PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 12th APRIL, 2022

The SEAC met on 12th April, 2022 through video conferencing in Google Meet under the Chairmanship of Sri. B.P. Singh. The following members were present in the meeting.

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

CONSIDERATION OF OLD PROPOSALS (COMPLIANCE RECEIVED):

The compliances furnished by the proponents were verified by the members through e-mail and also proceedings of the meeting were confirmed by the members through e-mail. The decision of the committee on case-to-case basis as follows:

ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR ADHAPATI PAIKANADI SAND BED OVER AN AREA OF 5.059 HA./12.50AC. WITH PROPOSED EXCAVATION OF 15,180 M3/YEAR OF SAND, IN VILLAGE - ADHAPATI, TAHASIL - TIRTOL, DISTRICT - JAGATSINGHPUR, ODISHA OF SRI HARAPRASAD SENAPATI – EC.

1. Sri Haraprasad Senapati proposes to mine Sand Quarry from an approved Mining Lease over an area of5.059 hectares (Non-Forest Land) which is located in Khata No. 278, Plot no. 1, Kisam Nadi, Village: Adhapati, Tehsil: Tirtol, District: Jagatsinghpur, Odisha. The proposed capacity during the current mining scheme period is15,180 m^3/year.
2. The proposed mining project falls under Category ‘B1’as per EIA notification 2006 of Ministry of Environment and Forests, New Delhi.
3. The demand in the domestic market is high Sand mineral is available in abundant quantity in the contracted area and can be excavated indigenously. Import does not apply in the present case of Sand mining.
4. There is no proposal to export the Sand at present.
5. The Sand excavated will be directly sold in the market. The proposed mining activity is for indigenous consumption only for real estate and infrastructure sector etc. No possibility of export of Sand from this contract.
6. The proposed project will generate direct employment to 27 people of the local people and number of indirect beneficiaries will be of the order of 100.

7. The mineral is site specific, hence there are no alternative sites considered. Mining activities are carried out based on local geology and availability of minerals.
8. The proposed mine has lease over an area of 5.059 Ha., in Khata No. 278, Plot no. 1. The total extractable material would be approx 15,180 m^3/year.
9. 5.0 KLD Water requirement will be met from nearby available water resource and drinking water will be sourced from tanker.
10. No electrical power shall be required for mining operations.
11. No Solid Waste will be generated.
12. No liquid effluent will be generated at the mine site due to the mineral excavation.
13. The Estimated cost of the proposed Project is approximately Rs.10 lakhs.
14. The Estimated cost of EMP for the proposed Project is approximately Rs.1,25,000 (Capital Cost) & Rs.55,000 (Recurring Cost).
15. Public hearing was organized under the Chairmanship of Smt. Chinmayee Biswas, Additional District Magistrate, Collector office Jagatsinghpur at 10.30 AM on dtd. 23.09.2021 at playground adjoining to Sreema Govt. Girls' High School, Village-Adhapati, Tehsil – Tirtol, District – Jagatsinghpur. During Public Hearing 6 suggestions/opinions were received during the public hearing by local citizens. About 65 local people participated in public hearing.
16. The project will bring economic benefits to the State by the ways of royalty of mineral. The mining operations shall be providing employment to approximately 27 people of the local area and benefiting more than 100 people indirectly. Socio-economic condition of area will improve as mining activity will create additional employment for the local people raising their living standard and socioeconomic status. Significant contribution will be made towards education, medical facilities and cultural aspects.
17. The Environment consultant **M/s Green Circle Inc., Green Empire (Anupushpam) Above Axis bank, Near Yash Complex, Gotri Main Road, Gotri, Vadodara - 390021 (Gujarat)** along with the proponent has made a presentation on the proposal before the Committee on 04.02.2022.
18. The SEAC in its meeting held on 04.02.2022 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.
19. The project 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.	Revised mining plan.	Undertake to submit the Revise Mining Plan after Post-monsoon period with a fresh Replenishment Study Report.
2.	Layout of Progressive Mining Plan closure.	Lay out of Progressive Mine Closure Plan shall also be incorporated in the Revised Mining Plan.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
3.	Revised Mining plan in the light of Techno- Economic feasibility be submitted with due approval of mining authority and the concerned Tahasildar.	Revised Mining Plan will be prepared as per OMMC Rules, 2016 after post monsoon period in the light of Techno-Economic feasibility study and also approved by the Competent Authority and the concerned Tahasildar.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Green Circle Inc., Green Empire (Anupushpam) Above Axis bank, Near Yash Complex, Gotri Main Road, Gotri, Vadodara - 390021 (Gujarat)**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions**.**

i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**. Lay out of Progressive Mine Closure Plan shall also be incorporated in the Revised Mining Plan.

ii) Regular replenishment study to be conducted and report to be submitted.

iii) Provision of Bio-toilet shall be made at the site.

iv) 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.

v) 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. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S RIVER FRONT DEVELOPERS PVT. LTD. FOR PROPOSED RESIDENTIAL PROJECT OVER REVENUE PLOT NO. 33(P) & 32(P) OVER AN BUILT-UP AREA OF 32451.07 M^2 AT MOUZA BIDYADHARPUR, UNDER SECTOR-11, CUTTACK SADAR, TAHASIL – BARANG, DIST – CUTTACK OF SRI MANOJ KUMAR SAHOO – EC

1. This is a proposal of Residential Project [2B+S+G+19 Floors (Block-1) and S+3 Floors + Part Terrace Floor (Block-2) with Community Centre] over Revenue Plot No. 33(P) & 32(P) at Mouza Bidyadharpur under Sector-11, Cuttack Sadar, Odisha of M/s. River Front Developers Pvt. Ltd.
2. The project falls under category “B” or activity 8 (a) Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s River Front Developers Pvt. Ltd. has obtained the land possession about 1.208 Acres. Proposed Built-up area-:32451.07 m2 (with basement) and Total Built-up Area-27317.1 m^2 (without basement).
4. At present the land is a barren land. The land has been earmarked for construction of residential building as per Plan approved by Cuttack Municipal Corporation.

5. Existing road & railway facility shall be utilized. The site is located close to Cuttack-Naraj-Athagarh Road which connects to Ring Road at Subhash Chandra Bose Square, the Ring Road then connects to NH-5 at Link Road Square (covering a total of 10.5 km by road). The site is approximately 12 km (by road) from Cuttack Railway Station. Only internal roads, paths will be developed for vehicular movements for transportation of construction material during construction phase. So, no new road or rail traffic required during construction or operation.

6. As per plan width of abutting Road or Means of Access proposed 30 meters. 03 (three) numbers of main entrance and exit gates of width minimum 06 meters have been proposed in the plan. The width of the main entrance gate shall not be less than 06 mtrs. The main gate shall fold back against the compound wall of the premises. If the main entrance gate is built over, the height of the same shall not be less than 05 meters. Provisions for access to the building fulfil the requirement as per Regulation-30 and 31 of ODA (P&BS) Rules, 2020. Site is approximately 12 km (by road) from Cuttack Railway Station. Biju Pattanaik International Airport is 0.72 km SE, Chandaka RF – 6.19 km (SSW), Nandankanan Zoo – 9.06 km (S)

7. The project falls under seismic zone-III as per IS1893 (Part-1):2002 indicating Moderate to lower damage risk zone. The buildings will be designed as earthquake resistant and comply with the required IS specifications.

8. The project will be developed on the land measuring 4890 Sqmt or 1.208 Ac or 0.488 Ha.

   Total Built-up Area – 32451.07 m2 (with basement),

   Total Built-up Area-27317.1 m2 (without basement)

   FSI Area: -24405.10 m2

   Non FSI Area: - 8045.97 m2

   Area considered for block 01 for ground coverage=1621.40 sqm

   Area considered for block 02 for ground coverage=308.79 sqm

   Total ground coverage area = 1930.19 sqm

   Total ground coverage in percentage = 39.47 %

   Total parking area provided = (25.59 %) of the far area

   No. Of blocks = 2

   No. Of floors = block 01 (2 basement + lower ground floor + stilt/upper ground floor + 19 floors)

   Block 02 (stilt+3 floors+ part terrace floor),
   No. Of dwelling units = 180,
   Block 01 Wing-a = 90 flats (4 bhk duplex - 4 nos, 3bhk - 68 nos, 2bhk - 18 nos)
   Wing-b = 90 flats (4 bhk duplex - 4 nos, 3bhk - 68 nos, 2bhk - 18 nos)
   Block 02 Community Centre with Roof-Top Swimming Pool Required Society Area For 180 Units - 180 Sqm Society Area Provided

In Wing-A Of Block 01 = 94.52 Sqm
Society area provided
In wing-b of block 01 = 96.14 sqm
Total area of society room provided - 190.66 sqm

9. Operational Power for Proposed 2B+(S+G)+19 Multi Storied Residential Apartment Building Plan of M/S River Front Developers Pvt. Ltd., Bhubaneswar over Plot No.:-11-4-6H/1472(P) corresponding to Revenue Plot No. 33(P) & 32(P) of Mouza- Bidyadharpur under Sector 11. Maximum Demand in KW = 1270 KW Or 1411.11 KVA @ 0.9 PF. DG SELECTED=1 no of 500KVA DG sets. Recommended Transformer Capacity= 1500 KVA (500 KVA x 3), 11/0.4 KV Sub-Station with Three Numbers Transformers of 500 KVA Rating. Source is TPCODL (TP CENTRAL ODISHA DISTRIBUTION LIMITED)

10. **Water Requirement and management**

i) During Construction Stage

For major construction activities daily requirement of water will be 5.0 m3 (peak demand) per day. Water consumption for the Non-resident laborers will be 50 @ 45 lpcd = 2,250 liters. Water consumption for the resident laborers will be 20 @ 70 lpcd =1,400 liters. Therefore, during the construction phase, total daily water requirement will be 5000 liters + 2250 liters + 1400 liters = 8650 liters = 8.65 m3/day or say 10 KLD. This will be sourced by Private tankers.

ii) During Operation Stage

During operation phase water will be sourced from Public Health Department

Total Fresh Water requirement is 89 m^3/day.

Total Flushing Water requirement is 45 m^3/day.

Total Water requirement is 134 m^3/day (fresh water + flushing water).

Waste water generate is 107 m^3/day.

Treated water recovered is 86 m^3/day

Reuses of treated water 86 m^3/day (during Dry Season) and during monsoon season 20 m^3/day of surplus treated waste water discharge to

11. **Greenbelt:**

a) The site comprises of approx. 1191.81 sqm of land as a green belt with open space and does not support any ecologically threatened vegetation. However, a multi-layered peripheral greenbelt of native plant species will be developed, which will enhance the aesthetic value of the region and also provide an excellent habitat for various faunal groups.

b) Total green and open area measures 1191.81 sqm (approx. 24.37% of total area). Trees like Azadirachta indica, Cassia fistula, Terminalia arjuna, Butea monospermic etc. and flowering and ornamental plants have been proposed to be planted inside the premises. Parks will also be developed by the management. The suggested plant species consisting of large trees, small trees and green lands will be planted.

12. The solid waste of the institutional block will be segregated into biodegradable waste and non-biodegradable. Biodegradable waste and non-biodegradable waste will be collected in separate bins. The MSW and recyclable wastes will be handed over to Govt. authorized agency. Proper guidelines for segregation, collection and storage will be prepared as per Municipal Solid Wastes (Management and Handling) Rules, 2000 and amended Rules, 2016. During the operation phase, waste will comprise domestic waste. The solid waste generated from the project shall be mainly MSW (Municipal solid waste) approx. 445.5 kg/day, Following arrangements shall made at the site in accordance to Municipal Solid Wastes (Management and Handling) Rules, 2000 and amended Rules, 2016. The total biodegradable solid waste will be 297 kg/day and total non-biodegradable solid waste will be 149 kg/day. This will be collected in separate coloured bins. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid waste and construction and demolition waste.

13. **Solar Panel sizing (in KW) and Solar Power Generation:**

    Total Solar Panel to be installed - 5% of the total load i.e. 854KW x 5% = 63.5 KW or say 65 KW (260 Panel of 250Watts Each)
    Normaly Energy Generation by 1 KW of Solar Panel per year is :
    No of Days per year (365) x No of Sun Hours per day (10) x Number of Sunny Days (40%)
    = 365 x 10 x 0.4 = 1460 KWH Per Year per KW of Solar Panel
    Therefore Solar Energy Generated Energy per year is
    65 KW x1460 KWH = 94,900 KWH per year.

14. **The total project cost is ` 62.32 Cr. EMP Cost: Capital Cost: ` 69.7 Lakh & Recurring Cost=3.1 (In lacs)**

15. The Environment consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** along with the proponent has made a presentation on the proposal before the Committee on 31.01.2022.

16. The SEAC in its meeting held on 31.01.2022 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by site visit of the sub-committee of SEAC.

17. The project 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.	"Kissam" of the land is found to be other than "Gharabari" as per the documents submitted by the PP. As such, it needs to be converted to	Land documents are given in **Annexure-1.**

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th></tr>
<tr><td></td><td>“Gharabari” before start of the construction work.</td><td></td></tr>
<tr><td>2.</td><td>Fresh water requirement is stated to be 90 KLD & the source is Ground water. Kathajodi River located at a distance of about 620 mtrs from the project site. If it is denied / not agreed to by the authority (s) concerned, then necessary ‘NOC’ from CGWA & permission from W.R deptt, Govt of Odisha to be submitted for drawl of required quantity of ground water.</td><td>Agreed & Complied.</td></tr>
<tr><td>3.</td><td>Provision of parking for 195 ECS is too inadequate for 180 dwelling units, besides necessity for provision for parking for two wheelers / Bicycles including for minimum 10% for visitors / floating population. This needs to be revisited and re-submitted accordingly.</td><td>Parking provides as per Norms and parking layout with adequate parking provision
attached as Annexure-2
Block-1(basement-B1)
TOTAL CAR PARKING = 49 NOS
RESIDENT PARKING = 46 NOS
VISITORS PARKING = 3 NOS
Block-1(basement-B2)
OTAL CAR PARKING = 98 NOS
RESIDENT PARKING = 98 NOS
<table>
<tr><th colspan="7">PARNING DETAIL STATEMENT</th></tr>
<tr><th>Sl. No</th><th>FLOOR</th><th>TOTAL CAR PARKING</th><th>PARKING FOR RESIDENT</th><th>PARKING FOR VISITORS</th><th>PARKING AREA FOR 2 WHEELER</th><th>PARKING AREA FOR 2 BICYCLE</th></tr>
<tr><td>1</td><td>BASEMENT B2</td><td>98</td><td>98</td><td>0</td><td>246 SQM</td><td>111.07 SQM</td></tr>
<tr><td>2</td><td>BASEMENT B1/ LOWER GROUND BLOCK 01</td><td>49</td><td>46</td><td>3</td><td>47.69 SQM</td><td>28.18 SQM</td></tr>
<tr><td>1</td><td>UPPER GROUND/</td><td>36</td><td>36</td><td>0</td><td>12.62 SQM</td><td>108.45 SQM</td></tr>
</table></td></tr>
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Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		<table><tr><td></td><td>UPPER STILT</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1</td><td>LOWER GROUND BLOCK 02</td><td>14</td><td>0</td><td>14</td><td>24.49 SQM</td><td>0 SQM</td></tr><tr><td colspan="2">TOTAL</td><td>197</td><td>180</td><td>17</td><td>330.8 SQM</td><td>247.7 SQM</td></tr></table>
4.	Calculation of RWHP (No of recharging pits) be revisited, taking into consideration the highest hourly rain fall based on last 30 years date (logical climate date), Run-off co-efficient and retention (hold) time and re-submitted.	Given in **Annexure-3.**
5.	Capacity of STP with quantity of input to STP be indicated.	STP DETAILS ANS SIZE CALCULATIONS :- No. of Flats:-180 No of persons: - 180x5 PERSONS PER FLAT=900 Floating population = 10% = 90 nos Total population = 990 Provision of fresh water requirement @135 lpcd Quantity of sewer generated considering loss of 10% for cooking and drinking, 5% for floor washing & 5% to be evaporated from wet cloth and kitchen utensils, balance 80% of fresh water to be generated as sewer Quantity of sewer to be generated = 0.8 X 135 = 108 lpcd Total quantity of sewerage input to STP = 990 X 108 = 106920 ltr (say 107 KLD) The capacity of STP proposed is 135 KLD After treatment, the quantity of treated water =107 KLD Utilization of treated water: a. Re-use on flushing considering 45 lpcd for population of 990 = 990 X 45 = 44550 ltr (say45 KLD) b. Use for road washing twice per day = 20 KLD c. Use for car washing/ cooling of generator = 10 KLD d. Use for plantation area: Area of plantation = 705.7 Sqm Depth of water required in one watering = 0.025m Considering twice watering in a day for area of 705.7 Sqm Total water requirement for plantation = 705.7 X 2 X 0.025 = 35.285 CUM = 35.285 KLD e. Total treated water requirement of the project = 110.28 KLD which is greater than anticipated treated water to be generated from STP e.i. 107 KLD

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		Given in **Annexure-4.**
6.	To confirm that the output discharge from STP shall not be discharged to the public drain and the re-use of the same (details with estimated calculation) be submitted.	Given in **Annexure-4.**
7.	Fire Tender Corridor with dimension be indicated & shown in the layout map.	Given in **Annexure-5.**
8.	Proposed green belt details with stretch / dimension / trees of plantation & the species be submitted.	Given in **Annexure-6.** Site plan showing (Trees=63 Nos, 24.37% GREEN AREA PROVIDED=1191.73 SQM(PLOT AREA=4890.37 SQM.

