost of 3,00,000 and recurring cost of 75,000 EMP cost includes capital cost of Rs 3,73,330/- and recurring cost of Rs 4,02,000/-

Sr. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	2,18,700	1,00,000
4.	Maintenance of haul road	54,630	42,000
5.	Tarpaulin and cover for minerals	1,00,000	50,000
<b>Total</b>		<b>3,73,330</b>	<b>4,02,000</b>

20. **Environment Consultant:** The Environment consultant **M/s P and M Solution, Noida** along with the proponent made a presentation on the proposal before the Committee on 12.04.2024.

21. The SEAC in its meeting held on dated **12-04-2024** decided to take the decision on the proposal after receipt of the following 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
1.	Details of span of the bridge including length and width and distance of the bridge from the two mining blocks duly certified by the concerned authority. The concerned authority shall also clarify whether the bridge is passing within the lease area or outside the lease area.	Letter from the Executive Engineering, R & B has been Attached for your reference as <b>Annexure – I.</b>
2.	The concerned Tahasildar shall clarify why the lease has been divided into Block – A, B and C.	Mundilo-Patenigaon Lease has been divided in to 2 Blocks, i.e A & B. As a bridge has proposed in the lease area, we are separated it into 2 Blocks after leaving the safety zone. Block – C has not proposed.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
3.	Submit complete and revised replenishment study details including section wise details, geo-coordinates, reduced level etc.	The revised replenishment study report has been attached for your reference as <b>Annexure-II</b> .
4.	Mismatch of Plot no. in DSR and mining plan.	As per revenue record, the plot no. has wrongly changed in the office order to Plot no-791 instead of plot no. 2499 of the same khata no. After the file has moved to Department of Steel & Mines we have been observed that, the plot no, which is mentioned in DSR is not matched with the mining Plan. Accordingly, we have modified the mining plan of the same area 6.42 ha. The modified Mining Plan has been attached for your reference as <b>Annexure-III</b> .
5.	Transportation route from lease area to connecting public road.	The transportation route from lease area to connecting public road has been attached for your reference as <b>Annexure-IV</b> .

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P and M Solution, Noida** on behalf of the proponent, the SEAC decided to take decision on the proposal after receipt of following information/clarification from the proponent:

- i) Mineable surface area as per modified mining plan is less than the common safe workable area in Replenishment study.
- ii) No benchmark is taken. No details of GCP is available.
- iii) Safety zone left due to bridge is not marked in the Replenishment study maps or shown in calculations.
- iv) The RSR in the ADS is based on pre and post monsoon photogrammetry surveys carried out on 09th June 2024 and 14th November 2024 respectively using drones / UAV. The method of fixing GCPs along with that of fixing site orthometric heights is stated under the para "3.3 Survey procedure". Two different sets of GCPs (5 nos. in each set) have been used for pre and post monsoon surveys. The GCPs in the pre and post monsoon surveys are not fixed as per para "Ground control point establishment and monumentation" of the standard operating procedure (SOP) for study of rate of replenishment of sand using drone survey prepared by ORSAC for SEIAA, Odisha and submitted vide letter No. ORSAC/PR/0951/21/2588 dated 02nd June 2023.
- v) The stated RMS errors in absolute geolocation variance 28.7 cm for X, 99.6 cm for Y and 61.4 cm for Z in both pre- and post-monsoon surveys. The mean of geolocation accuracy is mentioned to be 5 m for X, 5 m for Y and 10 m for Z or both the pre and post monsoon surveys. (Refer "Quality report" section of the RSR)
- vi) The revised mining plan is approved on 16th June 2024. As per this document the ML area has gentle slope, almost flat terrain with an average altitude of 16 m above the MSL. 1.5 m

depth of sand excavation is approved and accordingly quarry floor level is stated to be 14.5 m RL. The river water level is stated to be 12 m RL.

- vii) Table under para '4.3 Calculation of replenished volume' presents the grid point elevations of the riverbed sand surface in the mineable areas of the ML 0.80 m of sand deposit is stated based on the differences in average elevations of pre and post monsoon survey readings. This reported difference of 0.8 m cannot be considered significant in view of the stated geolocation accuracy of 10 m for Z (azimuth / elevation)
- viii) The pre and post monsoon surveys have not been done as per the SOP for study of rate of replenishment of sand using drone survey prepared by ORSAC for SEIAA, Odisha and submitted vide letter No. ORSAC/PR/0951/21/2588 dated 02<sup>nd</sup> June 2023. The RSR is not acceptable.

#### **ITEM NO. 09**

#### **PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR KHANJAMAHAL STONE QUARRY (CLUSTER APPROACH) OVER AN AREA OF 244.50 AC./98.94 HA. (KHATA NO 144, PLOT NO-161, 165, 164, 318, 168, 167, 166, 266, 287, 264, 265, 263) IN VILLAGE KHANJAMAHAL, UNDER SORO TAHASIL IN BALASORE DISTRICT OF REVENUE AND DISASTER MANAGEMENT DEPARTMENT - EC**

1. This proposal is for Environmental Clearance for Khanjamahal Stone Quarry (Cluster Approach) over an area of 244.50 Ac./98.94 Ha. (Khata No 144, Plot No-161, 165, 164, 318, 168, 167, 166, 266, 287, 264, 265, 263) In Village Khanjamahal, under Soro Tahasil in Balasore District of Revenue and Disaster Management Department.
2. **Category:** As per the EIA notification 2006 and its subsequent amendments, proposed project falls in category B under schedule of Item 1(a)-Mining of minerals.
3. The project proponent for the 61-cluster stone quarry is Tahasildar, Soro. After grant of Environmental Clearance all the lease will be auctioned to successful bidder.
4. It is a cluster of 61 nos. stone quarries. Out of the total 61 quarries, 46 nos. are existing and 15 nos. are new.
5. Mining lease is an identified Sairat source in the DSR page no.11 to 13 si.no.1 to 63 Annexure-II
6. The mining plan was approved by the Deputy Director Geology & Authorized Officer, The Directorate of Geology, Bhubaneswar, Odisha vide Letter No. GXVII(g)-86/21-6334/DG, Dt. 30.10.2021
7. **TOR details:** Terms of Reference (TOR) was issued by SEIAA, Odisha, vide proposal No.SIA/OR/MIN/429196/2023, dated 21<sup>st</sup> September 2023.
8. **Public hearing details:** Public hearing was conducted on Gram Panchayat office of Mahumuhan, dated 11.12.2023. Issues raised during public hearing are control of flying dust during operation of stone quarries and transportation, plantation in stone Quarry areas, road side and Government Forest land for control of flying dust, construction of 2 lane PWD road from Soro to Bagudi, utilization of DMF in the local area for developmental work, development of hospital, school, drinking water facility & road communication, development of road

Proceedings of the SEAC meeting held on 04.03.2025

**Environmental Scientist, SEAC**

condition from soro to Bagudi, reserve for 30% to 40% of stone quarry out of proposed stone quarry for local people, employment of local labour in the stone quarries, movement of heavy vehicles as per carrying capacity of road and for control of speed and blasting in quarries affecting the health of people, damaging nearby houses and losing fertility of nearby agriculture lands by deposition of stone splinters.50 lakhs has been incurred for action plan of public hearing.

9. **Location and connectivity:** The proposed project is located at (Khata No-144, Plot No-161, 165, 164, 318, 168, 167, 166, 266, 287, 264, 265, 263) in village Khanjamahal & Mahumuhan, under Soro Tahasil in Balasore district of Odisha. The site is bounded by Geo Coordinate: Latitude: 21°21'31.64"N to 21°21'29.51"N, Longitude: 86°39'57.58"E to 86°39'56.90"E bearing Topo sheet no F45 O11, Kissam of Land Parbat-I, Parbat-III, Pahad, Village Road passes adjacent to the mine lease. NH-16 passes at soro at distance of 6.14 KM. SH-19 at a distance of 15.12 KM, Major PWD road at a distance of 3.06 KM, there is no such river within 10 km radius, Khania bridge at a distance of 10.93 KM, village road at a distance of 0.51 Km, nearest transmission line at a distance of 1.42 km, Nearest embankment is at a distance of 10.93 KM, Adjacent village is Khanjamahal. Kuldiha Reserve Forest is 1.05 KM away from the mine lease boundary.
10. The proposed area is not located in ESZ. However, Kuldiha Wildlife Sanctuary Eco sensitive zone is located at a distance of 0.51 KM. Sanctuary boundary is at a distance of 1.05 KM.
11. **Total Reserves and proposed production:** As estimated, Geological reserves is 39.608 million Cum, Mineable reserves is 20.881 million Cum and proposed production is 2.484 million Cum/Annum.

Year	Volume (Million m <sup>3</sup> )
1 <sup>ST</sup> YEAR	2.484
2 <sup>ND</sup> YEAR	2.484
3 <sup>RD</sup> YEAR	2.484
4 <sup>TH</sup> YEAR	2.484
5 <sup>TH</sup> YEAR	2.484
<b>TOTAL</b>	<b>12.427</b>

12. **Mining method:** Open Cast semi-mechanized Mining method will be adopted for the proposed project with proposed production of 2.484 million Cum/Annum. Total production in 5-year plan period is 12.427 million Cum. Depth of mining is 10m. Shovel, dumper, Rock drill, compressor, excavator & loader will be used for mining. Transportation will be done by Trucks.
13. **Water requirement:** Total water required for the proposed project is 164 KLD.

S. No	Description	Water Requirement (KLD)
1	Drinking & Domestic purpose	31.2
2	Dust suppression	82.0
3	Green Belt	50.8
<b>Total</b>		<b>164.0</b>



14. **Waste generation and management:** A total of 2.972 million m<sup>3</sup> of waste will be generated during this plan period, which will be dumped temporarily at the designated place as per the approved Mining Plan and subsequently utilized for road construction and maintenance during the plan period.

<b>Summary of Development/Production Calculation of Khanjamahal Cluster</b>		
<b>Category</b>	<b>Items (M<sup>3</sup>)</b>	<b>Total Volume (M<sup>3</sup>)</b>
A	B	C
Development/Production In 5 Years (of 61 Quarries PRESENT IN CLUSTER AREA)	Volume of Total Excavation	12247110
	Volume of Recoverable Stone (90%/80%/75%)	9275013
	Volume of waste (10%/20%/35%)	2972102

15. **Baseline study details:** Base line data collected during March-2023 to May 2023.

- **AAQ results:** The monitoring results of ambient air quality were compared with the National Ambient Air Quality Standards (NAAQS) Prescribed by MoEFCC; GoI Notification dated 16.11.2009. The baseline levels of PM10 (26.6 – 72.2 µg/m<sup>3</sup>), PM2.5 (15.9 – 43.3 µg/m<sup>3</sup>), SO<sub>2</sub> (3.2 – 8.7 µg/m<sup>3</sup>), NO<sub>2</sub>(11.1 – 30.5 µg/m<sup>3</sup>), While thus it was found that concentration of pollutants was within the limits of NAAQ standards.
- **Surface water quality:** The analysis result of surface water samples was compared with IS 2296:1992 standard and in respect of CPCB water Quality Criteria for designated best use. Based on comparison study of test results with Surface water Quality Standards (Is 2296 Class A), it is interpreted that water qualities of studied locations are classified under Class E, which can be used for irrigation, industrial cooling and controlled waste disposal. The pH value ranges from 7.18 to 7.91 and within the limits (6.5 – 8.5) of IS 2296:1992. The Electrical Conductivity (EC) of the collected surface water ranges from 290µS/cm to 980 µS/cm. The chloride content in the collected surface water ranges from 51 mg/l to 153 mg/l. The sulphate content in the collected surface water sample ranges from 12.7 mg/l to 38.1 mg/l. The Total hardness of the collected surface water sample ranges from 63.5 mg/l to 318.5 mg/l. COD of the collected surface water sample ranges from 12.1 mg/l to 36.1 mg/l. BOD of the collected surface water sample ranges from 1.2 mg/l to 1.9 mg/l.
- **Ground water quality:** Physio-chemical characteristics of ground water samples collected from the selected villages during Pre-monsoon 2023. The Ground water results were compared with drinking water standards (IS 10500:2012). The ground water results of the study area indicate that the pH range varies between 7.08 and 7.68. It is observed that the pH range is within the limit of IS 10500:2012. The Total Dissolved Solids range varies between 416 mg/l –1475 mg/l for the ground water. All the samples are well within the permissible limit of IS 10500: 2012. The acceptable limit of the chloride content is 250 mg/l and permissible limit is 1000 mg/l. The chloride content in the ground water for study area ranges between 116 mg/l –413 mg/l. It is observed that all are well within the permissible limit of IS 10500:2012. The desirable limit of the sulphate content is 200 mg/l and permissible limit is 400 mg/l. The

sulphate content of the ground water of the study area varies between 29.1 mg/l – 103.2 mg/l. It is observed that all the samples are within the permissible limit and Acceptable Limit of IS 10500: 2012. Based on comparison study of test results with drinking water standard, it is interpreted that water qualities of studied locations meet with the drinking water standards as per IS 10500: 2012 permissible limit. These interpretations relate to the sample tested for location only.