18. The proposed site was visited by the sub-committee of SEAC on 16.03.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    a) Certificate of Structural Stability from appropriate authority
    b) Layout map with area and floors of Community Hall with entry and exit and Visitors parking area and no of 2 and 4 wheelers parking provided specific for Community Hall as it is proposed for outsiders use also.
    c) There has to be separate entry and exit for both Residents and Community Hall
    d) NOC for water sourcing authority
    e) Permission from Cuttack Municipality for discharge of extra load of treated water.
    f) Technology to be adopted for sewerage, waste water treatment and provision of Bio waste converter if any (details) to be given
    g) Visitors Parking for Residents (at least 10% of total parking area)
    h) Revised map showing green belt and %
    i) The PP to take adequate safety during construction as residential buildings are there in both sides
    j) Solar calculation details with generation and consumption interms of % of total power
    k) Stack height of DG set compared to building height.
    l) To submit the Contour map, Drainage map of the area with marking of the highest level of A Flood line during the last 30 years to access the likely impact on the Building foundation because of the proximity to rivers.

m) To submit a Disaster management plan as per the Disaster Management Act - 2005 to tackle on-site and off-site Emergencies including evacuation

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as pointed out at para 18 above.

ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S SAPIGEN BIOLOGIX PRIVATE LIMITED FOR PROPOSED MANUFACTURING OF VACCINES AND BIO-THERAPEUTICS INCLUDING BIO-PROCESSING, BULK FORMULATION, FILLING, PACKAGING AND ALLIED R&D WORKS AT ODISHA BIOTECH PARK, VILLAGE-ANDHARUA, TAHASIL-CHANDAKA, DIST.-KHORDHA, ODISHA OF SRI A. ARUNACHALAM - EC

1. The proposal is for Environmental Clearance of M/s Sapigen Biologix Private Limited for proposed manufacturing of Vaccines and Bio-therapeutics including bio-processing, bulk formulation, filling, packaging and allied R&D works at Odisha Biotech Park, Village-Andharua, Tahasil- Chandaka, Dist.-Khordha, Odisha of Sri A. Arunachalam.

2. The MoEF&CC, Govt. of India Notification vide S.O 2859 (E), dated 16.07.2021 stipulates "All proposals for projects or activities in respect of active pharmaceuticals ingredients (API) received from 16.07.2021 to 31.12.2021, shall be appraised as category B2 projects, provided that any subsequent amendment or expansion or change in product mix after the 31.12.2021 shall be considered as per provisions in-force at that time" and this shall be substituted after the 3rd paragraph of column 5 of item 5 (f) of schedule of EIA Notification , 14th September, 2006 and amendment thereafter.

3. M/S. Sapigen Biologix Private Limited has obtained the land possession from Odisha Biotech Park of 8.86 Acres. Proposed Built-up area-: 25889.5 SqM Plot Area - 35,889.22 m2 or 8.86 acres /3.58 Ha of land have been earmarked for development of the Production facility to manufacture multiple Vaccines including Covid vaccines and Bio therapeutics Manufacturing Unit at Odisha Biotech Park. The proposed project is a Manufacturing Project. The proposal also pertains to construction of infrastructure and Manufacturing buildings for proposed unit as per BDA.

4. **Location and Connectivity** - Total land for this proposed project is 35,889.22 m2 or 8.86 acres /3.58 Ha. over Sub Plot no.: B1/24 & ITBT1/7, Village-Andharua,Tahasil-Chandaka,Dist.-Khordha,Odisha.The Geographical co-ordinate of the project site is: Latitude $20^0$18'58.06" N to $20^0$19'4.11"N& Longitude $85^0$46'21.95"E TO 85^0 46'15.03"E and fall under Topo Sheet No. - 73H/11,73H/15,73H/12,73H/16.The Site is connected to AH-45 (Kolkata-Krishnagiri Road) at 7.23 K.M and also is well connected to Khandagiri Chandaka road at distance of 0.8 km from the project site. The nearest railway station is Bhubaneswar Railway Station is 16.6Km from project site. The nearest airport is Biju Pattnaik Airport, Bhubaneswar at a distance of approx.13.9 Km from project site. Nearest sanctuary is Chandaka Dampada Sanctuary – 0.62km. Nearest water body is Botanical Garden Lake – 3.20km. Nearest Habitation is Andharua Village – 1 km.

5. The site is coming under Bhubaneswar Development Authority.
6. The total plot area is 35,889.22 m2 or 8.86 acres /3.58 Ha. with total built-up area 25889.5 SqM.
7. The land use details of the Project:

S.NO.	FACILITY	AREA (Sqm)
1	Main Block	11238.09
2	Parking Area	6305.20
3	Greenbelt / Plantation Area	11843.43
4	Total Road Coverage	4100.00
5	Utility & Services	2402.36
	TOTAL	**35889.10**

8. **Water requirement**: Total water requirement will be 744 KLD. Around 628 KLD of water will be met out from PHED Supply. The sewage generated due to domestic usages from with the Plant will be treated in STP. The Park is expected to set up the common STP of 25 KLD with expandable capacity up to 50 KLD. The Park is expected to install 1 no. of 600 KLD Central Effluent Treatment Plant (CETP) with expandable capacity and the effluent network will be extended to required industries. All output from biotechnology units is decontaminated and sterilized to ensure safe disposal of effluents and to ensure all pathogens will be killed prior to liquid disposal. Every unit within the Park is expected to be equipped with a Kill Tank system (Decontamination System) using Thermal based decontamination technology. In case, the Park does not set up the ETP & STP units, Sapigen Biologix undertakes to set up its own ETP and STP catering to its individual need.
9. **Power requirement**: The daily power requirement for the proposed complex is assessed as 5836 KW. The power will be entirely supplied by 11 KV source of TPCODL of Odisha. Also, in case of power cut, 100 % power backup generator will be provided in the hospital. For this purpose diesel generator having DG Set (4x2000KVA) capacities will be provided.
10. **Rain Water Harvesting**: Rain Water will be harvested and recharge through 41 recharge pits from the plot area.
11. **Parking Requirement**: Total parking area provided 16686 m^2 Sq.mt./667 ECS and basement parking area will be provided.
12. Fire fighting Installations: Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).
13. **Green Belt Development**: Green belt area allocated within Layout Plan = 7278 Sq M (20% of Land Area).Parking area allocated inside is 10870sqm (33% of land area required = 11843 SqM requirement for Green development per MoEF guideline Therefore, required additional Green area allocation from the Parking space = 4565 Sq M. The proposed land area shall be planted with vegetation.
14. **Solid Waste Management**: Solid Waste generated will be segregated into components such as biodegradable (Waste vegetables and food etc.), hazardous wastes, Bio Medical

Wastes, oil waste and E-waste. Solid wastes will be collected in separate bins with different colors. The wastes will be disposed through authorized vendors.

Name of waste	Item	Quantity per Annum	Unit	Mode of Transport	Mode of Disposal
Used Oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	3.6	Kilolitre	Road	Authorized Recyclers
General waste scrap	Paper, Plastic and Other mixed waste	360	Tons	Road	Authorized Recyclers
Electrical and electronic waste	E Waste	0.6	Tons	Road	Authorized Recyclers
ETP sludge	Industrial Waste	14.4	Tons	Road	Treatment, Storage and Disposal Facility(TSDF)
Empty containers	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	7.2	Tons	Road	Authorized Recyclers

15. Employment Potential – During the operation phase, total manpower will be 325 persons (Temporary – 200nos and Permanent – 125nos).

16. Baseline Data from 01 January 2021 to 31st January 2021 (Winter Season)

17. The estimated project cost is ` 314.6 Crores and cost for EMP is 3.16 crores.

18. The project proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal. The proponent made an appeal before the committee to consider the proposal as category B2 as per MoEF&CC, Govt. of India Notification vide S.O 2859 (E), dated 16.07.2021 as they have applied for EC before 31.12.2021.

19. The SEAC in its meeting held on 22.12.2021 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.

20. The project 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.	EC compliance against the EC granted in favour of "Odisha Bio-Tech Park" duly authenticated by Regional Office, MoEF&CC, Govt. of India need to be submitted.	EC COMPLIANCE REPORT Attached as **Annexure -1.** **EC compliance against the EC granted in favour of "Odisha Bio-Tech Park" duly**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		authenticated by Regional Office, MoEF&CC, Govt. of India need to be submitted.
2.	It was mentioned during presentation that "Odisha Bio-Tech Park (OBTP)" may have common STP & ETP to which they will connect their industry effluent & domestic effluent line to it, otherwise they will have their own STP & ETP. In such a situation, the project proponent need to submit the confirmation including the capacity and design of STP & ETP (common) from the appropriate authority of OBTP is including the fact that they will accept the respective effluents of the project proponent. In case project proponent will have their own, they need to submit the capacity and design of the same.	Attached as **Annexure -2** regarding the Confirmation including the capacity and design of STP & ETP (common) from the appropriate authority of OBTP. The estimated sewage for treatment within the project is about 10 KLD and it is proposed that 1no. of Common STP of 25 KLD with expandable capacity will be installed within the Park by OBP. The entire common sewage network running all over the project site will handle the sewage from all the units within and is to be setup using 150mm / 200mm diameter Stoneware pipes/ UPVC pipes. The estimated industrial waste water effluent for treatment within the project site is about 267 KLD and it is proposed that 1no. of Common ETP with 600 KLD with expandable capacity will be installed within the Park by OBP. The pipelines have been designed keeping in mind the requirements per the National Building Code and to operate on natural gravitational flow under the effect of the gradient difference available within the Park. The proposed pipeline network, along the Master Plan is enclosed herewith as **Annexure--3.-A ,3-B & 3-C**.
3.	STP & ETP need to be standalone system and not to be inter-connected or integrated – to confirm this.	ETP and STP are separate systems. Inlet and Outlet for STP & ETP are independent of each other. Drawing enclosed for reference 3C.
4.	Internal drain network with dimension in the unit layout to be submitted along with dimensions and its connectivity.	Drawing enclosed for reference. Maps are attached as **Annexure-3 –A**.
5.	Start and fall out the outside drain to which the effluents of the unit will be discharged to be intimated including the permission of the authority of the drain to take the additional load (huge quantity)	**No outside drain required as per the revised chart.** The proposed project and Odisha biotech Park will be equipped with STP and ETP systems for treatment of sewage waste and industrial effluent waste liquids. The treated water shall be reused within the Park after treatment in a ETP having capacity of 600 KLD with expandable capacity. Post project which any excess treated water from the ETP will be discharged only into

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		the Pond to be created within the Park premises and shall not be connected to any source outside of our premises. Expected final quantity to be disposed in **dry season is nil and that in monsoon season is 33KLD (Inc. ETP & STP)**. As Per the approved Master Plan of the Park, plots with size **974.5 Sq.m shall be earmarked towards development of the proposed Pond**. Location of Final discharge of treated waste water generated from STP attached as **Annexure -3C**.
6.	Since effluents of ETP is very health hazardous, it shall not be connected to dual plumbing and not to be discharged to drain also. Chemical analysis of input and output discharge to be intimated along with the prescribed norms for the same.	Inlet and outlet for STP & ETP are separate. ETP treated water will not be discharged to the drain or will be used in any domestic purpose as we are reusing it inside the plant premises. Typical Chemical characteristics of both I/p & O/p report is attached for reference **4A, 4B & 4C**
7.	Green belt has been indicated to be exactly 20% of the plot area. Thus, green belt dimension in the layout map to be shown along with the details of species with three tier plantation around the boundary continuous.	Master Layout Plan Showing Greenbelt Is Attached As **Annexure-5**.
8.	The use of treated waste water has been intimated to be as follows which sounds hypothetical. a) Peripheral Green Belt - 149 KLD b) Inside Green belt - 100 KLD c) Road washing - 30 KLD The details of the above estimation with basis be submitted along with the details of peripheral green belt.	A revised water balance chart has been formulated where most of the water is being consumed itself in the processes. The total revised amount of waste water generated now, has been revised to 33 KLD. a] Inside Green Belt: 23 KLD b] Road Washing: 10 KLD Revised water balance Is Attached As **Annexure-6**.
9.	Total power demand is stated to be 5836 KW. To indicate and submit the plan and details of consumption of solar power vis-à-vis the generation and % of the same of total power demand.	Proposed LED street lights are between 20w to 40w. We shall provide solar panel to supply the power to illuminate LED lamp on street lighting We have taken a provision for solar power which is 5% of total power consumption required for the proposed project and the transferred in this regard has been installed in the Park. Total nos. Of solar panel to be installed for inside street lighting purpose on each street

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		light and other ancillary lightings in parking area etc are 3000Kw ÷ 20Kw per Light =150 nos. of LED Bulb. Approx Solar Power that will be used is 5836Kw x 5% = 292Kw
10.	The basis of no & capacity of DG set selection along with its location in reference to predominant wind direction and the offices / works and the stack height with installation drawing of the exhaust pipe be submitted since the project proponent will have 4 DG sets of 2000 KVA capacity each. Besides, the carbon balance with carbon Neutrality (Net zero) be submitted.	Carbon emission report and Air quality report is attached as **Annexure-7.**
11.	Since, schools are stated to be located at 300 mtrs distance, traffic study by domain expert be undertaken and based on the findings of the study, decongestion plan be proposed (if required) be submitted.	Traffic study report is attached as **Annexure-8.**
12.	Parking (space) for 4-wheeler, two wheelers and By-cycles be shown in the plant lay out map and corresponding norms be indicated	Detailed parking plan given in **Annexure-9.**
13.	Land use pattern indicates the land as Agriculture, water bodies, forest & settlement lands etc. The 'Kisam' of the land needs to be converted to "Industrial use" before construction of the unit by appropriate Revenue Authority.	Attached Document for your reference. Attached as **Annexure- 10.**
14.	Water balance for both monsoon & non-monsoon season to be shown.	Water balance diagram is attached as **Annexure-6.**

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

i) The proposal may be considered as category B2 as per MoEF&CC, Govt. of India Notification vide S.O 2859 (E), dated 16.07.2021 as they have applied for EC before 31.12.2021.

ii) Environmental Clearance may be granted valid for 10 years with stipulated conditions as per **Annexure-C and in addition to the following specific conditions**:

a) Land use pattern indicates the land as Agriculture, water bodies, forest & settlement lands etc. The 'Kisam' of the land needs to be converted to "Industrial use" before construction of the unit by appropriate Revenue Authority

b) All the compliances submitted/ committed by PP (s) shall be strictly adhered to by them.

c) Since, schools are stated to be located at 300 mtrs distance, the proponent shall take adequate measures for the traffic management as per recommendation of Traffic Study.

d) STP & ETP shall be standalone system and shall not be inter-connected or integrated.

e) Since effluents of ETP is very health hazardous, it shall not be connected to dual plumbing and not to be discharged to drain also.

ITEM NO. 04

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR CHARMULA DECORATIVE STONE DEPOSIT OVER AN AREA OF 4.553 HA. IN VILLAGE CHARMULA, TEHSIL-BORIGUMA, DIST-KORAPUT, ODISHA OF SRI. AJIT KUMAR SADANGI – EC.