- **Soil quality:** Eight locations in and around the proposed project were selected for soil sampling. The pH of the soil samples ranged from 7.25 to 8.28. Indicating that the soils are Neutral to moderately alkaline in nature. Conductivity of the soil samples ranged from 131µmhos/cm to 375 µmhos/cm. Nitrogen content ranged from 171 kg/ha to 521 kg/ha. Phosphorous ranged from 33 kg/ha to 75 kg/ha. Potassium content ranges from 205kg/ha to 858 kg/ha
16. **Greenbelt development:** Total plantation in 5 years will be 13113 numbers. The plantation proposed in the buffer area and avenue plantation will be carried out in open places in and around the quarry lease area. The budget for Afforestation will be around Rs. 19,66,950/-.

Year	No. of samplings	Species
1st	2625	Mango, Subabul, Chakunda, Karanja, Neem
2nd	2622	
3rd	2622	
4th	2622	
5th	2622	
<b>Total</b>	<b>13113</b>	

17. **Manpower requirement:** The manpower required for the proposed project is 1348 (Direct).
18. **Project cost:** Estimated cost of the project cost is 610 lakhs (6.10 Crore) & EMP cost 91.50 Lakhs. CER budget includes 12.2 lakhs.

S. No.	Environmental Work	Capital cost in rupees	Recurring cost in rupees
1	Water sprinkling for dust suppression	Rs.8,00,000/-	12,00,000/-
2	Greenbelt	Rs.19,66,950/-	15,00,000/-
3	Retaining wall, Garland Drain	Rs.15,00,000/-	6,00,000/-
4	Septic tank and related	Rs. 5,00,000/-	1,00,000/-
5	Environmental monitoring	Rs. 18,61,050/-	10,00,000/-
6	First aid Facility	Rs.5,00,000/-	5,00,000/-
7	PPE kit	Rs 20,22,000/-	20,22,000
<b>Total in Rupees</b>		<b>91,50,000/-</b>	<b>69,22,000/-</b>

19. **Environment Consultant:** The Environment consultant **M/s EHS360 Labs Pvt. Ltd., Chennai** along with the proponent made a presentation on the proposal before the Committee on 01.02.2024.

20. The SEAC in its meeting held on dated 01-02-2024 recommended the following information to be submitted by 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)	Submit authenticated Eco-sensitive Zone Map and certified copy from concerned DFO that the lease area is not coming within notified Eco-sensitive zone of Kuldiha Sanctuary and distance of the boundary of Kuldiha Sanctuary is 1.03 Km from the proposed site.	As per the certified Map from DFO, the distance from mine lease boundary to Kuldiha Wildlife Sanctuary boundary is at a distance of 1.056 KM and Ecosensitive zone boundary is at a distance of 0.510 Km. The certified map of DFO is attached as <b>Annexure-1</b> .	Certified Eco-sensitive Zone Map alongwith certificate from concerned DFO is not submitted. Old joint verification report has been submitted.
ii)	Brief note on blasting management, storage of explosive and SOP to be followed for blasting in all leases.	There is no such provision for storage of explosive inside the lease area. Agreement will be made with nearest explosive authorized dealer. On the day of blasting, vehicle will come with explosive and it will return after blasting. Details of blasting management and SOP to be followed for blasting for all leases is attached as <b>Annexure-2</b> .	Complied
iii)	Layout plan showing the accessible roads to all the lease areas.	The layout plan showing the accessible roads to all the lease area is attached as <b>Annexure-3</b> .	Complied
iv)	Note on truck parking plaza and truck route movement and transportation route.	An area of 1.0 Ac has been identified in plot no-263, khata no- 144 at Khanjamahal mouza for truck parking plaza. Basic amenities like rest shelter, toilet, drinking water facility, bathing facility with small snack shop will be provided in parking plaza. Letter from Tahasildar regarding area confirmed for Parking Plaza is attached as <b>Annexure-4A</b> . From the mines material will come to Bagudi Chawk which is 7m width village road. From their material will transport in both the way i.e. Bagudi-Mangalpur and Bagudi-soro (both the road stretch is 9m width PWD road). BagudiSoro road further connected to NH- 16 at Soro which is 4 lanes (6 lane is under process). Soro is at a distance of 6.14 Km. Google map showing the transportation route is attached as <b>Annexure-4B</b> .	Complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
v)	The proponent shall keep No mining zone from nearest habitation.	The nearest habitation is Mahumuhan & Khanjamahal village are at a distance of 0.5 to 1.0 km. Further, we are here with undertake that we will keep safe distance and no mining zone from the above both villages, so that there will be no such impact on both the villages due to mining activities.	Complied
vi)	Note on Magazine Management.	As discussed under point no – 2 that there is no such provision for storage of explosive inside the lease area. Agreement will be made with nearest explosive authorized dealer. On the day of blasting, vehicle will come with explosive and it will return after blasting.	Complied
vii)	Note on management of surface runoff during monsoon.	A proposal has been put forward for the construction of a 3530-meter retaining wall (1 X 1.5m) and garland drain along the cluster boundary. Additionally, there is a proposal for the construction of six settling tanks with adequate capacities at lower reduced levels, which will be connected to the garland drain. The garland drains of the individual lease will be connected to the settling tank. Before each monsoon settling tank & garland drain will be de-silted. The de-silted material will be used for bond making and road leveling. The surface run-off management plan map is attached as <b>Annexure- 5</b> .	Complied

21. The SEAC observed the following:

- i) The proponent was asked to submit authenticated Eco-sensitive Zone Map and certified copy from concerned DFO that the lease area is not coming within notified Eco-sensitive zone of Kuldiha Sanctuary and distance of the boundary of Kuldiha Sanctuary is 1.03 Km from the proposed site.
- ii) The Proponent has submitted old joint verification report dated 17.03.2022 along with a map duly signed by the concerned DFO on dated 24.01.2024. They have not submitted certificate from the concerned DFO that the lease area is not coming within notified Eco-sensitive zone of Kuldiha Sanctuary and distance of the boundary of Kuldiha Sanctuary is 1.03 Km from the proposed site.
- iii) Joint verification report dated 17.03.2022 reveals the following:

Proceedings of the SEAC meeting held on 04.03.2025

Environmental Scientist, SEAC

- a) Extent of DLC Forest area spreads over Plot Nos. 161, 168, 262, 263, 264, 265, 266, 287, 162, 165, 164, 163, 353, 354 & 356 in Khata No. 144 in respect of Khanjamahal Mouza under Soro Tahasil.
- b) Eco Sensitive zone boundary around Kuldiha Wildlife Sanctuary in respect of Khanjamahal Mouza passes at a distance of 500 mtr. from the boundary of Kuldiha Wildlife Sanctuary.
- c) The Hon'ble Supreme Court of India in order dated 04.08.2006 in I.A. No. 1598-1600 in W.P. (C) No. 202/1995 - T.N. Godavarman Thirumulpad - Vs - Union of India has taken a view that "01 KM from the boundaries of National Park and Sanctuaries would be a safety zone subject to the orders that may be made in I.A. No. 1000 regarding Jamua Ramgarh Sanctuary and the State will not grant any temporary working permit in these safety zones".
- d) Accordingly, during pre-field visit exercise, the safety zone in respect of Kuldiha Wildlife Sanctuary has been imposed on Revenue Map referring boundary of ESZ and Kuldiha Wildlife Sanctuary and the geo-referred station points on the safety zone are extracted are as follows:
- i. 21°21'35.20"N - 86°39'5'0.32"E
  - ii. 21°21'31.15"N - 86°40'21,12"E
  - iii. 21°21'30.57"N - 86°40'38.57"E
- e) On the date of field verification, the above geo-referred co-ordinates and the following DLC Forest Patches were identified in the field at various places vis-à-vis safety zone.

Village	Khata No.	Plot No.	Area in Hectare	Remarks
Khanjamahal	144	265	05.00	Outside safety zone
		318,353,354	05.00	Within safety zone
		266,287	05.00	Outside safety zone
		263,264	05.00	Outside safety zone
		161,168	05.00	Partially within safety zone
		262,263	10.00	Outside safety zone

- f) It was unanimously decided to prevent any sort of quarrying activity over the identified DLC Forest land as well as Safety Zone and the cluster sairat sources to be confined outside the limit of Safety Zone and DLC Forest area.

22. The SEAC in its meeting held on dated **27.02.2024** decided to take decision after receipt of following information from the project 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
1.	Certificate from the concerned DFO that the lease area is not coming within notified Eco-sensitive zone of Kuldiha Sanctuary and distance of the boundary of Kuldiha Sanctuary is 1.03	As per the authenticated DGPS map of ORSAC, DFO, Balasore vide its letter dated 27th November 2024 certified that all the 61 cluster stone quarries are not coming within Eco-	DFO, Balasore has certified that 61 quarries are not falling within the ESZ of Kuldiha

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	Km from the proposed site.	Sensitive Zone around Kuldiha Wildlife Sanctuary and the distance of the cluster boundary is 1.13 km from the boundary of Kuldiha wildlife Sanctuary. Authenticated ORSAC certified DGPS map counter signed by DFO, Balasore is attached as <b>Annexure1</b> . DFO, Balasore letter dated 27th November 2024 is attached as <b>Annexure-2</b> .	Sanctuary.
2.	Khata no. and plot no. of 61 individual quarry in cluster along with extent of DLC forest land involved and also to confirm the limit of safety zone for individual quarry (whether within the safety zone or outside the safety zone).	Khata no, Plot no and extent of the lease area with kissam of 61 no's of individual quarry is provided by DFO, Balasore vide its letter dated 27th November 2024. Regarding safety zone, there will be 7.5 m wide all along the periphery of cluster (within the safety zone) as per the approved Mining Plan. Further, the individual quarry having certain distance from other will be maintained its own 7.5m safety zone along its lease boundary. The approved surface plan showing safety zone is attached as <b>Annexure-3</b> . Further, as per the DFO letter dated 29th January 2025, it has been mentioned that as per the field basing of DGPS map no quarries are falling within the identified boundaries of DLC forest patches. The letter of DFO dated 29th January 2025 is attached as <b>Annexure-4</b> .	Checked the table of Khata no. and plot no. of 61 individual quarry in cluster along with extent of DLC forest land involved
3.	Status of stage-I forest clearance if DLC forest land involved in the lease area for individual quarry.	As there is no such DLC forest land involved in this project, DFO, Balasore , vide its letter dated 27th November 2024 confirmed that no forest proposal and compliance of stage-1 in respect of stone quarry in village Khanjamahal under Soro Tahasil of Balasore district is pending at his level.	-----

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s EHS360 Labs Pvt. Ltd., Chennai on behalf of the proponent, the SEAC approved the EIA/EMP report in cluster approach and recommended the following:**

- a) The SEIAA, Odisha may consider to grant Environmental Clearance to individual lease (for **61 nos.** quarry leases) in cluster with specific conditions as per **Annexure-H** after receipt of individual applications from the lessee in cluster along with following documents.
  - i) Filled in form-I of individual lease

Proceedings of the SEAC meeting held on 04.03.2025

Environmental Scientist, SEAC

- ii) Prefeasibility report of individual lease
- iii) EMP of individual lease.
- iv) Approved Mining Plan of individual lease
- v) DLC status of the lease area from concerned DFO as certified by the concerned Tahasildar.
- vi) An Undertaking by the lessee not to use wagon drilling blasting to be submitted. Accordingly, specific condition to be stipulated in EC of individual lease.
- vii) No storage and usage of blasting materials/explosives inside the lease area without license/permission/authorization from competent Authority as per Indian Explosives Rules, 1983 shall be ensured by the lessee. An undertaking to this effect shall be submitted by the lessee. Accordingly, specific condition to be stipulated in EC of individual lease.
- viii) An undertaking to obtain NOC from CGWA and permission from WR department, Govt. Of Odisha for use of ground water. Accordingly, specific condition to be stipulated in EC of individual lease.
- ix) A Wildlife Conservation Plan shall be prepared in consultation with DFO and approved by CWLW Odisha and copy to be submitted along with EC application of individual lease.

**b) Following specific conditions shall be stipulated in Environmental Clearance for individual lease:**

- 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.
- 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 – E** shall be followed by the lessee.

## **ITEM NO. 10**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S UTKAL REALTORS PVT. LTD. FOR PROPOSED CONSTRUCTION OF PRIVATE HOUSING PROJECT OVER PLOT NO.: 292,293,294,295,296,298,295/687, KHATA NO - 352/237, 352/236, 352/322, 352/238 OVER AN REVISED BUILT-UP AREA 52257.17 SQM AT PAHAL, BHUBANESWAR. DIST- KHURDA OF SRI PRAKASH CHAND BHURA - MOD EC.**

1. The proposal is for Modification of Environmental Clearance for Proposed Construction of Private Housing Project over Plot No.: 292,293,294,295,296,298,295/687, Khata No - 352/237, 352/236, 352/322, 352/238 over a revised built-up area 52257.17 sqm at Pahal, Bhubaneswar, Dist- Khurda of Sri Prakash Chand Bhura.
2. M/s Utkal Realtors Pvt. Ltd. has awarded for Development of Private Housing Project 2.08 Acres of land at Plot No.: 292,293,294,295,296,298,295/687 Khata No- 352/237, 352/236, 352/322, 352/238, Near NH-16 Road, Pahala, Bhubaneswar, Odisha-751021.
3. The proposed site is located at Pahal, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20° 20' 26.60" N & Longitude - 85° 53' 04.07" E. The project site is well connected with National Highway-16 (Jharpokharia-Chennai Road). The nearest railway station is Bhubaneswar Railway station at a distance of approx 10.6 Km in South West direction. The nearest airport is Biju Pattnaik International Airport Bhubaneswar at a distance of approx. 13.4 Km in South-West direction from project site. The site is located adjacent to the local landmarks, Haridaspur Mosque, Jagannath Temple, Pahala Etc. There is no structure or encroachments on the site. The site is easily accessible from NH-16 Road.