1. Charmula Decorative Stone Deposit of Sri Ajit Kumar Sadangi is Located over an area of 4.553 Ha. in Village - Charmula, Tehsil - Boriguma, Dist - Koraput, Odisha. Proponent intends to obtain prior-environmental clearance from SEIAA, Odisha for carrying out mining operation in the said Mine. Prospecting License for this mine has been granted by Directorate of Mines, Govt. of Odisha vide its proceedings no.MXIII(e)-216/2009-7991/DM, dated 31.08.2016.
2. The said Mine area forms a part of Survey of India Topo sheet No. E 44 E12 (65 I/12). The mine area is bounded between the latitude of 190 05’ 19.20444”N to 190 05’ 40.92144”N and longitudes of 820 41’ 25.93284” E to 820 41’ 29.94396” E . The quarry area is accessible from nearest town Jaypore at a distance of about 40 Km.
3. Topography of the lease area is hilly slope. The highest and lowest elevations of the area above 596 mRL and 589 mRL respectively. Overall slope of the area is due north. There is no river / nala in the mine lease area.
4. Proponent intends to produce decorative stone @ 1150 CuM/Annum (Maximum). Total Geological reserve is estimated as 98515.00m3 and total Mineable reserve is estimated as 52531.20 m3 and the life of the mine will be about 45 years.
5. Opencast semi-mechanized method will be adopted using machineries such as Excavator, Line offset, compressor, jack-hammer, wire ropes and drill rod etc. Blasting is not required for the production of blocks.
6. There is no river / nala within the lease area. 2KLD of Surface Water shall be required for drinking, dust suppression and green belt, which will be sourced from nearby villages. No electrical power shall be required for operations as the mining will be worked out during day time only. Minimal power required for office shall be taken by using D.G set (Capacity 100 KVA).
7. Mining process does not involve any requirement of water. Hence no process water will be generated from the mine. The proposed working depth of quarry during the plan period will not touch the water table. As such, question of encountering of water due to seepage does not arise.

8. Out of 17325 m3 waste generated in 5 years, 6930.00 m3 of waste will be utilized for construction and maintenance of roads and remaining 10395.00 m3 of waste will be dumped in the proposed temporary waste dump in the earmarked site. There will be one terrace in the proposed dump, i.e., height of terrace will be 5.0 m. The proposed dump slope should be maintained at 80°.
9. During the 5 years of the proposed plan period 1.569 hectares will be degraded due to proposed mining and allied activities.
10. It is proposed to develop a green belt over an area of 0.266 Ha. in the safety zone of the mine of during the plan period.
11. Estimated cost of the project is Rs.1.2 Crore, including Rs. 2 Lakhs towards provision for expenditure during mine closure. Total number of employee in the proposed mine will be around 20. Proposed mining project shall contribute for overall socioeconomic development of the area and it will generate revenue for the Govt.
12. The Environment consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., N-5/305, IRC Village, Nayapalli, Bhubaneswar** along with the proponent has made a presentation on the proposal before the Committee on 19.02.2022.
13. The SEAC in its meeting held on 19.02.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent.
14. The project 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.	Dump management with detail calculations of waste utilization / inventory / sale including its chemical characteristics be submitted.	Dump management with detail calculations of waste utilization/ inventory / sale is enclosed as **Annexure-1.** Composition of Waste is enclosed in **Annexure-2.**
2.	Water management with rain water harvesting along with calculation be submitted.	Compliance is enclosed as **Annexure-3.**
3.	Local people should get employment owing to sensitivity of the area.	A total of 20 people will be engaged in the proposed mine. Priority will be given to Local people for employment in the mine as per their skill.
4.	Silt management including procedure for silt management for de-silting of surrounding water body(s) / Agricultural land be submitted.	Silt management plan is enclosed as **Annexure-4.**
5.	Proposed "Zero discharge" mechanism be submitted.	Compliance is enclosed as **Annexure-3.**
6.	Proposed budget for CSR / CER as per the law with due approval of the Govt. authority be submitted.	This is category B2 project. Public hearing is not applicable as per EIA Notification 2006

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		and its amendments. As per MoEF & CC OM dated 01.05.2018, for project cost < 100 crore, 2% of the project cost will be spent for peripheral development activities in the locality as this a green field project. Capital cost of the project is Rs.1.2 Crore. Hence, Rs.2.4 Lakhs (i.e. 2% of project cost) will be spent on the head of CER.
7.	Details of composition of waste is to be provided.	**Annexure-2**
8.	Reduction in cutting of tress and promote transplantation of tress on safety zone.	There is no Forest and no DLC land in the lease area, which is approved by DFO, Jeypore Forest Division vide letter no-884/4F-(Misc)-2019, Dated 22.02.2019. Hence, no tree cutting is required.
9.	NOC from the concerned BDO for use of Panchayat/ village road for transportation of minerals.	Copy of NOC granted by BDO, Boriguma along with consent of Sarpanch are enclosed as **Annexure-5**.
10.	Details of Rain Water Harvesting Pond (s) with number and design vis- a- vis the adequacy of the same be submitted.	Compliance is enclosed as **Annexure-3.**
11.	Certificate from the concerned Mining Officer that there is no other decorative mines within 500 meters from the boundary of the lease area.	There are no existing / operating mines in 500m and 1000m around the lease area and the same is certified by Tahasildar on 04.02.2022. Copy enclosed as **Annexure-6**.
12.	Certificate from the concerned DFO that there is no DLC land involved in the lease area.	There is no Forest and no DLC land in the lease area, which is approved by DFO, Jeypore Forest Division vide letter no-884/4F-(Misc)-2019, Dated 22.02.2019. Copy enclosed as **Annexure-7**.
13.	Scientific basis for the proposal to maintain the dump slope at 80^0.	Compliance enclosed as **Annexure-9.**
14.	Land schedule/ Kisam including Haal/ Sabak from Appreciate Authority.	Joint survey Report along with details of Forest Land including DLC land and records on Sabik / Hal are enclosed as **Annexure-8**.
15.	Specific Risk Management with SOP against possible slope failure and erosion.	Compliance is enclosed as **Annexure-10.**
16.	How Bench design & dump slope as stated decided? need to be with scientific basis.	Compliance enclosed as **Annexure-9.**
17.	Location of Polishing Unit and it's linkage.	**Address of Polishing Unit:** M/s odyssey Granites At-Bhuduka, Post-Boulajholi Dist-Ganjam, Odisha Linkage of polishing unit is enclosed as **Annexure-11**.
18.	How to address Toxic effect of Silica	Compliance is enclosed as **Annexure-12**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	in air and Silica from Silt in Water if ingressed to Water bodies and control its quantity in case of ingress to Agricultural land.	
19.	The Land records (Sabik and Hal) for the lease area are to be duly authenticated by Tahasildar, Mining Officer, and Forest Range Officer and submitted to SEAC.	Joint survey Report along with details of Forest Land including DLC land and records on Sabik / Hal are enclosed as **Annexure-8**.
20.	As requested in the public hearing proceedings, prior arrangements with local Stone artisans be made to supply the Waste stones with the prior permission of the required Authorities.	This is category B2 project. Public hearing is not applicable as per EIA Notification 2006 and its amendments. After operation of the mines, Permission will be taken from the Local Authority for supplying decorative stone to the local stone artisans.
21.	The procedure and Technology adopted for the determination of the Geological reserve in the mining plan to be submitted.	Compliance enclosed as **Annexure-13.**

Considering the information furnished and the presentation made by the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., N-5/305, IRC Village, Nayapalli, Bhubaneswar** along with the project proponent, the SEAC recommended for grant of Environmental Clearance with stipulated conditions as per **Annexure – D** and following specific condition.

i) The area is in village Charmula under Boriguma Tahasil of Koraput district, Odisha. The area is coming under major and minor irrigation canal of Govt. of Odisha. The lessee shall take NoC from the concerned Govt. Department before going for mining activity in the area. On receipt of the required permission from the Irrigation department a copy of the same needs to be forwarded to SEAC/SEIAA for necessary action.

ITEM NO. 05

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S JAY MINERALS FOR PANDIAPATHAR DECORATIVE STONE (GRANITE GNEISS) MINES DEPOSIT OVER AN AREA OF 20.566 HA. LOCATED IN VILLAGE PANDIAPATHAR, TAHASIL - ASKA, DISTRICT - GANJAM OF SRI AJAY AGRAWAL: PROP- JAY MINERALS – EC

1. The Environment Impact Assessment and Environmental Management Plan of Pandiapathar Decorative stone Mine over an area of 20.566 Ha in village Pandiapathar, under Aska tahasil, Ganjam district, Odisha address all the environment related issues and is prepared in accordance with the requirements Ministry of Environment and Forest, Govt. of India, EIA notification (2006) and subsequent amendments. Govt. of Odisha, Dept. of Steel & Mines, has issued the Letter of Intent vide their letter no. 5879/S & M, Bhubaneswar, dated 09.08.2019 for grant of mining lease in favor of Sri Ajay Agarwal for a period of 30 years. Mining Plan was approved by the Director of mines, Bhubaneswar vide

letter No. MXXII-(a) 7/2019/3905/DM dated 17.06.2020. As per EIA Notification, 2006 and subsequent amendments, the project is coming under Category B1 (New Mines) Lease area > 5.0 Ha (Minor Minerals).

2. The area of mining lease area is located in the Survey of India Toposheet no. E 45 A 10 (74 A/10), latitude 19º4'41.08" to 19º4'53.98" and longitude 84º43'08.33"E to 84º43'31.78"E. The land use pattern of the mining lease area comes under the non forest agricultural land (Abada Ajogya Anabadi), bearing Khata no.1173, Plot no.671 (50.72Acres) and 672 (0.12Acres), Kissam: Parbata.

3. Nearest railway stations is Berhampur Railway Station at an aerial distance of 45Km. and about 15Km from Aska. The lease area can be approached from NH: 59 to Berhampur and SH: 33 to Aska, at a distance of 15Km from the applied area. The maximum altitude of the isolated hillock is 116.00 m. at the top of the hillock and the lowest altitude is 83.00m. The overall slope of the hill is towards north-south side of the area. The nearest reserved forest is Sandhasolia RF which is located at a distance of 1 Km from the lease area. There is no national park, sanctuary or other eco sensitive zone located within the buffer zone of the lease area. The major drainage in the buffer zone is regulated by Rushikulya river which flows at a distance of 11 Km from the lease area. The Bara River – a tributary of Rushikulya river is flowing at a distance of 5 Km, in the western side of the lease area. A water reservoir is existing in the North west side at a distance of 200m from the lease area.

4. Total geological reserve of the area is 1384929 cu.m. and mineable reserve is 1044216 cu.m. The proposed production from the lease area will be 5000 (c.u.m)/annum of decorative stone with total excavation of 16667 Cu.m/ Annum of rock mass. The method of mining proposed is semi mechanised open cast mining method on single shift basis. The volume of total waste likely to be generated during the proposed plan period will be 58335 Cu.m. However about 40% of the generated waste will be utilized for maintenance and construction of the haul road, approach and existing roads in the surrounding areas periodically.

5. Total water requirement for the project will be 3.5 KLD out of which 1.5 KLD will be required for drinking and domestic purpose and 1.0 KLD for dust suppression and 1.0 KLD for plantation purpose. Manpower requirement for the project will be 30 nos.

6. The cost of the project is 2 crores. The capital cost and recurring cost (per annum) for the environmental facilities for the project works out to 7.54 lakhs and 6.8 lakh / year respectively.

7. The public hearing was held on 29.10.2021 as per schedule and the venue in accordance with the EIA notification S.O.1533 (E) dt.14.09.2006. The major issues raised during public hearing was health care, education, pollution caused due to the proposed project, peripheral developmental activities etc. In compliance to the public hearing issues raised a time bound action plan for peripheral development activities has been prepared. A budget of 20.0 Lakhs has been allocated for peripheral development activities.

8. The Environment consultant **M/s Kalyani Laboratories Pvt. Ltd.**, **plot no. 78/944, Millennium city, Pahala, Bhubaneswar – 752101** along with the proponent has made a presentation on the proposal before the Committee on 19.02.2022.

9. The SEAC in its meeting held on 19.02.2022 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.

10. The project 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.	Dump management with detail calculations of waste utilization / inventory / sale including its chemical characteristics be submitted.	Dump Management plan with detail calculation of waste utilization and chemical characteristics of waste is attached as **Annexure 1**
2.	Water management with rain water harvesting along with calculation be submitted.	Water management and rain water harvesting calculation is attached as **Annexure 2**
3.	Local people should get employment owing to sensitivity of the area.	Out of the total workers employed in the mines 80% employment will be from local village as per the recommendation of the village committee.
4.	Silt management including procedure for silt management for de-silting of surrounding water body(s) / Agricultural land be submitted.	Details of silt management and SOP for de-silting of surrounding water body(s) /agriculture land attached as **Annexure 3**
5.	Proposed "Zero discharge" mechanism be submitted.	Details of water management practice and zero discharge is attached as **Annexure 2**
6.	Proposed budget for CSR / CER as per the law with due approval of the Govt. authority be submitted.	The CSR plan will be implemented as the recommendation of village committee. The development plan has been authenticated by BDO**. Annexure 4**
7.	Details of composition of waste is to be provided.	Waste composition is attached in **Annexure 1**
8.	Reduction in cutting of tress and promote transplantation of tress on safety zone.	No tree will be cut during mining operation. The plantation will be carried out along the safety zone.
9.	NOC from the concerned BDO for use of Panchayat/ village road for transportation of minerals.	NOC has been obtained from the concerned BDO for use of Panchayat / village road for transportation of decorative stone. **Annexure 5**
10.	Details of Rain Water Harvesting Pond (s) with number and design vis- a- vis the adequacy of the same be submitted.	Details of rain water harvesting is given in **Annexure 2**
11.	Certificate from the concerned Mining Officer that there is no other decorative mines within 500 meters from the boundary of the lease area.	Pandiapathar Decorative stone mines of M/s Md. Irfan Razzak over an area of 9.579 Ha shares the common boundary of the proposed lease area.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		The mines obtained Environment clearance from SEIAA; Odisha vide letter no: SEIAA/2119 dated 26.10.2016. So the mining lease is not included in the cluster. The certificate from mining officer regarding the presence of this mines is attached as **Annexure 6**
12.	Certificate from the concerned DFO that there is no DLC land involved in the lease area.	Certificate from concerned DFO regarding no involvement of DLC land is attached as **Annexure 7**
13.	Mitigation against blockage of natural drainage as raised during public Hearing.	Mitigation plan for blockage of natural drainage as raised during public hearing is attached **Annexure 8**
14.	Scientific method of stabilization of dump including measures for erosion and Slope failure of dump.	Dump stabilization and dump management is attached as **Annexure 9**
15.	Provision of STP.	A 5 KLD STP is proposed for the project. Details has been given as **Annexure 10**
16.	Provision of rain water harvesting pond with adequate capacity.	Already submitted **Annexure 2**
17.	The Land records (Sabik and Hal) for the lease area are to be duly authenticated by Tahasildar, Mining Officer, and Forest Range Officer and submitted to SEAC.	Details land records (Sabik & Hal) for the lease area are to be duly authenticated by Tahasildar, Mining officer and Forest Range Officer attached **Annexure 11**
18.	As requested in the public hearing proceedings, prior arrangements with local Stone artisans be made to supply the Waste stones with the prior permission of the required Authorities.	The waste generated from the lease area will be given to local artisan for making of different household articles and idol making with prior permission from the mining authority when the mines will be executed. An undertaking from the project proponent is attached. **Annexure 12**
19.	The procedure and Technology adopted for the determination of the Geological reserve in the mining plan to be submitted.	Detail procedure and technology adopted for the determination of the geological reserve in the mining plan. **Annexure 13**

Considering the information furnished and the presentation made by the consultant **M/s Kalyani Laboratories Pvt. Ltd.**, **plot no. 78/944, Millennium city, Pahala, Bhubaneswar – 752101** along with the project proponent, the SEAC recommended for grant of Environmental Clearance with stipulated conditions as per **Annexure – D**

ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR RAICHANDA SAND BED MINES ON RIVER BRAHMANI OVER AN AREA OF 8.093 HA OR 20.00 ACRE IN VILLAGE RAICHANDA, UNDER DHARMASALA TAHASIL OF JAJPUR DISTRICT OF SRI SRIBASH JENA – EC.