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

<b>Particular</b>	<b>Area as per EC</b>	<b>Revised</b>	<b>Permissible</b>
Project Name	Proposed Housing Project (Residential Use Type)		
Plot Area	8457.86 sqm	8457.86 sqm	--
Ground Coverage	2875 sqm (34 %)	3313.35 sqm (39.2 %)	--
Total Built up Area	30990.21 sqm	58737.31 sqm	--
FAR	23257.91 sqm (2.74)	39846.96 sqm (4.711)	23259.11 sqm (2.75)
Maximum Height	59.45 mtr (Residential) 16.80 mtr (Commercial)	83.5 mtr (Tower-A) 83.5 mtr (Tower-B&C)	--
Road & Paved Area	2368.15 sqm	2368.15 sqm	--
Parking Area	7709.50 sqm (30 % of Residential FAR Area + 50 % of commercial FAR Area)	13384.48 sqm	(30 % of Residential FAR Area)
Green Belt Area	1691.50 sqm (20% of Plot area)	1701 Sqm (20.11% of total plot area).	1691.50 sqm (20% of Plot area)
Power/Electricity Requirement & Sources	1056 KW	1682.17 KW Source: TPCODL	--
No. of DG sets	2 x 500 KVA	1 x 750 KVA	--

Proceedings of the SEAC meeting held on 04.03.2025

**Environmental Scientist, SEAC**



Particular	Area as per EC	Revised	Permissible
Fresh Water requirement & Sources	75 KLD Source-Ground Water	133 KLD Source-Ground Water	--
Sewage Treatment & Disposal	STP Capacity 110 KLD	STP Capacity 180 KLD	--
Estimated Population	700 nos.	1428 nos.	--

#### 5. REQUIREMENT FOR THE PROJECT:

- **Area requirement:** For this project- 8457.86 sqm (2.08 Acres) of land is required, which has already been acquired.
- **Power requirement:** The daily power requirement for the proposed Private Developer Project is preliminarily assessed as **1682.17 KW** source from TPCODL of Odisha State Electricity Board. In order to meet emergency power requirements during the grid failure, there is provision of 1 no. of DG set having 750 KVA (1 No.) capacities for power back up in the Private Housing Project.
- **Water requirement:** Fresh make up of 133m<sup>3</sup>/day will be required for the project which will be sourced from Ground Water Source.

#### 6. Solid waste Generation:

S. No.	Category	Counts (heads)	Waste generated
1.	Residents	1428 @ 0.45 kg/day	642.6 kg/day
3.	Floating population in residents	140 @ 0.15 kg/day	21 kg/day
5.	STP sludge(S in Kg=Q*0.01*0.05 Where, Q = Quantity of waste water generated in Ltr)		85 kg/day
<b>Total Solid Waste Generated</b>			<b>748.6 kg/day Say 749 kg/day</b>

- The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.
- The project proponent has intimated during presentation that they have not yet started any construction activity for the project including proposal for modification of EC.
- The SEAC in its meeting held on dated **30-08-2022** decided to take decision on the proposal after receipt of the following information / 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
1.	Structural Stability certificate from appropriate authority as per BDA guidelines be submitted and also for revise plan also with corresponding studies made for both approved original plan and revised approved plan.	Structural Stability Certificate of the proposed building is attached in <b>Annexure-1</b> .	complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
2.	Certificate from chartered civil engineer about construction made for both approved original plan and revised approved plan.	Chartered Certificate regarding construction made for both original plan and revised approved plan is attached in <b>Annexure-2</b> .	complied
3.	Comparative statement in terms of physical features in original plan and present plan.	Comparative Statement regarding physical features in original plan and present plan is attached in <b>Annexure-3</b> .	Complied
4.	Compliance Report to Previous EC conditions duly certified by Regional Officer of MoEF & CC.	The present proposal is for Amendment of Environment Clearance. No construction work is started at site, once the Amendment EC is received from SEIAA we will submit the Six Monthly EC Compliance report to Regional Office of MoEF&CC and SEIAA.	-
5.	Permission from Water Resources deptt. For usage of ground water in commercial complex.	We have received the Ground Water NoC from CGWA vide NoC no. CGWA/NOC/INF/ORIG/2021/12756. Copy of Ground Water NoC is attached in <b>Annexure-4</b> .	complied
6.	Approval from Fire Safety Dept. for 6m fire tender corridor for high rise building of 40m height.	Recommendation letter from Fire Safety Department is attached in <b>Annexure-5</b> .	complied
7.	As per BDA norms, is ground coverage for the project is 35% of total area?	As per BDA Norms, if building height is more than 40 meters then Ground Coverage of the building is 40%. BDA Norms is attached in <b>Annexure-5</b> .	complied
8.	Ground coverage of both original approved plan and revised plan approved of the total plot area vis- a-vis the guidelines/ norms	Ground Coverage of the approved plan is 34% and the ground coverage of the revised plan is 39.2%. As per BDA Norms the Ground Coverage of the building is 40%. BDA Norms is attached in <b>Annexure-5</b> .	Complied
9.	Impact and effect of change in ground coverage with reference to the original approved plan and the revised plan.	<ul style="list-style-type: none"> <li>As the ground coverage is increasing according to the Population, We are also increasing the services like the capacity of STP, DG, UGT etc.</li> <li>Also increasing the parking according to the population As per BDA norms.</li> <li>In previous plan we have provided 12.0m driveway as per previous BDA norms but as per new BDA norm it's reduced to 7.50m.</li> </ul>	-
10.	In view of significant changes in approved plan and increase in population from 700 to 1428, the requirements be recast with reference to water, power, parking in terms of space and ECS, waste water discharge, STP and its capacity, rain water harvesting and recharging with	Comparison sheet of approved plan & revised plan is attached.	complied

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	back up calculation be revisited and resubmitted including number and capacity of DG sets& basis of it etc.		
11.	Tower wise break up of built-up area of approved original plan and revised plan approved as well.	Tower wise break up of built up area of approved original plan & revised plan is attached.	complied
12.	Distance between the towers as per the original plan approved and revised plan approved against the guidelines/ norms for the same.	The width of open space between the building on a plot shall be the setback specified in rule 32 and 33 for the tallest building subject to a minimum of three meters and the minimum width of internal road shall be 6 meters.	
13.	Fresh traffic study through a reputed Institute or study to be vetted by a reputed Institute in view of significant changes in population and the vehicles thereof at intersecting points with public road/ NH/ SH.	The Traffic Study has been vetted by IIT Bhubaneswar. We have calculated the Traffic volume at higher. Traffic Study Report is attached in <b>Annexure-7</b> .	complied
14.	Letter from Appropriate authority to take additional load of treated waste water discharge	Bhubaneswar Municipal Corporation (BMC) has vetted the drainage plan. Drainage Vetted letter is attached in <b>Annexure-4</b> .	BMC has vetted the drainage plan. Drainage Vetted letter submitted nowhere the permission for additional load of treated waste water to be discharge is mention.