1. The Environmental Impact Assessment (EIA) & Environmental Management Plan (EMP) of Raichanda River sand bed has been granted to Successful bidder Sri Sribash Jena by Tahasildar, Dharmasala, to address all the environment related issues and is prepared in accordance with the requirements of the Approved TOR issued by SEIAA vide letter no. 247/SEIAA dated 01.02.2021, Odisha and as per Ministry of environment forest & Climate Change, Govt. of India, EIA notification (2006) and subsequent amendments. The EIA / EMP report for the mines has been prepared by Kalyani Laboratories Private Limited, Bhubaneswar based on the base line study carried out during December 2020 to February 2021.
2. **Project Details**

Sl. No.	Salient Features	Description
1.	ML area	8.093 Ha.
2.	Village	Raichanda
3.	Tahasil	Dharmasala
4.	District and State	Jajpur, Odisha
5.	Land Category	Nadi Kisam
6.	Toposheet No.	F45T13 & F45U1
7.	Lattitude	20°52'45.10"N to 20°52'52.96"N
8.	Longitude	85°59'59.49"E to 86°00'12.90"E
9.	Nearest Town	Chatia
10.	Nearest road	NH 200: 1Km; Brahmani River Road: 0.5 Km, Pingal Road: 2.1 Km
11.	Nearest Railway station	Jenapur Railway station- 7.5 Km
12.	Ore to be mined	Sand
13.	Stratigraphy	upper deltaic plain
14.	Rate of production	16800 cu.m per annum
15.	Nature of Waste	No waste generated
16.	Water requirement	3000 liters/day
17	Source of water	By tanker
18.	Man power	21 nos
19.	Transport	By Haiwa, Truck/ Tractors
20.	Cost of the project	Rs.2,00,000/- approximately

3. The project intends for excavation of maximum up to 16800cu.m/ annum of sand from the lease area. The project site of Raichanda sand Quarry is located on the river bed of Brahmani River in village Raichanda under Dharmasala Tahsil of Jajpur district. The lease area is located in survey of India toposheet no. F45T13 & F45U1 between latitude of 20°52’45.10”N to 20°52’53.00’’N and longitudes of 86°00’00.02’’E to 85°59’59.49’’E.
4. The method of excavation of sand from Raichanda Sand quarry will be Semi mechanised open cast mining. The mode of the deposits, geomorphology of the area and its hydrological condition are some of the factors that favour the open cast method of mining. The geological and mineable reserve of the lease area is 161842 cu.m and 143656 Cu.m respectively.
5. The lessee will employ 02 skilled, 04 semiskilled and remaining 15 unskilled workers for the excavation of sand. The mining lease area falls within the river course of Brhamani River, below the high flood level. It therefore cannot be put to any other use. The kisam of land

under the lease is Nadi. Before the lease was granted it was part of the river course. During the mining of river bed the mining would be resorted to a depth of 2 m only. After the mining the lease will remain as a part of river bed and replenishment of sand will be carried out during the rainy season.

6. As per the land use pattern of the buffer zone of the proposed project area it has been observed that about 34% of the total land use comes under crop land and 34% of the land coming under fallow land, Scrub land 11%, Forest including open forest 6%, River, River bed and water bodies 8% and industrial area 3% of the total land use.
7. From the soil analysis result it can be concluded that the soil of the area is highly fertile and suitable for agricultural purpose.
8. From the water quality results, it can be inferred that all the parameters analyzed are under the prescribed limit as per IS 2296:1982 as per class C and the water does not contain any pollutants which would be hazardous for human, animal or crop health. As per the analysis of ground water of the area it has been observed that, water is colourless and odourless. The drinking water parameters are within the standard as prescribed in IS10500: 2012.
9. The PM_{10} concentration of the monitoring locations varies from 38 to 59 µg/cu.m, $PM_{2.5}$ concentration varies from 20 to 27 µg/cu.m, SO_2 concentration varies from 4.0 to 12 µg/cu.m and NOx concentration varies from 8.8 to 22 µg/cu.m. As per the National ambient air quality standard, 2009 the air quality parameters are within the prescribed limit.
10. There is no ecological sensitive zone, wild life sanctuary, Biosphere reserve, wild life corridor present within the 10 Km buffer zone of the project site.
11. The prediction of air quality due to proposed activities through simulation model shows that, taking into account of all the conceptual particulate matter generating area of river sand bed mines as the source parameter the maximum incremental Ground Level Concentration (GLC) of PM_{10} will be 4.2 µg/m^3 in North East direction at a distance of 300 m in the lease area.
12. As the lease area is a part of active river course, development of green belt within the lease area is not possible. There is the proposal for development of green belt along the road side, river bank and village waste land. Plantation will be done in 2000 nos of saplings along the river bank.
13. The public hearing for environment clearance for Raichanda Sand Mine of M/s St Minerals Pvt. Ltd. on river Brahmani over an area of 8.093 ha. in village Raichanda, Tahasil Dharmasala in the district of Jajpur was conducted on 25.10.2021 at Raichanda Grampnchayat office in Raichanda village, Jajpur. The major issues raised during public hearing are employment, maintenance of village road, drinking water facility etc.
14. The Environment management cost allocated for the project will be ` 3.00 lakhs per annum and social development cost will be ` 5.8 lakhs as allocated in compliance to public hearing demand.

15. The Environment consultant **M/s Kalyani Laboratories Pvt. Ltd., Plot No. 78/944, Millenium City, Pahala, Bhubaneswar – 752101** along with the proponent has made a presentation on the proposal before the Committee on 04.02.2022.

16. The SEAC in its meeting held on 04.02.2022 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.

17. The project 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.	Confirmation of stone patching on river bank with plantation in between indicating the stretch with dimension, leaving the ramp.	The lessee will carry out stone patching on the river bank and plantation. Detail plan is given as **Annexure 1**
2.	Plantation, specific sprinkling arrangement with procedure to mitigate dust emission on haulage road and avenue plantation.	A 10 KLD water tanker will be hired by the lessee to carry out water sprinkling in the haul road and transporting road twice daily. Further there is the proposal for avenue plantation along the river bank.
3.	Permission from BDO in case of use of Panchayat Road (if any) for transportation of sand including maintenance of the same by PP.	The permission letter from BDO for use of the river bank road for sand transportation is attached as **Annexure 2**.
4.	Plantation alongside of river bank to avoid erosion.	There will be the proposal for plantation of 100m along both side of the connecting point of the haul road and river bank road. The detail plan for plantation is already given under point no. 1
5.	Avenue plantation besides plantations on both sides' village road & haulage road.	The detail plan for plantation is already given under point no. 1
6.	Perennial sprinkling on haulage road to arrest fugitive dust emissions.	A 10 KLD water tanker will be hired by the lessee to carry out water sprinkling in the haul road and transporting road twice daily. An undertaking in this regard from the lessee is submitted. **Annexure 3**
7.	To indicate the stretch of the river bank on both sides of the river with dimensions to be stone patched.	Detail dimension of stone patching is already complied in point no. 1
8.	Details, viz: width of the river, no mining zone, distance of lease area from the banks with summary of the findings of the Replenishment study be submitted as per Enforcement & Monitoring Guidelines for Sand Mining, January, 2020 of MOEF&CC, Govt. of India.	Details, viz: width of the river, no mining zone, distance of lease area from the banks with summary of the findings of the Replenishment study be submitted as per Enforcement & Monitoring Guidelines for Sand Mining, January, 2020 of MOEF&CC, Govt. of India as **Annexure 4**.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Kalyani Laboratories Pvt. Ltd., Plot No. 78/944, Millenium City, Pahala,**

Bhubaneswar – 752101, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions**.**

i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**. Lay out of Progressive Mine Closure Plan shall also be incorporated in the Revised Mining Plan.

ii) Regular replenishment study to be conducted and report to be submitted.

iii) Provision of Bio-toilet shall be made at the site.

iv) 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.

v) 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 ENVIRONMENT CLEARANCE OF M/S ASSOTECH SUN GROWTH ABODE LLP FOR CONSTRUCTION OF MULTISTORIED RESIDENTIAL BUILDING "ASSOTECH PRIDE PHASE-1 EXTENSION" OVER PLOT AREA - 65383.16 SQM. LOCATED AT MOUZA- RUDRAPUR, BHUBANESWAR, DIST-KHURDA, ODISHA OF SRI. SASHANKA SHEKHAR ROUT (VICE PRESIDENT) (TOTAL BUIT UP AREA – 3,50,733.31SQM.) – EC

1. M/s Assotech Sun Growth Abode LLP (LLP Identification Number is (LLPIN) AAA-8036) is an Assotech Group company, which is the developer of this project. The Assotech Group was formed in the year 1986 and during the last 35 years the group has delivered projects in UP (Noida, Greater Noida, Ghaziabad), Haryana, (Gurugram & Faridabad) in Delhi NCR, Uttrakhand (Rudrapur-Nainital), Madhya Pradesh (Gwalior) and Odisha (Bhubaneswar). It has delivered over 45 projects comprising of over 40,000 residential apartments, shopping units and industrials project.
2. Currently the Assotech Group is developing affordable housing projects in Jharkhand (Ranchi) comprising of over 2500 apartments in four phases. It also proposes to develop similar project in Bhubaneswar located at Plot No. 274, NH-16, Rudrapur, Bhubaneswar.
3. It is also developing mid-segment housing project in Gurugram, Noida and Ghaziabad. These Projects nearing completion. Assotech Group has successfully completed 840 apartments housing complex "COSMOPOLIS" at Khandagiri, Dumduma, Bhubaneswar.
4. M/s Assotech Sun Growth Abode LLP. has Proposed Multistoried Residential Building "Assotech Pride Phase-1 Extension" over Plot No. - 274/9190, 276, 277/856, 277/8893, 279/10152, 279 & others Khata No: 412/1079, 412/1349 & others of Mouza-Rudrapur, PS-Balianta, Tehsil-Bhubaneswar, Dist-Khurda, Odisha. The Environment Clearance for existing building is already obtained from State Environment Impact Assessment Authority vide letter no. 7484/SEIAA, dated 06.11.2019 and Consent to Establish is obtained from State Pollution Control Board vide letter no. 693/IND-II-CTE-6353, dated 21.01.2020.
5. The Geographical co-ordinate of the project site is: Latitude –20^0 19' 40.2" to 20^0 19' 37.7" N & Longitude - 85° 53' 08.4"to 85° 53' 05.2" E. The project site is well connected with National Highway NH-16at a distance of approx 0.2 Km in West direction. The nearest

railway station is Mancheswar Railway station at a distance of approx 4.24 Km in West direction& Bhubaneswar Railway Station at a distance 8.9 Km in South-west direction. The nearest airport is Biju Patnaik Airport at a distance of approx. 10.8 Km in South-west direction from project site.

6. The maximum temperature is about 36.0^{o} C and the minimum temperature is 16.0^{o} C felt in the area. The average annual rainfall in the area is 1326.16 mm.

7. **The building details of the project are given below:**

Particular	Existing	Proposed	Total
Project Name	**Assotech Pride, PH-1 EXTENSION**		
Net Plot Area	52825.37 sqm (13.050 Acre)	14433.63 sqm (3.566 Acres)	67259.00 sqm (16.615 Acres)
Ground Coverage	23387.05sqm	15556.05 sqm	38943.10 sqm
FAR (Floor Area Ratio)	118843.72 sqm	166782.00 sqm	285625.72 sqm
Built up Area	136017.28 sqm	214716.03 sqm	350733.31 sqm
Maximum Height	45 m	130 m	130 m
Road Area	10506.06 sqm	9333.94 sqm	19840.00 sqm
Podium/Basement Parking	22015.70 sqm	43940.59 sqm	65956.29 sqm
Open Surface Parking	5500.00 sqm	146.72 sqm	5646.72 sqm
Total Parking Area	**27515.70 sqm**	**44087.31 sqm**	**71603.01 sqm**
Green Belt Area	23847.39 sqm (45.14 %)	-231.39 sqm	23616.00 sqm (35.11%)
Power/Electricity Requirement & Sources	Total - 4232 KW (4702 KVA) Solar - 455 KW (506 KVA) CESU - 3777 KW (4196 KVA)	Total - 2758 KVA Solar - 54 KVA TPOCDL - 2704 KVA	Total - 7460 KVA Solar - 560 KVA TPCODL – 6900 KVA
Capacity of DG sets	1500 KVA	4500 KVA	6000 KVA
Water requirement	551.4 KLD (Fresh)	241.4 KLD	792.8 KLD
Sewage Treatment Plant	750 KLD	300 KLD	1050 KLD
Estimated Population-Residential, Commercial, Floating/visitors	5930 nos.	2830 nos.	8760 nos.

8. The daily power requirement for the proposed complex is preliminarily assessed as **7460 KVA** (Solar System- 560 KVA&TPCODL – 6900 KVA). In order to meet emergency power requirements during the grid failure, there is provision of 6 nos. of DG set having total capacity 6000 KVA for power back up in the Residential Building Project.

9. For energy conservation, Roof Top Solar Power plant for captive power Generation = 12x 38KW = 560 kVA, Total Energy Conservation = 7460 KVA, Total Energy saving = 560/7460 = 8 %.

10. Fresh make up of 792.8 m^{3}/day will be required for the project which will be sourced from Ground water. Waste water of 1017 KLD will be treated in a STP of 1050 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the Prachi Drain.

11. Rain Water will be harvested through 23 nos. of recharging pits.

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

13. Green belt will be developed over an area of 23616.0 sqm which is 35.11% of the plot area; by using the local species like Casia Fistula, Conocarpus, Agave, Amla, Mango, Water Apple, Royal Palm, etc.

14. From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 3942 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate-coloured beans. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste.

15. Solid waste from sweeping and Dry Garbage containing non-biodegradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored in separate garbage bin and send to approved recyclers. Around 140 kg/day of STP sludge will be generated.

S. No.	Category	Counts (heads)	Waste generated (kg/day)
i)	Residents	8760 @ 0.45 kg/day	3942.0
ii)	Floating Population	876 @ 0.15 kg/day	131.4
iii)	STP sludge		140.0
TOTAL SOLID WASTE GENERATED			**4213.4 kg/day**

16. Total Capital Cost = ` 624 Crores

17. Environment Management Cost = ` 2.62 Crores

18. The Environment consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., N-5/305, IRC Village, Bhubaneswar** along with the proponent has made a presentation on the proposal before the Committee on 04.02.2022.

19. The SEAC in its meeting held on dated 04.02.2022 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by site visit by the Sub-Committee of SEAC to the proposed site. The project proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
i)	Provisions of solar power (8%) of total power demand in stated to have been made. Details of plan and consumption calculation vis-s-vis the generation of the same be submitted.	Total power generation from solar system is 565 KVA. Total power demand of the Project is 7460 KVA. So total solar power generation from the proposed Project is 7.57% of total power demand. Details solar calculation is attached in **Annexure-1**.
ii)	Layout of internal drains in project with connection to existing drains.	The Layout Plan showing internal drain line of the building with connected to existing drain is attached in **Annexure-2**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
iii)	Permission from BMC and Highway authority (if the drain is immediately connecting to adjacent highway drain) for discharge of treated water.	The nearest drain to the proposed project site is Prachi Nala which is adjacent to the project site. The drainage plan has been approved by Bhubaneswar Municipal Corporation (BMC) vide letter no. 24923, dated 10.09.2019. BMC drainage approval letter is attached in **Annexure-3**.
iv)	Layout drawing showing separate parking for commercial, residential and floating population with separate entry and exits for the same.	The layout plan showing separate parking for Residential and Floating population with separate entry and exits is attached in **Annexure-4**.
v)	Traffic study report and fire clearance	The traffic density report has been vetted by Indian Institute of Technology (IIT) Bhubaneswar. Traffic study report is attached in Annexure-5 and Fire Clearance recommended letter is attached in **Annexure -6**.

20. The SEAC in its meeting held on dated 15.03.2022 decided to take decision on the proposal after the site visit by the sub-committee of SEAC.

21. The proposed site was visited by the sub-committee of SEAC on 16.03.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    a) There is a dead canal inside the premises of the project. The possession and permission including developments of the same like- constructing Culvert etc to be provided from the appropriate authority.

    b) Water storage arrangements and permission from appropriate authority.

    c) Main Entry and Exist drawing with dimensions and pavements provision.

    d) Total Parking, ECS and Visitor Parking (both 2 and 4 wheelers). Also % of visitor parking w.r.t. total parking.

    e) Land details for Service Plots including Ownership and Kisam.

    f) Solid waste disposal facilities and any tie up for garbage disposal (documents to be provided with a brief on how the types of solid wastes to be separated).

    g) NOC from BMC for drain connection and disposal of treated water load of the project.

    h) Copy with Possession of Private land connecting the final drain (external).

    i) Drainage map of internal drains, Rain water harvesting their nos, dual plumbing lines and final connection. Calculation of Rain water harvesting.

    j) Details of WTP if any.

    k) Source of water with permission letter, Fire permission.

l) No of OHT and Tanks for Dual Plumbing.

m) Certified compliance report of PH-1 or earlier project.

n) Party to give an undertaking that all statutory permissions including CGA, Fire etc to be obtained for the composite project as a whole.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as pointed out at para 21 above.