10. The SEAC in its meeting held on dated **02-12-2023** decided to take decision on the proposal after receipt of the following from the proponent followed by site visit of the Sub-Committee of SEAC.

11. 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
a)	The built-up area, population etc. are increased almost 2 times, but STP capacity, water requirements are increased by about 60%. Thus, basis with detailed calculations is to be submitted.	Detail comparison statement of earlier proposal & revised proposal is attached in <b>Annexure-1</b> .	Comparative table statement has been submitted.  STP capacity, water requirements are increased by about 60% the basis with detailed calculations has not been submitted.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
b)	The population with power load increased but, DG Set capacity reduced from 1000 KVA to 750 KVA needs to be explained.	Total power requirement of the project is 1682.17 KW & DG set capacity is 750 KVA. In the earlier proposal the proposed project was Commercial-cum-Residential type. Therefore, we have provided 1000 KVA DG Set. Meanwhile the revised proposal the building is residential type therefore; we have provided 750 KVA DG Set only for common use only.	----
c)	No permission from authority for discharge of excess treated water taken, which is a non-compliance and reported in the Proceeding.	Drainage permission has been obtained from BMC. Permission letter is attached in <b>Annexure-2</b> . Permission has been obtained from Highway Authority for construction of drain. NHA letter is attached in <b>Annexure-3</b> .	No permission from authority for discharge of excess treated water has been taken. Permission for disposal of storm water is mentioned in the letter.
d)	All statutory reports of Traffic, Ground water, AA etc. fresh to be taken as some of them are of 2020 and 2021 and there are major changes.	All the fresh clearance has been obtained.	-----

12. The proposed site was visited by the sub-committee of SEAC on **05.07.2024**. Following are the observations of the sub-committee:

- a) The PP and Consultant explained the Layout (both original and revised).
- b) The PP had taken EC for 3 towers earlier with 17 floors and now the revised plan is for same 3 towers (all residential) for 22 floors.
- c) The Tower A is constructed up to 2 floors and Tower B up to 3 floors and Tower C not yet started. PP explained the comparative plan and said that the current built up area is within the previous EC conditions.
- d) The PP was advised the following:
  - i) To submit a write up with details of comparative statements of construction (built up area), floors, environmental settings, STP capacity etc for project/each Tower and explain that the current construction started is not violated the EC conditions. Also, submit the date of Mod EC presentation, Date of submitting ADS, Date of starting of Construction for Tower A & B, Date of BDA interim approval for modified plan.
  - ii) The above statements at i) need to be certified by a BDA empanelled Architect.
  - iii) A structural stability certificate and safety of building with regard to foundations considered for revised built up area and height from an institute of repute.
  - iv) Revised statutory clearances if not taken, to be obtained.

- v) Permission for discharge of excess treated water and storm water from appropriate authority for the revised plan with lay out plan of drain till fall out.
  - vi) All other information asked during presentation, if not complied.
- e) The stack height to be above the building height complying to CPCB norm.

13. The SEAC in its meeting dated **06-11-2024** decided to take the decision on the proposal after receipt of following from the proponent raised during site visit:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	A write up with details of comparative statements of construction (built up area), floors, environmental settings, STP capacity etc. for project/each Tower and explain that the current construction started is not violated the EC conditions. Also, submit the date of Mod EC presentation, Date of submitting ADS, Date of starting of Construction for Tower A & B, Date of BDA interim approval for modified plan.	Comparative Statement is attached as <b>Annexure-1</b> .	complied
ii)	The above statements at i) need to be certified by a BDA empanelled Architect.	The statement is certified by BDA empanelled architect.	complied
iii)	A structural stability certificate and safety of building with regard to foundations considered for revised built up area and height from an institute of repute.	Structural Stability certificate has been attached as <b>Annexure-2</b> .	complied
iv)	Revised statutory clearances if not taken, to be obtained.	Revised statutory clearance shall be obtained.	--
v)	Permission for discharge of excess treated water and storm water from appropriate authority for the revised plan with lay out plan of drain till fall out.	Permission Executive Engineer drainage division for discharge of excess treated water and storm water has been attached as <b>Annexure-3</b> .	Permission from Executive Engineer drainage division for discharge of only storm water has been attached as <b>Annexure-3</b> .

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 grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – I** in addition to the following specific conditions.

- i) 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.

- ii) 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 before further construction and 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.
- iii) NOC/Permission for discharge of treated water along with storm water to the nearest public drain to be obtained from the appropriate authority including passing the Govt. land. The PP shall try to explore ZLD.
- iv) Internal drainage plan with RWH/Re-charge Pits to be taken up based on requirement and with approval of the authority.
- v) Care to be taken in developing land scape to avoid flood situation.
- vi) The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.
- vii) The proponent shall obtain permission from concerned Fire Safety Authority.
- viii) Trees located within the project area shall be transplanted to alongside the boundary green development area.
- ix) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.
- x) 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.
- xi) The PP will not commence construction unless the drain lay out is finalized and permission to be taken from the authority to discharge excess treated water & storm water.
- xii) 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.
- xiii) Revised Statutory Clearances to be obtained.
- xiv) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

  
MEMBER SECRETARY, SEAC

**CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR CONSTRUCTION OF WORKING WOMEN'S HOSTEL FOR SEA FOOD PROCESSING PARK ON TOTAL PLOT AREA OF THE PROJECT IS 35856.00 SQM, AND TOTAL BUILT UP AREA OF THE PROPOSED PROJECT IS 73485.71SQM. THE SITE IS LOCATED MOUZA - HARIPUR, P.S.- CHANDAKA, BHUBANESWAR, DIST- KHURDA OF SRI JITENDRIYA JYOTIPRAKASH - 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 666 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 43 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 1000 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. All 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<sup>2</sup> 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. 7231.0 sqm (20.16% of the 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(II) 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<sub>2</sub>, NO<sub>x</sub> (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 31<sup>st</sup> 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.

**CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S PERFECTUS TECHNOLOGY SOLUTIONS PRIVATE LIMITED FOR COMMERCIAL “I- HUB TECH PARK” IT BUILDING OF 2B+LG+UG+7 STORIED OVER AN BUILT-UP AREA 36274.05 SQ.MT PROJECT LOCATED AT MOUZA- CHANDRASHEKHARPUR, TAHASIL- BHUBANESWAR, DISTRICT- KHORDHA OF SRI SUSHANT PATTNAIK - 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 48.0 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 35 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. All 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<sup>2</sup> 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. 7350 sq.mt. (21 % 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(II) 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<sub>2</sub>, NO<sub>x</sub> (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 31<sup>st</sup> 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.

**CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S TEAM MEDIA & HOSPITALITY PRIVATE LIMITED FOR PROPOSED (2B+G+7) COMMERCIAL-CUM-MULTIPLEX (BLOCK-A) AND PROPOSED FIVE FLOORS HOTEL ABOVE EXISTING (G+2) PRINTING PRESS (BLOCK- B) OVER IDCO PLOT NO – 7/7, REVENUE PLOT NO – 6 (P) UNDER KHATA NO – 474/1607 WITH PLOT AREA OF 6070.28 SQM AND BUILT-UP AREA OF 24817.75 SQM [LUXER MALL] AT MOUZA–CHANDRASEKHARPUR, CHANDAKA INDUSTRIAL AREA, BHUBANESWAR, DIST – KHURDA OF SRI SATYA PRIYA JAYASINGH - 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 lightning 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 45 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 18 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. All 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<sup>2</sup> 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. 1335.42 m<sup>2</sup> (22 % of the total 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(II) 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<sub>2</sub>, NO<sub>x</sub> (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 31<sup>st</sup> 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.

**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 to prevent 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](http://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.

## **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 over 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.

A handwritten signature in black ink, appearing to be 'G. S. S.', located at the bottom center of the page.

**STANDARD ENVIRONMENTAL CLEARANCE CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR SAND MINING**

**Stipulated Conditions:**

1. The project proponent should carry out River bed sand mining manually by engaging local laborers in force to check over exploitation of sand at the source.
2. Any change in the plan or quantity to be produced shall require prior approval of SEIAA.
3. There shall be a 'no working zone' to protect the embankment on both sides, road or rail bridge in the vicinity, if any, dam, weir, water intake structure of irrigation or drinking water project, or any cross drainage structure. 10 % of the width of river shall be left intact along the embankments on both sides as 'no mining zone'. Further, no mining shall be allowed within 200 m of any existing structures dam, weir, water intake structure of irrigation or drinking water project, or any cross drainage structure. In case of River Bridge, this no mining zone shall extend upto a minimum stretch of 200 meters from the bridge and it may extend upto 500 meters in sensitive locations. The lease area shall be accordingly curtailed to carve out the actual sand mining area within the leasehold. Exact map of the lease area, and the 'no mining zone' shall be drawn to scale, showing the DGPS coordinates of all corner points, and the location of the bridge, embankment, extraction route & other structures; and such map has to be submitted to SEIAA by the project proponent through the Tahasildar within three months of the date of issue of the EC. The quantum of sand allowed to be extracted will be worked out on the basis of the actual working area.
4. The lease area and the actual working area shall be demarcated on the ground by erecting durable masonry /concrete pillars by the project proponent.
5. The project proponent shall take prior statutory and regulatory clearance as required from the concerned authorities in respect of the project, before carrying out any operation.
6. Mining is not permissible within the water channel or stream flow area. No stream shall be diverted for the purpose of mining and no natural water course shall be obstructed. The mining or any ancillary activity shall not in any way disturb the flow pattern of the river water during the non monsoon period. There shall be no sand mining in the river during the rainy season or when there is flow of water in the river.
7. Sand mining operations shall not affect the existing sources for irrigation / drinking water / industrial purpose.
8. The natural sand dunes, if any, near or surrounding the lease area shall not be disturbed.
9. No transportation of the minerals shall ordinarily be allowed on any road passing through villages/habitations/forest land without prior explicit permission. Transportation

of minerals through existing rural roads can be allowed only by the concerned Govt. Department/BDO and only after required strengthening, such that the carrying capacity of road is increased to handle the sand truck traffic. The project proponent shall bear the cost towards the widening and strengthening of existing public roads in case the same is proposed to be used for the project. No movement on any road is allowed on existing village road network without appropriately increasing the carrying capacity of such roads. 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 traffic density. Plying of sand extraction trucks may be allowed on roads / path ways passing close to schools, temples, hospitals and such other public places only with prior written permission of competent authority.

10. Vehicles hired for transportation of sand from the site should be in good condition and should have pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
11. The vehicles shall not be overloaded and shall be covered with Tarpaulin. The Tahasildar may collect an appropriate road maintenance levy from the lessee as part of the lease conditions on the basis of quantum of sand transported, and utilize the proceeds of the levy for proper maintenance of the extraction paths and roads to prevent their degradation on account of plying of sand trucks.
12. The project proponent shall take all precautionary measures against causing damage to flora and fauna of the locality. The PP shall plant and nurse to full establishment a minimum of 50 number of saplings of native tree species along the approach roads, river banks and in community areas in consultation with the Gram Panchayat.
13. Water spray should be made on the road/extraction paths to control dust emission during transportation of sand.
14. The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
15. Environmental Management Plan (EMP) shall be implemented by PP to ensure compliance with the environmental conditions specified above. The year wise funds earmarked for environmental protection measures shall be kept in separate account and shall be spent according to the plan proposed. Year wise progress of implementation of EMP shall be reported to the SEIAA, Odisha and OSPCB along with the compliance report.
16. The proponent shall take necessary measures to ensure that there is no adverse impact of the mining operations on the human habitation if any, existing nearby.
17. It shall be mandatory for the project management to submit quarterly compliance reports on the status of implementation of the above stipulated environmental safeguards to the SEIAA, Odisha / SPCB, Odisha/ Regional Office of the MoEF&CC, Bhubaneswar, in hard and soft copies on 1<sup>st</sup> day of January, April, July, October of each calendar year, failing which EC is liable to be revoked.

18. River Bank stabilization shall be made through stone patching. Plantation of adequate number native species on river banks and both sides of haulage roads shall be made.
19. During transportation of sand, all traffic safety measures shall be taken to avoid any kind of accidents.
20. Bio - toilet provision shall be made.
21. Stone patching on river bank with plantation in-between and the ramp construction shall be done in consultation with and advice of concerned W.R.Deptt, Government of Odisha.
22. Necessary sprinkling on Haulage Road and Avenue plantation shall be done.
23. At the end of mine closure, the proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area before closure of the quarry.
24. The conditions stipulated in the environmental clearance will be closely monitored on the ground by the lease granting authority, i.e. the Tahasildar, who shall ensure compliance of the stipulated conditions and take corrective measures promptly in case of any non- compliance and also ensure that the project proponent submits quarterly compliance reports.
25. The concerned Regional Office of the MoEF&CC/ SPCB, Odisha shall periodically monitor compliance of the stipulated conditions as applicable for this project. The project authorities should extend full cooperation to the MoEF&CC officer(s)/SPCB officer(s) by furnishing the requisite data / information / monitoring reports.
26. A copy of the clearance letter shall be sent by the proponent to concerned Gram Panchayat /Panchayat Samiti /Zilla Parisad /Municipal Corporation / Urban Local Body as the case may be.
27. Project proponent shall obtain Consent to Operate from the OSPCB and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the State Pollution Control Board.
28. The SEIAA, Odisha may revoke or suspend this EC, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter /modify the above conditions or stipulate any further condition in the interest of environment protection.
29. The Project Proponent (lease holder) shall inform the SEIAA of any change in ownership of the mining lease. In case, there is any change in ownership or mining lease is transferred, then mining operation can be carried out only after transfer of EC as per provisions of the para 11 of EIA Notification, 2006, as amended from time to time.
30. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this environment clearance besides attracting penal provisions in the Environment (Protection) Act, 1986.



31. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court and any other Court of Law relating to the subject matter.
32. This Environmental Clearance (EC) is subject to orders/judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
33. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

## Annexure - G

### ESSENTIAL PHYSICAL CRITERIA AS PER ENFORCEMENT AND MONITORING GUIDELINES FOR SAND MINING, JANUARY 2020 OF MOEF&CC, GOVT. OF INDIA

Sl. No.	Essential Criteria	Reference
1.	"No Mining Zone": 1/4th the part of the river width (excluding 3/4th the central part of the river width) on both sides of the river towards the river bank	4.1.1 (Para - e) Page - 16
2.	a) Distance between two clusters: $\geq 2.5$ km b) Area of mining lease area is a cluster: $\leq 10$ ha.	4.1.1 (Para - k) Page - 19
3.	Concave River Bank: No extraction of sand	
4.	No mining if a) Upstream: Lease is 1 km from major Bridge and high ways or $5(x)$ of the Bridge / public civil structure / water intakes point subject to lease is located at a minimum 250-meter distance. Where $x$ = Span of the bridge. b) Downstream side: Lease is 1 km from the major bridge and Highways Or $10x$ of the bridge / public civil structure / water intake point Subject to lease is located at a minimum distance of 500 meter where $x$ = span of the bridge	4.3 (Para - h) Page - 23
5.	Mining depth: $\leq 3$ meter (maximum 3 meter)	4.3 (Para - m) Page - 24
6.	Mining distance from river bank: $1/4^{\text{th}}$ of the river width, But subject to not less than 7.5 meter	4.31 (Para - m) Page - 24
7.	Area for removal of minerals: $\leq 60\%$ of mine lease area	4.3 (Para - s) Page - 25
8.	Minable sand per ha. Available for actual mining: $\leq 60,000$ MT/Annum	
9.	Regular replenishment study and replenishment rate	

**SPECIFIC CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF INDIVIDUAL MINING LEASE OF KHANJAMAHAL STONE QUARRY (CLUSTER APPROACH) OVER AN AREA OF 244.50 AC./98.94 HA. (KHATA NO 144, PLOT NO- 161, 165, 164, 318, 168, 167, 166, 266, 287, 264, 265, 263) IN VILLAGE KHANJAMAHAL, UNDER SORO TAHASIL IN BALASORE DISTRICT OF REVENUE AND DISASTER MANAGEMENT DEPARTMENT - EC.**

---

1. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Odisha, Hon'ble NGT and any other Court of Law, if any, as may be applicable to the quarry lease.
2. The Environmental Clearance is subject to obtaining requisite NBWL Clearance, if any, from the Standing Committee of National Board for Wildlife for Mining project.
3. The lessee shall implement the Pollution Control Measures and safeguards as proposed in the approved EIA/Environment Management Plan (EMP) in the cluster approach.
4. The lessee 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.
5. 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 lessee 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.
6. The lessee shall obtain NOC from concerned Block Development Officer (BDO) for usage of haulage road/Panchayat Road.
7. The lessee shall ensure safety of human life and livestock from accidents in case village / any habitation is very nearby the mining lease area.
8. The lessee 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 MOEF & CC and SEIAA, Odisha.
9. The lessee/concerned Tahasildar shall follow the detailed procedure for De-reservation of Gochar kissam land if involve in the lease area before going for mining activity.
10. Under no circumstances, the lessee shall use wagon drilling blasting during mining activity.
11. The lessee shall not store and use blasting materials/explosives inside the lease area without obtaining license/permission/authorization from competent Authority as per Indian Explosives Rules, 1983.
12. The lessee shall obtain NOC from CGWA and permission from WR department, Govt. Of Odisha for use of ground water.

13. The lessee shall complete the rejuvenation of ponds if any within lease area on priority basis after obtaining Environment Clearance.
14. No mining activities shall be allowed in forest area, if any, for which the Forest Clearance is not available.
15. No change in mining technology and scope of working should be made without prior approval of the SEIAA, Odisha.
16. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
17. Mining shall be carried out as per the provisions outlined in the approved mining plan.
18. 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.
19. The illumination and sound at night at the lease area 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. Project Proponents 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.
20. 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.
21. The soil to be generated during mining activity shall be stacked in the earmarked temporary soil stack and shall be utilized for the plantation purpose to be undertaken around the respective hill/patch and adjacent to haul roads of the same in lease area.
22. The abandoned mine pit shall be converted to rain water storage tank and the rain water stored in pit shall be utilized for plantation as well as dust suppression.
23. Total Plantation shall be carried out within 2-3 years of mining activity and maintenance shall be continued in remaining years. Trees present in mining area shall be uprooted & transplanted in safety zone.
24. All the lease holders in a cluster to join hand through a registered MOU on cluster to cluster basis for laying of permanent pipeline by the side (one side) of the main haulage road with half-moon automatic sprinklers system for suppression of dust during movement of vehicles.
25. All the lease holders in a cluster should join hand for grading of the main haulage road to maintain the gradient facilitating smooth movement of vehicles.
26. The same cluster approach to be taken for development of green belt all around the cluster area baring catch dams for flow of runoff water during rainy season. These activities may be coordinated by the leadership in the cluster leases or RQP for the cluster with help from Revenue Inspector of the area for better results.
27. The SEIAA, Odisha may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

28. 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.
29. 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.

**CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S UTKAL REALTORS PVT. LTD. FOR PROPOSED CONSTRUCTION OF PRIVATE HOUSING PROJECT OVER PLOT NO.: 292,293,294,295,296,298,295/687, KHATA NO - 352/237, 352/236, 352/322, 352/238 OVER AN REVISED BUILT-UP AREA 52257.17 SQM AT PAHAL, BHUBANESWAR. DIST- KHURDA OF SRI PRAKASH CHAND BHURA - MOD 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 133 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 adequate 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 180 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. All 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<sup>2</sup> 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. 1701 Sqm (20.11% of total 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(II) 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<sub>2</sub>, NO<sub>x</sub> (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 31<sup>st</sup> 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.