ITEM NO. 08

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S SASWAT INFRASTRUCTURE PVT. LTD. FOR PROPOSED MULTI STORIED RESIDENTIAL APARTMENTS BUILDING PLAN WITH COMMERCIAL FACILITY OF LS+US+12 OVER AN TOTAL BUILT UP AREA OF 43,223.23 SQM LOCATED AT MOUZA: PATAPUR, DIST: CUTTACK OF SRI SWADESH KUMAR ROUTRAY – EC

1. The proposal is for Environmental Clearance of M/s Saswat Infrastructure Pvt. Ltd. for proposed Multi Storied Residential Apartments building plan with Commercial Facility of LS+US+12 over an total built up area of 43,223.23 sqm located at Mouza: Patapur, Dist: Cuttack.
2. As per EIA Notification dated 14th Sept, 2006, as amended from time to time; this project falls under Category "B", Project or Activity 8(a) Building and Construction projects (EIA Notification dated 14th Sep, 2006 as amended on 2009).
3. **Location and Connectivity –** The proposed site is located at Mouza-Patapur, Dist-Cuttack, Odisha. The Geographical co-ordinate of the project site is: Latitude – 20°26'51.52"N & Longitude - 85°50'0.98"E. River Katajorhi is flowing at a distance of 200 metres in the North direction. The Nearest Railway Stations are Barang at 5.5 Km, Cuttack Railway Station is 7.2 km from project site and Bhubaneswar Railway Station is at a distance of 20 Km (by road) from Project site. The nearest Airport is Biju Patnaik Airport, Bhubaneswar, which is approx. 23 km (by road) from the project site.
4. The site is coming under Cuttack Development Authority.
5. The total plot area is 9359.81 sq meters (2.31Acres). with total built-up area 43,223.23 SqM.
6. The building details of the Project:

Particular	Proposed	Permissible
Project Name	Saswat Infrastructure Pvt. Ltd.	--
Plot Area	9432.52 Sqm	--
Ground Coverage	3743.02 sqm (39.99 %)	--
FAR (Floor Area Ratio)	3.632	-
FAR Area	34259.91 sqm	
Built up Area	43223.23 sqm	--
Maximum Height	45.04 m	--
Total Parking Area	8547.22 sqm	

Green Belt Area	1871.96 sqm (20 %)	1871.96 sqm (20 %)
Road Area	1829.66 sqm	
Parking Area	Covered – 6632.05 sqm Open – 1915.17 sqm **Total – 8547.22 sqm**	8525.53 sqm
Maximum No. of Floor	LS+US+12	--
Power/Electricity Requirement & Sources	Total – 1566.6 KW Solar – 98.24 KW TPCODL – 1468.36 KW	--
No. of DG sets	1x200 KVA & 1x82.5 KVA	--
Water requirement	137.2 KLD (Fresh)	--
Sewage Treatment Plant	STP Capacity - 200 KLD	--
Estimated Population-Residential, Commercial, Floating/visitors	Residential - 1477 Nos. Floating – 148 Nos. Commercial- 58 Nos.	--

7. **Water Requirement** – Fresh make up of 137.2 m3/day will be required for the project which will be sourced from Ground water. Waste water of 177.9 KLD will be treated in a STP of 200 KLD capacity, which includes primary, secondary and tertiary treatment.
8. Rain Water will be harvested through 18 nos. of Rain Water recharging pits.
9. **Power Requirement** - The total consolidated electrical load estimate for proposed project is about 1768.5 KW. Power from Solar is 98.5 KW. The 1670.0 KW power will be supplied by 11 KV source of TPCODL of Odisha State Electricity Board. Also, in case of power cut, 100 % power backup generator will be provided for common uses only. For this purpose diesel generator having 200 KVA (1 no.) & 82.5 KVA capacities will be provided.

   There are 80 nos. of Solar Lighting poles (@72 Watt) has been proposed for Street lighting,

   Energy conservation by using Solar Street Lighting = 80 x 72 = 5760 watt = 5.76 KW

   Energy Saving by using Solar Lighting = 92.44 KW

   Energy Saving by using Solar Street Lighting = 5.76 KW

   Total Energy Saving = (92.44 + 5.8) KW = 98.24 KW

   Total Solar Energy saving = 98.24/1566.6 = 0. 0627 x 100 = 6.27 %.
10. **Solid waste Management -** From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 664.7 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate colored bins. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid waste and construction and demolition waste.

S. No.	Category	Counts (heads)	Waste generated (kg/day)

1.	Residents	1477 @ 0.45 kg/day	664.7
2.	Floating Population	148 @ 0.15 kg/day	22.2
3.	Retail Shop	66 @ 0.15 kg/day	9.9
4.	STP sludge		85.0
TOTAL SOLID WASTE GENERATED			**781.9 kg/day**

11. **Green Belt**- Green belt will be developed over an area of 1871.96 sqm which is 20.0 % of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.

12. **Parking Details –** Total parking area allocated to the project is 8547.22sqM/ 314ECS.

13. The project cost is ` 180 crores and Environmental Monitoring programme – 3.6 crores.

14. The proponent along with the consultant **M/s. Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar** made a detailed presentation before the SEAC on the proposal on **22.12.2021**.

15. The SEAC in its meeting held on dated 22.12.2021 decided to take decision on the proposal after receipt of the following information / documents from the project proponent followed by site visit by the Sub-Committee of SEAC to the proposed site.

    (i) "Kisam" of the land along with relevant document from appropriate Revenue Authority be submitted.

    (ii) The source of water is 'Ground Water' as stated. Why cannot be surface water / pipe water supply? Letter from the appropriate authority be submitted that surface water / pipe water supply from CMC / WATCO/PHD is not possible.

    (iii) PH value of ground water from the baseline study data reveals that it is 6.91 against the norm of 6.5-8.5. Thus, from health point of view, measures to improve the same be submitted.

    (iv) No. of rain water harvesting pits (14 nos.) has been arrived with maximum rain fall as 120 mm/hr in 24 hours and retention time as 25 mts with co-efficient of run off as 0.70 for paved area. This calculation be revisited taking into consideration of maximum rain fall is 24 hours in past 30 years based on logical climate data (Date taken for 10 years up to 2018 by PP) and norm for retention time /co- efficient of run-off with relevant reference be submitted as well.

    (v) Parking in terms of space of ECS, both for 4 wheelers / two wheelers / by-cycles for residential apartment as well as commercial complex as per the norms showing the demarcation in the layout map be submitted, considering the residents, visitors and floating population for commercial complex as well.

    (vi) Provision of solar power (5.68%) of total power demand of 89.1 KW) is stated to have been made. Details of plan and consumption calculation vis-à-vis the generation of the same be submitted.

(vii) 1871.96 m^2 land (exactly 20% has been stated to have been taken for green belt development. As such, details of dimension of green belt continuous stretch surrounding the boundary with three tier plantations (indicating the species) be submitted.

(viii) Traffic study be undertaken by a domain expert at the intersecting point with public road /NH/SH, considering the traffic 10 years ahead with other projects and decongestion plan (if any required) based on the study findings be submitted.

(ix) Installation drawing of exhaust pipe of the stack of DG sets be submitted with the basis of selection of no & capacity of DG sets along with the location of the same (2 nos. DG sets of capacity of 500 KVA each) with respect to predominant wind direction vis-à-vis the location of residential tower and shopping complex.

(x) Distance of ESZ (Nandan Kanan Sanctuary and Chandaka - Dampada Sanctuary) duly certified by the concerned DFO from the project site boundary be submitted.

(xi) The treated water proposed to be discharged to nearby dead canal. Permission from the Water Resources Department, Govt. of Odisha to discharge to the nearby dead canal is to be submitted.

16. The project proponent was requested vide letter no. 91(9)/ SEAC–(Misc)-28, dated 25.01.2022 to submit the information / documents as sought by the SEAC at para 15 above. But, they have not yet furnished the same.

17. The proposed site was visited by the sub-committee of SEAC on 16.03.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

a) As there is lot of space at some places in the periphery, 2 rows of trees in north side wherever possible to be provided

b) Copy of Fire authority recommendation

c) NOC from appropriate authority for connecting the excess treated to final drain

d) Details of reuse of STP treated water for possible zero discharge as the sandy soil can absorb more water

e) Provision of solid waste disposal system to be submitted in details

f) Rain water harvesting, its calculation and internal drainage map showing final connection to the external drain to be provided in a map

g) No of OHT and Dual plumbing along with residential units

h) Details of solar power calculation, generation and use in % of total power

i) Map showing Entry and exit gates (Needs to be separate for residential and commercial) for both residential and commercial area, Parking areas for residential, commercial and visitors (for both separately) with ECS calculation vs

norms and also mention the % of each parking w.r.t. total parking. Visitor parking for commercials to be adequate qualifying the norms.

j) Traffic study by a reputed institute

k) Stack height of DG set and height of building

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as requested vide letter no. 91(9)/ SEAC–(Misc)-28, dated 25.01.2022 and as sought by the Sub-Committee of SEAC at para 17 above.

ITEM NO. 09

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S ADISH MINERALS PVT. LTD. FOR PROPOSED CHROME ORE BENEFICIATION PLANT OF CAPACITY 1,20,000 TPA THROUGHPUT OVER AN MINING LEASE AREA 13.43 ACRES AT MOUZA- BAUNSAMALI, PS- BADACHANA, DIST-JAJPUR, ODISHA OF SRI NRUSINGHA CHARAN PARIDA (DIRECTOR) – EC

1. The proposed project is for Environmental Clearance of M/s Adish Minerals Pvt. Ltd. for proposed chrome ore beneficiation plant of capacity 1,20,000 TPA throughput over an mining lease area 13.43 acres at Mouza- Baunsamali, PS- Badachana, Dist-Jajpur, Odisha of Sri Nrusingha Charan Parida (Director).
2. M/s Adish Minerals Private Limited has proposed for installation of greenfield Chrome Ore Benefication Plant of capacity 1, 20, 000 TPA throughput located at - Mouza-Baunsamuli, Thana- Badachana, District Jajpur, Odisha.
3. As per EIA Notification dated 14th Sep, 2006 as amended from time to time, the project falls under Category “B”, Project or Activity 2(b) – Mineral Beneficiation Unit.
4. The Company “Adish Minerals Private Limited” (AMPL) is incorporated under Companies Act 2013 on 25th April 2018. The Company is a private limited company with Corporate Identity Number- U14298OR2018PTC028769. The Major Objective of the Company is to Beneficiate Low Grade Chrome to Chrome concentrate and sell to various industries of Odisha & other states of India. The Project will have an 100% capacity of beneficiation 120000 TPA of Siliceous Chrome ore material. The concentrated chrome ore output is envisaged as 74400 TPA with conc. Of Cr2O3 between 46 to 54%.
5. **Site Location and Connectivity -** The site is located at Mouza- Baunsamuli, Thana- Badachana, District- Jajpur of Odisha bounded by Latitude 20°41’49.3” N and Longitude 86°00’04.1” E which falls under the Survey of India Toposheet No.F45T13, F45T14,F45U1,F45U2. Total Area of the plant is 13.43 acres. Out of Total land, 5.38 acres (5.435 Ha.) had been acquired at Village- Salapada, Tehsil- Darpan, Thana- Badachana, District- Jajpur of Odisha State. There is no habitation in the proposed area. Nearest habitation is Salapada which is at a distance of 0.30 km from project site. The site is well connected with the road. NH-5 is at a distance of 12- 15 Km from the project site. The nearest railway facility is Barithengarh Railway Station which is 7.5 km. The Nearest airport is Bhubaneswar at 53 km and nearest seaport is Paradeep at a distance of 84 km (SE) from the project site. Water Bodies: Kumaria Nadi- 8.2 Km & Mahanadi River- 17 Km. Nearest town Chandikhol located at a distance of 10.0 Km from the project site. NH- 5

connects the factory site with major cities like Jajpur ,Dubri ,Sukhinda ,Kailpani in order to get their raw materials transported to the factory site . It also connected the States like West Bengal, Andhra Pradesh, therefore the end processed products can easily be transported to the buyers site with the convenient connecting Conveyance Facilities.

6. No National Park / Wildlife Sanctuary /Biosphere Reserve /Tiger reserve have been reported to be located in the core & buffer Zone of the project and the area does not report to form corridor for schedule-1 Fauna.
7. There is no forest land involved in the proposed site. No rehabilitation and resettlement is required for the proposed project.
8. ToR was granted on 20th August 2019 vide letter no. 231/SEAC-4/19.
9. Baseline Study was conducted during the period 1st March 2019 – 31th May 2019 (Pre-Monsoon Season)
10. Public Hearing was conducted in 15th December 2020.
11. **Water Requirement:** Total Water requirement for the plant– 2,880 m3/day. Water will be kept in closed circuit & will be recycled and hence, conservation of freshwater to about 30% of the total requirement. Thus fresh make water requirement is envisaged to be 46 m3/hr or 1,104 m3/day and source is borewell. Total Circulation Water: 120 m3/hr or 2,880 KLD. The unit has applied to CGWA for drawl of water vide Application Number: 21-4/2404/OR/IND/2020, Dated: 07.01.2020. Treated water from STP will be used for plantation activities and greenbelt development.
12. **Power Requirement:** There will be an installation of a 315 KVA Transformer and it has been estimated that approximately 292 KVA will be used for running the motors of the Plant & Machinery if all machines work at full capacity and there will be utilization of the rest 24 KVA for the Office administrative & Staff Quarters . The Power connection will from CESU. In future, if there will be an expansion of the plant capacity from current 100% capacity of 1, 20,000 tons, accordingly the power connectivity for 33 KVA transformer will be installed . In Case of Power Failure situation, it is envisaged that a D.G Set of 320 KVA, of Kirloskar make will be installed which will operate the plant at full load even there is a power cut.
13. Fuel: Diesel as a fuel is required for running the Tipper & JCB Loader. And there will be requirement of 115 litres per Day.
14. The Raw Material used will be Chrome Ore of below 40% Grade Cr_2O_3 with 10% moisture with recovery rate of 62%. The finished products generated will be Chrome Concentrate Cr_2O_3 with 8% moisture.
15. The project will generate 90 nos. of manpower, out of which 70 nos. Labourer's skilled & unskilled employees and the rest 20 nos. will be recruited as Administrative & operating facilities.
16. Safeguard Measures like, as regular water sprinkling shall be carried out in critical areas prone to pollution, like haul road, loading & unloading points. It shall be ensured that the

ambient Air Quality Parameters conform to the norms prescribed by the central pollution control board in his regard.

Sl. No.	Source of Pollution	Pollutants	APC measures
i)	Raw material handling yard (Unloading, Stacking)	Fugitive Dust	Dust suppression system such as water sprinkling
ii)	Screening	Fugitive Dust	Dry Fog system
iii)	Internal Roads	Fugitive Dust	Mobile Tanker, Internal Roads will be made Black topped
iv)	Fines stock yard of COB Plant	Fugitive Dust	Will kept under a shed
v)	Product discharge system (finished product)	Fugitive Dust	Water sprinkling
vi)	Movement of vehicles	Fugitive Dust	Water sprinkling

17. **Solid waste and management:** The estimated Tailing generation from the process would be 45,600 Ton/Yr. Considering the life of plant 6 years, total tailing generation worked out to be 2,73,600 Tons. The tailings discharged through beneficiation process will be treated with ferrous sulphate to minimize the hexavalent chromium in the tailings. The tailings will be processed in filter press and the cake disposed off in TSDF.Garland drains will be constructed to collect the discharges and the same will be drained down to re-circulation pond. To control the dust handling of feed ore and finished product, water sprinklers in Raw material yard and finished product yard have been recommended. In addition adequate plantations are recommended. ETP Sludge – 1200 TPA will be disposed off in TSDF. Waste oil in small quantities will be generated from gear box and other machineries and will be disposed off to authorized recyclers registered with Pollution Control Board.

18. **Greenbelt / plantation** will be done in 33% (i.e. 4.43 acres) of the total plant area. The entire plant is set up at an area of 1.30 acres. Plantation will be done in and around the plant premises. 80% survival rate will be maintained with all possible efforts. The trees will be planted at suitable grid spacing to encourage proper growth. Local plant species will be preferred.

19. Total Cost of the proposed project will be ` 984.81 Lakhs.

20. The project proponent along with the environment consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation before the SEAC on 01.09.2021.

21. The SEAC in its meeting held on dated 01-09-2021 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by visit of the sub-committee of SEAC to the site. 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

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th><th>Views of SEAC</th></tr>
<tr><td>i)</td><td>Complete material balance of the whole process occurring in Plant.</td><td>Material balance has been attached as Annexure -1.</td><td>------</td></tr>
<tr><td>ii)</td><td>Detailed description on utilization/disposal of tailings from process till end users using the treated tailings and related documents i.e. copy of agreement made with end users for disposal of treated tailings commensuration with disposal SOP of tailings.</td><td>The project is currently at conceptual stage and there is no tailing generation at the moment. However, the company is in discussion with registered CHTSDF and final MoU shall be submitted shortly.</td><td>------</td></tr>
<tr><td>iii)</td><td>Content of E. coli in treated water is more than norm. Justify the result and mitigation measures to be undertaken to control the same.</td><td>Neither this point was raised during the presentation nor it does have any relevance for the proposed project.</td><td>------</td></tr>
<tr><td>iv)</td><td>Source of chromite ore and copy of agreement made with mine owners.</td><td>Undertaking has been attached as Annexure -2.</td><td>------</td></tr>
<tr><td>v)</td><td>Detailed to the scale plant layout map (in A1 size) with legend indicating location of the beneficiation plant, office building, rainwater harvesting pond, ETP, tailing pond, raw material storage yard and green area etc.</td><td>Plant layout has been attached as Annexure -3.</td><td>------</td></tr>
<tr><td>vi)</td><td>Tailing pond design and specification along with tailing utilization and disposal plan year wise for 5 years. In case of storage plan the land area and</td><td>The tailing shall be built as per downstream method. Year wise disposal of tailings has been tabulated below:
<table><tr><th>Year</th><th>Quantity in Ton</th></tr><tr><td>1st year</td><td>45,600</td></tr><tr><td>2nd year</td><td>45,600</td></tr></table></td><td>------</td></tr>
</table>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	storage plan to be elaborated. The design capacity of the tailing pond need to include the waste water associated with tailings. The material of construction including matting material to leachate be submitted. The ETP design and capacity need to be made in reference to treatment of waste water of a tailing pond to arrest overflowing at any point of time suitably.	<table><tr><td>3rd year</td><td>45,600</td></tr><tr><td>4th year</td><td>45,600</td></tr><tr><td>5th year</td><td>45,600</td></tr><tr><td>Total</td><td>2,28,000</td></tr></table> Tailing pond will be constructed progressively using tailing and natural borrow materials. Semi –crystalline thermoplastics such as High Density Ployethene (HDPE) shall be used as liner. ETP design and capacity will be made in reference to waste water from tailing pond.	
vii)	Analysis of Nickel and Cobalt content in Tailings and Mines waste	The tailing water will be analysed for Nickel and Cubalt content and results shall be submitted along with EC compliance report. There are no mine wastes as the proposal is only for beneficiation plant.	Tailings are not water. Tailing analysis is required along with analysis of OB generated for Ni, Co.
viii)	The report has in many places' hexavalent chromium more than norms or close to norm (page-32, SW-3, SW-1. Similarly, E-coil in SW-2, SW-7, SW-8 etc are more than norm. Mitigation plan to be reworked and submitted.	The deviation found was sporadic samples are drawn from adjacent location, the results of same has been given in **Annexure -4.** The present results conform to the norms. E-coil was not raised during the presentation nor it does have any relevance for the proposed project.	Mitigation measure (plan) is essential for Cr+6 wherever applicable. E-coil might not have relevance but it was analyzed and presented and found to be abnormal. Being a pollutant, mitigation measures required and proponent needs to submit action plan with revised report.
ix)	Separate chapter on monitoring Study of cumulative effect on soil, air, water due to establishment of chrome ore beneficiation unit for 3 months.	A separate chapter shall be prepared and submitted after 3 months from the installation of the unit.	------
x)	Distance of	Agriculture land is about 200 m from the	------

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	agricultural land from beneficiation unit.	beneficiation unit towards north.	
xi)	Details of existing units near to the Chrome Ore Beneficiation Plant.	There are no existing Chrome Ore Beneficiation plants within 10 km buffer of the project site.	------
xii)	Study of Disaster Management for this new Chrome Ore Beneficiation unit.	On-site Disaster Management plan shall be submitted shortly.	------
xiii)	Detailed proposal to adopt Zero Liquid Discharge (ZLD) concept.	Water balance for Zero Liquid Discharge (ZLD) has been shown below:	??? This needs to reflect in water balance for both rainy and other season
xiv)	Source of waste water and details of Effluent Treatment Plant for treatment of waste water containing hexavalent chromium. Cost of ETP with breakup.	Waste water will be generated from tailings in the beneficiation plant. Same shall be treated in ETP. Cr (VI) shall be reduced to Cr (III) by dosing it with Ferrous Sulphate. After reduction, the chromium will be precipitated as chromium hydroxide by dosing with alkali (NaOH). It will be separated in clariflocculator enhanced with polyelectrolyte. It will be further treated by filtration system (sand bed) and ion exchange removal system. Proposed ETP construction cost is `2.0 Crore with an operational cost of `30 Lakhs. Treatment units that will be installed are Screen chamber (2 nos), Equalisation tank (2 nos), Clariflocculator (2 nos), Aeration tank (2 nos), Clarifier (2 nos), Sludge beds (20 nos).	It is necessary to visit the plant during operation to ascertain the functioning of ETP for mitigating Cr+6
xv)	Water balance diagram along with compensating water balance from rain harvesting pond.	Potential rainwater that will be harvested per annum = 12636 CUM (1.44 CUM/hr) water balance diagram with compensating water balance is given below:	------
xvi)	Design and dimensions along with capacity of rain harvesting pond.	Total leased area taken as 404700sq. meter. Average annual rainfall is 1536.7 mm. Rain water potential of the project area can be computed as below. Using rational formula, Q=CiA, Q in cum. Where C=Run-off Coefficient, I=intensity of rainfall (m/s) A=catchment area in sq.m. **Parti | Area | Runo | Rai | Rainwat**	------

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th><th>Views of SEAC</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>cular s</th><th>(Sq. m)</th><th>ff Coeff icient</th><th>nfal l (M)</th><th>er harvesti ng potential (cum)</th></tr>
<tr><td>Gree n Belt</td><td>1792 8</td><td>0.15</td><td>1.1 43</td><td>3074</td></tr>
<tr><td>Open Land</td><td>3102 4</td><td>0.15</td><td>1.1 43</td><td>5319</td></tr>
<tr><td>Road and Pave d Area</td><td>2023</td><td>0.5</td><td>1.1 43</td><td>1156</td></tr>
<tr><td>Roof Top</td><td>3376</td><td>0.8</td><td>1.1 43</td><td>3087</td></tr>
<tr><td>Total</td><td>5435 1</td><td></td><td></td><td>12636</td></tr>
</table>
To accommodate total harvested rainwater of 12636 m^3 / year, it is proposed to construct a water conservation tank having 30000 m cubic meter storage capacity.
The tank dimension will be L=40 m, W=35m & Depth = 3 m Thus, storage capacity of water conservation structure would be 4,200 cubic meter.

Rainfall during monsoon season = 1143 mm
No. of rainy days = 60
Average rainfall per day = 19 mm
Every 15 days pond will be filled, hence = 4,200 cum*4 = 16,800 cum
Therefore, total storage capacity is 16,800 cum.
</td><td></td></tr>
<tr><td>xvii)</td><td>How much quantity of total water requirement (1104 kld) to be sourced from ground water will be reduced on use of ground water harvested and stored in rain water harvesting pond (with detail</td><td>Total lease area = 404700sq m
Average rainfall = 1536.7 mm
Rainwater harvesting potential:
Green belt = 3074 m^3
Open land = 5319 m^3
Road and paved area = 1156 m^3
Rooftop = 3087 m^3
Total recharge = 12636 m^3
Harvested water per day = 34.6 – 34 KLD
Reduction in water usage = 1104-34 = 1070 KLD</td><td>------</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th><th>Views of SEAC</th></tr>
<tr><td></td><td>calculations).</td><td></td><td></td></tr>
<tr><td>xviii)</td><td>Mitigative measures to be taken for serious occupational health hazards due to hexavalent chromium- SOP of measures to be undertaken for employees and local habitation including adoption of ISO 14001 and OHSAS be submitted.</td><td>Periodical medical check-up for employees & surrounding habitations shall be carried out half yearly. We will adopt OHSAS & IS-14001 after the plant is commissioned.</td><td>------</td></tr>
<tr><td>xix)</td><td>Detailed cost breakup towards pollution control measures for this Chrome Ore Beneficiation Plant.</td><td>Cost of Environment Monitoring
<table><tr><th>Particulars</th><th>Cost / year (` in Lacs)</th></tr><tr><td>Air Monitoring</td><td>35.45</td></tr><tr><td>Water Monitoring</td><td>1.07</td></tr><tr><td>Noise Monitoring</td><td>6.48</td></tr><tr><td>Total</td><td>43.0</td></tr></table></td><td>------</td></tr>
<tr><td>xx)</td><td>Surface runoff management and detailed treatment facility for surface runoff.</td><td>Garland drains will be constructed to collect the discharge and the same will be drained down to re-circulation pond.</td><td>------</td></tr>
<tr><td>xxi)</td><td>Analysis result of surface and ground water and soil within study area w.r.t. hexavalent chromium.</td><td>The deviation found was sporadic. Samples are drawn from adjacent location, the results of same has been given in Annexure-4. The present results conform to the norms. E.Coli was not raised during the presentation nor it does have any relevance for the proposed project.</td><td>------</td></tr>
<tr><td>xxii)</td><td>Detailed land schedule with kissam of land in tabulated form. Whether land kissam has been converted to “Industrial Use”, if so, detailed document to be submitted.</td><td></td><td>------</td></tr>
<tr><td>xxiii)</td><td>Report has several mistakes with regard to process reactions (Chapter-IV,</td><td>Revised report shall be submitted to SEAC shortly.</td><td>Revised report to be submitted to SEAC by the proponent.</td></tr>
</table>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	Chapter-X and other places) given by the Consultant. It is necessary that the report needs to be revised and resubmitted as the corrections are many. The consultant and proponent are required to understand the impact of the process and reaction and be serious in providing environmentally friendly solution with regard to hexavalent chromium and other pollutants.		
xxiv)	Minutes of Meeting of Public Hearing conducted and mitigation measure on the concerns of the public in physical terms be submitted.	Minutes of meeting of the Public Hearing conducted has been attached as **Annexure-6.** Compliances of Public Hearing with timeline and budget have been attached as **Annexure-7**.	------
xxv)	Maintenance of Biodiversity register.	Biodiversity Register shall be maintained with the plant.	------
xxvi)	Findings of traffic study undertaken at point of intersection with NH Vis-a vis the norm in terms of PCU and traffic decongestion measures recommended if any be submitted.	It is recommended that quick development of road condition, proper street lights and parking area near to the main road are of utmost importance for the safety of life as well as development of nearby villages/towns. Road signs and road marking area main guiding factors for the road users which is essential required to be adequate and placed at appropriate places on the road. In all most all intersections road markings not provided/dilapidated condition. Hence it is immediate requirement to install the signboards and marking at all intersections and maintenance of existing roads of good condition.	------
xxvii)	How DG set height of 30 mtr is arrived for 24 KVA DG set	It is a typographical error; the chimney height calculation is given below: Height of Chimney = height of	------

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	including installation layout and drawing of the chimney be submitted.	building *0.2 KVA Height of Chimney = 12*0.2*4.89 = 11.736-12 m	
xxviii)	Conversion of land "to industrial use" and submission of the relevant document thereof from the appropriate revenue authority be submitted.	Same has been attached as **Annexure-8.**	------

22. The SEAC in its meeting held on dated 05.01.2022 decided to take decision on the proposal after site visit by the sub-Committee of the SEAC and receipt of revised report from the proponent as stated above.

23. The project proponent has furnished the revised EIA/EMP Report and the SEAC verified the same.

24. The SEAC in its meeting held on dated 15.03.2022 decided to take decision on the proposal after the site visit by the sub-committee of SEAC.

25. The proposed site was visited by the sub-committee of SEAC on 17.03.2022. Following are the observations and recommendation of the sub-committee of SEAC.

    i) The PP shall submit a sketch of the layout map (not to scale) of the proposed plant showing the boundary wall, material entry and exit gate and employees movement gate separately, Tailing pond, ETP, Recirculation pond, Rain water Harvesting pond.

    ii) The waste water that will be generated from the tailings shall be treated in ETP wherein hexavalent Chromium shall be reduced to trivalent Chromium by dosing it with appropriate standard chemical following due technical procedure.

    This is to be put as a specific condition.

    iii) The PP shall obtain NOC to use the Panchayat roads from the concerned BDO for transportation of both input materials and finished products including the responsibility of maintaining the road if damaged by such transportation.

    This is to be put as a specific condition in EC.

    iv) The big trees including the fruit bearing trees shall not be cut and if necessitated to relocate, the same may be de-rooted and replanted in green belt area/ alongside the boundary wall.

    If it becomes inevitable to cut the said trees, the same may be done only with due necessary permission from appropriate authority of forest department, Government of Odisha with necessary compensatory plantation/ afforestation as per the applicable rules/ laws.

v) A copy of letter of consent tied up with M/S Ramky for disposal of tailings was shown to the sub- committee by the PP/ consultant and it was okay.

26. The PP has already submitted a sketch of the layout map (not to scale) of the proposed plant showing the boundary wall, material entry and exit gate and employees movement gate separately, Tailing pond, ETP, Recirculation pond, Rain water Harvesting pond as desired by the Sub-Committee of SEAC.

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

i) The waste water that will be generated from the tailings shall be treated in ETP wherein hexavalent Chromium shall be reduced to trivalent Chromium by dosing it with appropriate standard chemical following due technical procedure.

ii) The PP shall obtain NOC to use the Panchayat roads from the concerned BDO for transportation of both input materials and finished products including the responsibility of maintaining the road if damaged by such transportation.

iii) The big trees including the fruit bearing trees shall not be cut and if necessitated to relocate, the same may be de-rooted and replanted in green belt area/ alongside the boundary wall. If it becomes inevitable to cut the said trees, the same may be done only with due necessary permission from appropriate authority of forest department, Government of Odisha with necessary compensatory plantation/ afforestation as per the applicable rules/ laws.

ITEM NO. 10

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S PARAMITRA SMART INFRA SNA PRIVATE LTD. FOR MODIFICATION AND EXPANSION OF PROPOSED "SHANTI NAGAR AWAS YOJNA" [PRIVATE DEVELOPER PROJECT] LOCATED AT MOUZA-SATYA NAGAR, PLOT NO. -121'125'126'128'129'130&143(P), THANA-NEW CAPITAL BHUBANESWAR, DISTRICT -KHORDHA, ODISHA OF SRI SHYAM SUNDAR PADHY – EC.

1. **M/s Paramitra Smart Infra SNA Private Ltd.** is coming with Environmental Clearance for Expansion and Modification and of proposed **"SHANTI NAGAR AWAS YOJNA"** [Private Developer Project] At mouza- Satya nagar, plot no. -143(P), Thana-New Capital Bhubaneswar, District -Khordha, Odisha of - M/s Paramitra Smart Infra SNA Private Ltd.
2. Shantipalli slum is located on the land belonging to the General Administration (GA) department. Government of Odisha has decided that BDA, which is also the State Level Nodal Agency, shall implement the in-situ redevelopment project of Santipalli slum. Accordingly, the land (on which the cluster is situated) is being transferred to BDA. There will be permanent change in land use pattern as mostly GA land will be used for construction of private development based on the market dynamics and development guidelines.
3. Paramitra Smart Infra SNA Private Limited is developing the site in partnership with Bhubaneswar Development Authority (PPP Mode). The project (PPP) guidelines stipulate

7.797 acres land area allocation for EWS Housing, while remaining 2.1 acres land will be utilized for private development based on the market dynamics and development guidelines. Proposed area is coming under Wholesale Commercial Use Zone as per CDP.

4. Land has been acquired for residential - development under an In-Situ slum Redevelopment Project. The land will be used for construction of Residential complex with club. There will be permanent change in land use pattern, as mostly land will be used for construction of Residential Complex with Retail & Club. Total land acquired for this project is 8498.7 sqm 2.10 Ac. Proposed Total Built up Area is **119108.29 sqm [Existing 49927.11 sqm. to proposed 119108.29 sqm]**
5. The proposed expansion project will have a total building foot-print of 3111.84 sqm (36.62% of the total plot area & (existing ground coverage 1912.37 SQM. (22.5%) Total green area proposed 3438.57 sqm (40.46 % of total area (exclusive plantation area 1755.83 sq.m. (20.66 %) and lawn area 1682.74 sqm (19.80%) of the plot area)
6. The Geographical coordinates of the project site is 20°17'7.54"N & - 85°51'2.19"E. The nearest airport is Biju Pattanaik Airport which is 5.4 km away from the project site towards S-S-W direction. Bhubaneswar railway station is 2.36 km away from the project site towards SSW direction. Banivihar railway station is 0.8 km away from the project site towards N-N-E direction. (aerial distance). Maharshi College Road is adjacent To Project Site at the distance of 0.70 km in E direction. NH-203 (Cuttack-Puri Road) at the distance of 0.95 km in NW direction.
7. The total water requirement is approx. 356 KLD (domestic + flushing), out of which total domestic water requirement for residential and shops are 244 KLD & flushing water is 112 KLD. The total fresh water requirement is approx. 244 KLD on Daily Basis. The wastewater will be treated up to tertiary level in one STP of 350 KLD capacity provided within the complex generating 260 KLD of recoverable treated waste water from STP which will be recycled within the project sit and excess treated waste water will be discharge to existing municipal drain.
8. The power supply shall be supplied by TPCODL. The maximum demand load is estimated at 3658KW There is provision of Power backup for the residential project will be through DG sets of total capacity -1x2000 KVA & 1X1500 KVA silent DG Set.
9. Solid waste generation will be approximately 970 KG/DAY which will be supplied to Bhubaneswar Municipality for further disposal. Recyclable and non-recyclable wastes will be disposed through Govt. approved agency. Hence, the Municipal Solid Waste Management will be conducted as per the guidelines of Solid Wastes Management Rules, 2016.
10. During the operational stage, operation of Standby DG Sets and Vehicular Movements are main source for air pollution. Low sulfur diesel oil (LDO or HSD) will be used in DG sets. Water will be sprinkled to suppress dust, while cleaning and sweeping the roads and pavements. Proper traffic management and provision of acoustic enclosure for silent type DG sets will control noise level. Plantation along the peripheral boundary walls will also act as acoustic screen or vegetative barrier against the propagation of noise and pollutants.

11. Total project cost is ` 153.84 Cr

12. The Environment consultant **M/s Visiontek Consultancy Services Pvt. Ltd. Bhubaneswar** along with the proponent has made a presentation on the proposal before the Committee on 04.02.2022.

13. The SEAC in its meeting held on dated 04.02.2022 decided to take decision on the proposal after receipt of the Certain information / documents from the proponent followed by site visit of the sub-committee of SEAC. The project proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
i)	Land document with kissam of the land (Sabik and Hal).	The plot no.143 (P) which is comes under the proposed project area already been approved by the Bhubaneswar Development Authority and SEIAA in previous EC Letter no.6389/SEIAA. Paramitra Smart Infra SNA Private Limited is developing the site in partnership with Bhubaneswar Development Authority (PPP Mode). The project (PPP) guideline stipulated a total of 7.797 acres land area allocation out of which 4.146 acres for EWS Housing, 1.551 acre for road widening & remaining 2.1 acres land will be utilized for private development based on the market dynamics and development guidelines. Proposed area is coming under Wholesale Commercial Use Zone as per CDP. Shantipalli slum is located on the land belonging to he General Administration (GA) department. Government of Odisha has decided that BDA, which is also the State Level Nodal Agency, shall implement the in-situ redevelopment project of Santipalli slum. Accordingly, the land (on which the cluster is situated) is being transferred to BDA. There are mostly GA land will be used for construction of private development based on the market dynamics and development guidelines. Attached as **Annexure -1**.
ii)	Layout of internal drains / sewer along with ownership of the land / ROW since the same need to be in favour of PP.	We will treat the waste water of the residential colony in well-designed sewage treatment plant having capacity of 350 KLD (MBBR Type). Excess Treated Water Discharge to Municipal Sewer -14 KLD (during Dry Season) & 54 KLD (during Monsoon Season). The entire common sewage network running all over the project site will handle the sewage from all the units within and is to be setup using 150mm diameter Stoneware pipes/ HDPE pipes. The estimated waste water effluent for treatment within the project site to handle the load. The effluent network shall connect all the units of the project through 150mm diameter HDPE pipes. The pipelines have been designed keeping in mind the requirement per the National Building Code and to operate on natural gravitational flow under the effect of the gradient of 6M difference available within the site. They are of sufficient capacity to handle the sewage / effluent within the project site. 54KLD of treated water from STP, in excess post utilization during monsoon season, shall be connected to Public Sewerage System with the necessary permission from concerned authority. Permission of

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th></tr>
<tr><td></td><td></td><td>Bhubaneswar Municipality Corporation is attached as Annexure-2.
The proposed pipeline network, along the Master Plan, and cross-section of pipeline is enclosed here with as Annexure-2A.</td></tr>
<tr><td>iii)</td><td>Permission of the authority of the drain / sewer to take the addl. load of this proposed project including the scheduled operation of the sewer system.</td><td>Permission of Bhubaneswar Municipality Corporation is attached as Annexure -2.
Only 54KLD of treated water from STP, in excess post utilization during monsoon season, shall be connected to Public sewearge System with the necessary permission from concerned authority. The municipal drain exists adjacent to the project site in North direction of proposed project site. The existing municipal drain is adeqate to take the extra load of 54 KLD which dischrgae only during the rainy season.
permission of Bhubaneswar Municipality Corporation is attached as Annexure-2.</td></tr>
<tr><td>iv)</td><td>Parking in terms of space and ECS for 4 wheelers, 2 wheelers including bicycles be calculated separately for dwellers & visitors (floating population) indicating the norm as well and showing it in the layout map & be submitted.</td><td>
<table>
<tr><th>SL No.</th><th>Name of Area</th><th>Area in Sqm</th><th colspan="2">No. of ECS for 4 Wheerlers @ 32 sqm and 2 wheelers @ 12 sqm (As per NBC)</th></tr>
<tr><td>1</td><td>Parking provided in Basement -1</td><td>6011.55</td><td colspan="2">188 nos- for Dwellers</td></tr>
<tr><td>2</td><td>Parking provided in Basement -2</td><td>6476.62</td><td colspan="2">202 nos- for Dwellers</td></tr>
<tr><td rowspan="2">3</td><td rowspan="2">Parking provided in Basement -3</td><td rowspan="2">6696.92=4132+2565(10% for visitors parking)</td><td>Dwellers</td><td>65 no. of ECS for 4 Wheelers 172 Nos of parking for 2 wheelers</td></tr>
<tr><td>visitors</td><td>40 no. of ECS for 4 Wheelers 107 Nos of parking for 2 wheelers</td></tr>
<tr><td>4</td><td>Parking</td><td>6425.92=3861+2565(10%</td><td>Dwellers</td><td>60 no. of</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>provided in Basement -4</td><td>for visitors parking)</td><td></td><td>ECS for 4 Wheelers 161 Nos of parking for 2 wheelers</td></tr>
<tr><td></td><td></td><td></td><td>visitors</td><td>40 no. of ECS for 4 Wheelers 107 Nos of parking for 2 wheelers</td></tr>
<tr><td>5</td><td>Surface parking</td><td>36.00</td><td></td><td>Parking for differently abled</td></tr>
<tr><td></td><td>Total</td><td>2567.01 sqm</td><td>Dwelers</td><td>Visitors</td></tr>
<tr><td></td><td></td><td></td><td>4 Wheelers--515 nos. 2 Wheelers--333 nos.</td><td>4 Wheelers-80 nos. 2 Wheelers-214 nos.</td></tr>
</table>
Total parking area required 30% of built up area=23883.sqm
Total parking area provided = 25674.01 sqm
Parking and traffic layout plan is attached as Annexure-3.
</td></tr>
<tr><td>v)</td><td>Stack height of DG sets with installation drawing of exhaust pipe be submitted.</td><td>
<u>DG SETS STACK HEIGHT CALCULATION</u>
• Calculating Stack Height of DG sets For A facility:
The minimum height of stack to be provided with each generator set can be worked out using the follwing formula:
Formula:-
H=h+0.2 x √ KVA
Where:
H=Total height of stack in meter, h = Height of the building in meters
KVA = Total generator capacity of the set in KVA
• For 500 KVA DG Sets
Stack Height = 119+.2√500
= 119+4.47
= 123 Mtr
Say = 123 Mtr.
Annually Predominant wind direction of Bhubaneswar is S & SW direction. Location of DG set will be based on the down wind direction
</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th></tr>
<tr><td></td><td></td><td>of annually pre-dominant wind direction.
The location of the stack of DG Set is fixed such that it will not have any effect on the surrounding area.

Supporting documents enclosed as Annexure-4.</td></tr>
<tr><td>vi)</td><td>Green belt of plot area detail calculation with dimension continuous around the boundary showing in the layout map shall be submitted.</td><td>
<table>
<tr><td>TOTAL PLOT AREA 8498.7 Sqm.</td><td>TOTAL GREEN AREA 3438.57 Sq.m.</td><td>40.46%</td></tr>
</table>
<table>
<tr><td>20.66 % Plantation Area</td><td>1755.83 Sq.m.</td><td rowspan="2">139 Nos. Trees</td></tr>
<tr><td>19.80 % Lawn Area</td><td>1682.74 Sq.m.</td></tr>
</table>
<table>
<tr><th></th><th>Name</th><th>Area in Sqm.</th><th>No. of Trees</th><th>Spacing of trees</th></tr>
<tr><td rowspan="6">GREEN BELT AREA</td><td>GB-1</td><td>186.71</td><td>14</td><td>3M</td></tr>
<tr><td>GB-2</td><td>156.35</td><td>11</td><td>3M</td></tr>
<tr><td>GB-3</td><td>195.81</td><td>22</td><td>3M</td></tr>
<tr><td>GB-4</td><td>204.27</td><td>18</td><td>3M</td></tr>
<tr><td>GB-5</td><td>254.12</td><td>13</td><td>3M</td></tr>
<tr><td colspan="2">TOTAL NO OF LARGE TREES</td><td>78</td><td></td></tr>
<tr><td rowspan="4">OTHER PLANTATION</td><td>PL-1</td><td>130.04</td><td>14</td><td>2M</td></tr>
<tr><td>PL-2</td><td>492.97</td><td>32</td><td>2M</td></tr>
<tr><td>PL-3</td><td>135.56</td><td>15</td><td>2M</td></tr>
<tr><td colspan="2">TOTAL NO OF SMALL TREES</td><td>61</td><td></td></tr>
<tr><td colspan="5">TOTAL PLANTAION AREA 1755.83 Sq.m.</td></tr>
</table>
Landscape plan is attached as Annexure-5.
</td></tr>
<tr><td>vii)</td><td>Recommendations of Fire Safety Deptt.</td><td>Recommendations of Fire Safety Deptt. Is attached as Annexure-6.</td></tr>
<tr><td>viii)</td><td>A comparison table of earlier plan in terms of units, parking, built up area, green belt may be provided with norms.</td><td>
<table>
<tr><td>Description</td><td>As per previous EC (Expansion (After getting the EC, the construction work has not yet started at the project site.)</td><td>Proposed project (Existing+ Additional)</td></tr>
<tr><td>Building plan approval -status</td><td>Approved</td><td>Approved By BDA subject</td></tr>
<tr><td>Blocks /Phases</td><td>Block -02 (2B+G+25)</td><td>One Block (4B+G+36)</td></tr>
<tr><td>Area of plot</td><td>8489.7sq.mt.</td><td>Total Plot area = 8489.7sq.mt.</td></tr>
<tr><td>Built-up area</td><td>49927sq.mt.</td><td>119108.29sq.mt.</td></tr>
<tr><td>Ground coverage</td><td>1912.37sq.mt. (22.5%)</td><td>3111.84sq.mt. (36.62%)</td></tr>
<tr><td>Greenbelt area</td><td>2122.12sq.mt. (25%)</td><td>3438.57sq.mt. (40%)</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>F.A.R</td><td>4.7sq.mt.</td><td>79611.39sq.mt.</td></tr>
<tr><td>Revenue Plot No.</td><td>143(P)</td><td>143(P)</td></tr>
<tr><td>Dwelling Unit</td><td>336</td><td>280</td></tr>
<tr><td>For Residential</td><td>236</td><td>280</td></tr>
<tr><td>Fresh water requirement (KLD)</td><td>186 KLD</td><td>218 KLD</td></tr>
<tr><td>Power requirement</td><td>1713 KW</td><td>2429 KW</td></tr>
<tr><td>STP (KLD)</td><td>290 KLD</td><td>350 KLD</td></tr>
<tr><td>Height of the building</td><td>82mt.</td><td>119 mt.</td></tr>
<tr><td>No. of DG Set</td><td>02 nos. 1250 KVA</td><td>7 nos. 500 KVA</td></tr>
<tr><td>Project cost</td><td>96 Cr</td><td>153.84 Cr</td></tr>
</table>
</td></tr>
<tr><td>ix)</td><td>Structural stability for the change in the building plan from authorised structural Engineer of BDA be submitted.</td><td>Structural stability certificate is attached as Annexure -7.</td></tr>
<tr><td>x)</td><td>Since there is a reduction of 50 dwelling units in the revised proposal, Parking in terms of ECS compatible with the space provided as per norms indicating the norm of space per ECS with the copy of the referred document be submitted.</td><td>Parking provides as per Norms and parking details provides in point no-4.</td></tr>
<tr><td>xi)</td><td>Traffic Study copy be submitted.</td><td>Traffic Study report is attached as Annecure-8.</td></tr>
<tr><td>xii)</td><td>Calculation of RWHP (number) be revisited with maximum hourly rain fall in 24 hours in last 30 years of logical climate data with run off co- efficient s as per the norm/ realistic input and retention time.</td><td>
<table>
<tr><td colspan="5">RAINFALL RUN OFF CALCULATIONS</td><td></td></tr>
<tr><td>Area</td><td>8489.7</td><td>Catchment Area</td><td rowspan="2">Run off Coeff. [C]</td><td rowspan="2">Intensity of Rainfall (m/hr) in mm</td><td rowspan="2">Total (m3/hr) [Q]</td></tr>
<tr><td>Sr. No</td><td>Type of Surface</td><td>In sq.m</td></tr>
<tr><td>1</td><td>Paved Area</td><td>3147.76</td><td>0.65</td><td>0.16</td><td>327.367</td></tr>
<tr><td>2</td><td>Green Area</td><td>3438.57</td><td>0.15</td><td>0.16</td><td>82.52</td></tr>
<tr><td>3</td><td>Terrace</td><td>1912.37</td><td>0.85</td><td>0.16</td><td>260.082</td></tr>
<tr><td>Area (ac)</td><td>2.1</td><td colspan="4">8498.7</td></tr>
<tr><td colspan="5">Grand Total (1+2+3)</td><td>669.97</td></tr>
<tr><td>4</td><td colspan="5">Roof top water will be recharge to ground water through</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td colspan="5">recharge well. Water collected from other area =410m3/hr</td></tr>
<tr><td></td><td colspan="5">Considering 15 minutes retention period</td></tr>
<tr><td></td><td>VOLUME required</td><td>Say</td><td></td><td></td><td>102 m3</td></tr>
<tr><td>5</td><td colspan="5">Considering I No. Rain Water harvesting Pit of Size 3.0 m dia. and 5.0 m depth</td></tr>
<tr><td></td><td colspan="5">Volume of 1 Rain Water harvesting pi</td></tr>
<tr><td></td><td>Dia. of Pit (d) in Mtr.</td><td>=</td><td></td><td></td><td>3</td></tr>
<tr><td></td><td>Depth (D) in Mtr.</td><td>=</td><td></td><td></td><td>5</td></tr>
<tr><td></td><td>Volume of 1 Pit in Cum</td><td>=</td><td colspan="2">Pi X r2 X h</td><td></td></tr>
<tr><td></td><td></td><td>=</td><td colspan="2">3.14 x(1.5x1.5)x5</td><td>35.325</td></tr>
<tr><td></td><td>Say</td><td>=</td><td></td><td></td><td>35</td></tr>
<tr><td>6</td><td colspan="5">Total Nos of Rain Water Harvesting Pits</td></tr>
<tr><td></td><td>Total Volume Required</td><td>=</td><td colspan="2">102 m3</td><td></td></tr>
<tr><td></td><td>Volume of Unit Harvesting pit</td><td>=</td><td colspan="2">35</td><td></td></tr>
<tr><td></td><td>Total number of pits</td><td>=</td><td colspan="2">2.9</td><td></td></tr>
<tr><td></td><td>say</td><td>=</td><td colspan="2">3</td><td></td></tr>
<tr><td></td><td colspan="5">Providing 5 No of Rain Water Harvesting Pit of size 3.0m dia x 5.0m depth</td></tr>
</table>
Layout plan showing recharge pit is attached as Annexure-9.
</td></tr>
<tr><td>xiii)</td><td>Plan with detail calculation of solar power consumption vis-a- vis the generation and as percentage of total power demand be submitted.</td><td>
<table>
<tr><td>Solar Water Heating</td><td>20 % of total hot water requirement must be catered through Solar Thermal system</td><td>Total No. of Occupants in 4BHK @ 7 persons /flat = 280 x 7 = 1960nos.
Hot Water Requirement @ 25 lpcd x 1960 = 49000 liters
Solar Hot water system for 20 % of capacity = 9800 liters
Solar Panel Nos@ 500 Liter/Panel = 19.6 Nos.
Say = 20 Nos</td></tr>
<tr><td>Solar PV Panel</td><td>Providing for emergency lighting of common area (staircase, lift lobby lobby, basement etc.</td><td>5% of Demand Load SPV Modules of 445 Wp or above for a total capacity 128KW</td></tr>
</table>
</td></tr>
</table>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent		
				SPV Panel Nos.@ 445 Wp/Panel = 288 Nos.

14. The SEAC in its meeting held on dated 15.03.2022 decided to take decision on the proposal after the site visit by the sub-committee of SEAC.

15. The proposed site was visited by the sub-committee of SEAC on 22.03.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    a) Provision of bio waste or compost converter.
    b) Management of other solid wastes with documentary evidence.
    c) Agreement copies of BDA on Santipali slum development.
    d) No of OHT and Tanks for Dual Plumbing.
    e) Traffic study from reputed institute.
    f) All other points of Proceeding to be complied if not done.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as pointed out at para 15 above.

ITEM NO. 11

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR PROPOSED HOUSING PROJECT FOR ENVIRONMENT CLEARANCE FOR LB+UB+LG+UG+21 COMMERCIAL AND RESIDENTIAL BUILDINGS OVER AN BUILT-UP AREA 40030.21 M^2 LOCATED AT MOUZA- BIDYADHARPUR-6, TAHASIL - CUTTACK SADAR, DIST-CUTTACK OF M/S GRAND BAZAAR DEVELOPERS LLP OF SRI VINEET MOHAN GUPTA – EC

1. This is a proposal for housing project for Environment Clearance for LB+UB+LG+UG+21 commercial and residential buildings over a built-up area 40030.21 m^2 located At Mouza-Bidyadharpur-6, Tahasil - Cuttack Sadar, Dist-Cuttack. M/s Grand Bazaar Developers LLP is the developer of this project.

2. The project falls under category “B” or activity 8 (a) - Building and Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.

3. M/s Grand Bazaar Developers LLP. is developing the site in partnership with Bhubaneswar Development Authority (PPP Mode). The project (PPP) guidelines stipulate 1.331 acres land area allocation for Housing, while remaining land will be utilized for private development based on the market dynamics and development guidelines.

4. The proposed site is located at Bidanasi Project Area, Mouza-Bidyadharpur-6, PS-Market Nagar, Tahasil-Cuttack sadar, Dist-Cuttack. The Geographical co-ordinate of the project site is: Latitude -20° 28’ 44.03” N & Longitude - 85° 49’ 02.01” E and and the area comes under Survey of India Toposheet No-73H/11, 73H/12, 73H/15, 73H/16. The project site is well connected with National Highway-16 (AH-45) (Jharpokharia-Chennai Road).

5. The maximum temperature is about 36.0^o C and the minimum temperature is 16.0^o C felt in the area. The average annual rainfall in the area is 1326.16 mm.

6. **Building details of the Project are as follows:**

Total Plot Area	**:**	**5309.47 sqm**
Kisam of Land	:	Gharabari
Residential Builtup Area	:	26,023.2 sqm
Commercial Builtup Area	:	4,159.72 sqm
Total Builtup Area	**:**	**26,456.4 sqm**
Ground Coverage	:	2,258.00 sqm
Road & Paved Area	:	1,989.67 sqm
Green Belt Area	:	1,061.8 sqm
Total Parking Area	:	9,292.16 sqm
Height of the Building	:	82.50 m

7. **Water requirement:** Fresh make up of **72 m^3/day** will be required for the project which will be sourced from Ground water. Waste water of 93.9 KLD will be treated in a STP of 100 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the Near Drain.

8. **Power requirement:** The daily power requirement for the proposed building is preliminarily assessed as 1419 KW. In order to meet emergency power requirements during the grid failure, there is provision of 2 nos. of DG set having 700 KVA capacities for power back up in the proposed Building Project.

9. **ENERGY CONSERVATION BY SOLAR LIGHTING:**

i) **Solar Street Lighting:** There are 20 nos of Solar Lighting poles (@72 Watt with panel for generation) has been proposed for Street lighting,

ii) **Energy conservation by using Solar Street Lighting =** 20 x 72 = 1440 watt = 1.4 KW

iii) **Solar Lighting for common area:**

In the proposed area, we can propose 80 nos. of solar PV panels.

Size of each PV solar panel = 1.560 m x 1.05 m

Therefore, area covered by single PV solar panel = 1.638 m^2

Therefore, Total area covered by 80 nos. of PV solar panels = 131.04 m^2 (Roof Top)

Total Roof Area of the project is 2258 sqm

Each PV Solar panel generates energy through solar rays = 345 Watts-hr

Therefore, total amount of electrical energy generated by 80 nos. of PV Solar panel = 27.60 KW-hr.

Assuming, only 4 hours of sunlight available throughout the day time, therefore electrical energy generated by 80 nos. of PV solar panel per day = 110.4 KW

iv) **Saving Using Solar System:**

Total Energy Saving = (110.4 + 1.4) KW = 111.8 KW

v) **Total Solar Energy saving = 111.8/1419 = 0. 0787x 100 = 7.8 %**

10. **Rain Water Harvesting:** Rain Water will be harvested through 4 nos. of recharging pits.

11. **Green Belt Development:** Green belt will be developed over an area of 1,061.8 sqm which is 20 % of the plot area; by using the local species like Neem, Karang, Golden Champa, Bakul, Bela, Bottle Palm, Cheekoo, Guava etc.

12. **Solid Waste Management:**

Solid Waste from Residential Population - 342 kg/day

Solid Waste from Commercial Population- 15.0 kg/day

Solid Waste from Floating Population - 30.0 kg/day

STP Sludge - 46.95 kg/day

Total Solid Waste Generation - 433.95 kg/day

13. Estimated Project cost:

Total Capital Cost = ` 70 Crores

Environment Management Cost = ` 2.2 Lakhs

14. The Environment consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., N-5/305, IRC Village, Bhubaneswar** along with the proponent has made a presentation on the proposal before the Committee.

15. The SEAC in its meeting held on dated 11.02.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of the sub-committee of SEAC.

i) Land document and “Kissam” of the land.

ii) Since, this being a flood prone area, detailed SOP for proper management of the flood to be submitted along with Structural Stability Certificate from the reputed institution.

iii) The Housing project with more than 21 storied building will be constructed 15 meter away from embankment of river Kathajodi. There will be risk to river embankment during construction of the project and may be erosion problem. The proponent shall obtain permission from the Water Resources Department, Govt. of Odisha before going for construction activity with regard to the safety and stability of proposed housing project.

iv) Layout map showing different parking area for commercial and residential, visitors and floating population.

v) Soil quality test report to be submitted.

vi) Google Layout map showing the distance of all sensitive places from project site.

vii) Possibility of exploration of river water/PHED rather depending on ground water.

viii) Detail analysis of Ground water and river water to be submitted.

ix) Layout of internal drains / sewer along with ownership of the land / Row since the same need to be in favour of PP.

x) Permission of the authority of the drain / sewer to take the addl. load of this proposed project including the scheduled operation of the sewer.

xi) Layout of drainage system and exact distance of project site to nearest drain and outfall of drain.

xii) Parking in terms of space and ECS for 4 wheelers, 2 wheelers including bicycles be calculated separately for dwellers & visitors (floating population) indicating the norm as well and showing it in the layout map & be submitted.

xiii) Details of DG sets to be installed at the suitable places after due consideration of pre-dominant wind direction to avoid air pollution from entering the dwelling house of the colony. DG set location w.r.t wind direction, stack height with layout / installation and drawing of the stack / exhaust pipe be submitted, considering cumulative capacity(s) of all DG sets and height of the tallest tower.

xiv) Revised Green belt of plot area along with detail calculation with dimension continuous around the boundary showing in the layout map be submitted. Details of species to be mentioned.

xv) Fire clearance from the appropriate authority need to be obtained and their observations is to be submitted.

xvi) Plan of consumption of solar power with exact calculations to be submitted and increase the Solar power usage to 5% of total power load.

xvii) Calculation of number of proposed Rain water harvesting pits appears to be wrong and hence to be recalculated and re submitted. Maximum hourly rainfall be taken based on 30 years data (Climate logic data) and accordingly, no. of rain water harvesting pits be calculated / decided along with the design of the pit including retention time (hold) showing the norms for the same. Thus, this is to be re-submitted.

xviii) Traffic study should be undertaken from reputed Institute and its findings in terms of LOS (Level of Service) as per IRC norm to be submitted and mitigation plan as and if necessary be submitted.

xix) Separate Entry & Exit Gates with appropriate dimensions to be provisioned, shown in the layout map and be submitted.

xx) Structural stability Study including river bank erosion/ site soil testing be done by NIT, Rourkela as stated by the consultant during presentation besides second opinion from W.R. Department, Government of Odisha on the same as the project is in close proximate to the river.

xxi) STP capacity of 100KLD against requirement for treatment of 93.9 KLD waste water is inadequate and the same be10 to 20 percent extra and therefore, suitable STP capacity be confirmed.

16. The project proponent was requested vide letter no. 202 (06)/ SEAC–(Misc)-28, dated 18.02.2022 to submit the information / documents as sought by the SEAC at para 15 above. But, they have not yet furnished the same.

17. The proposed site was visited by the sub-committee of SEAC on 22.03.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    a) All information sought in the Proceedings to be submitted

    b) The lay out needs to change to avoid separate entry and exit for residential and commercial along with separate Parking for both. The current lay out although has 2 entry and 2 exit gates, the ramp is common and both movements cross each other during operation.

    c) There is no drain available at any side of the roads nor NOC from appropriate authority for connecting the excess treated water shown. As there is no drain mere NOC will not serve the purpose unless the drain is constructed to cater the 21 storied apartment.

    d) No of OHT and Dual plumbing along with residential units

    e) Permission of water resources deptt as commercial unit is a part of the project

    f) Traffic study by a reputed institute

    g) Plinth should be above HFL (undertaking necessary)

    h) Revision of green belt based on layout modification

    i) Kisam & ROR of land

    j) Parking details for residential, commercial, visitors with ECS provision, percentage of each vs norm and layout showing all above parkings

    k) Most important factor is the situation of proposed apartment. It is at one side of ring road (leaving few meters) and the Kathajodi river is at other side of ring road. At present the road at the riverside nearer to the project site has been eroded up to several meters and is under remaking. Thus, safety and stability of such high raise building (21 storied) is a matter of concern and question. Reports from NIT and Irrigation department, Govt of Odisha have been sought by SEAC, from the party on the same.

    l) On getting above information, the issues of safety and stability with regard to proposed structures of 21 storied complex and whether it can stand flash flooding, erosion and earthquake etc needs to be deliberated in SEAC before finalising the recommendation.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as requested vide letter no. 202 (06)/ SEAC–(Misc)-28, dated 18.02.2022 and as sought by the Sub-Committee of SEAC at para 17 above.

ITEM NO. 12

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S LA DEVELOPERS FOR RESIDENTIAL & COMMERCIAL PROJECT OVER A BUILT-UP AREA 56147.44 SQR

LOCATED AT MOUZA- NAYAPALLI & MADHUSUDAN NAGAR, DISTRICT-KHURDA, BHUBANESWAR OF SRI DILIP KUMAR MOTWANI – EC.

1. M/s LA Developers proposes to construct a Residential cum Commercial project located at 1392, 1393, 1398, 1398/3312 & 3313, 1396/3382, 1394/4908/ & 4909, 1394/4966 & 4967, 1341/2127 & 2128 & 2129, 897,897/1822, 898, 899, 900, 901/1740 & 1776, 902/1777, 902/1754, 902/1971, 902, 903, 903/1755, 904/1736, 904/1976, 904/1972, 904/1837, 904/1909, 911,911/1495 &1970, 911/1495, 912/1727, 893/1906, 896, 895 of Mouza-Nayapalli & Madhusudan Nagar, District Khurda, Bhubaneswar, Odisha on a land measuring 2.90 acres or 11756.34 m^2.
2. The nearest Railway Station is Bhubaneswar Railway Station 2.6 km (SE) away from the project site and Biju Patnaik International Airport is at a distance of approx. 3.2 km in SW direction from the project site.
3. The project falls under category “B” or activity 8 (a) - Building and construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
4. The site is coming under development plan of Bhubneshwar Development Authority. The project having total 15 floors (LB+UB+G+14). The maximum height of the building will be 44.51 m.
5. The total plot area is 11756.34 sqm. Net Plot Area is 9590.78 sqm.
6. The permissible ground coverage will be 3836.31 sqm (39.99%) and proposed Ground Coverage will be 3053.66 (31.83%).
7. The permissible FAR will be 57544.68 sqm (@ 6 of plot area) and proposed FAR will be 40798.37 (4.253).
8. The Non-FAR for the project will be 15349.07 sqm.
9. Total Built up area for the project will be 56147.44 sqm.
10. The total population of project after operation of the project will be 1587 persons.
11. **Water Requirement:** The total water requirement will be Ground water met through Bore well which is approx. 170 KLD, out of which total domestic water requirement is 140 KLD. The total domestic water will be 140KLD, out of which fresh water requirement is approx. 104 KLD & flushing water will 57 KLD.
12. **Waste water details:** The project will generate approx. 140 KLD of wastewater. The wastewater will be treated in an onsite STP of 170 KLD capacity. The treated water (126 KLD @ 90% of total waste water) will be reused for flushing (57 KLD), horticulture (10 KLD). Surplus treated water during dry season (59KLD), monsoon season (68 KLD) and winter season (65KLD) will be discharged to external sewer with the requisite permission.
13. Total 16 Rain Water Harvesting (RWH) pit at different locations will be constructed.
14. **Parking Requirement:** Total parking area requirement will be 12377.09 m^2. And Total Parking i.e. 438 ECS will be provided.

15. **Power Requirement:** The power supply will be supplied by State Electricity Board. The requirement load for the project will be approx. 1247 kVA.

16. **Power Backup:** There is provision of 2 Nos. of DG sets of total 1500 kVA (2x 750 kVA) capacity for power back up out of which one DG set of 750 KVA will be kept as standby. Silent DG sets (Radiator cooled). Separate generator yard will be constructed for the residential block.

17. The total solid waste generation will be 675 kg/day.

18. Total green area measures 2416.08 m^2 i.e. 25.16% of the net plot area.

19. Total Project cost is ` 99.156 Crores including land and development cost.

20. The Environment consultant **M/s Grass Roots Research & Creation India (P) Ltd** along with the proponent has made a presentation on the proposal before the Committee on 18.02.2022.

21. The SEAC in its meeting held on dated 18.02.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of the sub-committee of SEAC.

    i) Land document with kissam of the land (Sabik and Hal) and conversion of land to Gaharabari from Revenue Authority before start of the construction work.

    ii) Layout of internal drainage map and their fallout to external public drain.

    iii) Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain including the ownership of the land/ ROW of the land between the project boundary and the public drain. In case of sewer, the schedule of operation of the same from the appropriate authority be submitted

    iv) Parking in terms of space and ECS for 4 wheelers, 2 wheelers including bicycles be calculated separately for dwellers & visitors (floating population) and commercial indicating the norm as well and showing it in the layout map & be submitted. Separate entry and exit gates for residential and commercial to be submitted in layout. Parking for 438 ECS has been stated to be provisioned as against 795 ECS as per MOEF&CC, Govt. of India guide norm as mentioned by PP. The difference be explained.

    v) Copy of Traffic Study be submitted and it should cover all sensitive intersecting traffic points.

    vi) Break up of greenbelt of plot area in terms of plantation and landscape. Revisit the detail calculation of 25% green belt in terms of norm of MoEF&CC, Govt. of India with dimension continuous around the boundary showing in the layout map be submitted

    vii) Recommendations of Fire Safety Deptt. with peripheral road fir movement of fire fighting vehicles and fire control measures

    viii) Plan with detail calculation of solar power consumption vis- a- vis the generation and as percentage of total power demand be submitted.

    ix) Procedure to be undertaken to reduce noise level within limit during construction phase so that it is not affected to nearby vicinity and employees.

    x) Procedure for regular monitoring of quality of treated water to be discharged to the drain.

xi) Physio-chemical analysis of ground water to be submitted.

xii) Copy of letter from PHED Deptt. for refusing to provide water supply to project site and also copy of refusal letter of WATCO for water supply to the project. Quality of ground water (physico- chemical analysis/ parameters), if used, be submitted. NOC from CGWA & permission from Water Resources Department, Government of Odisha need to be submitted for use/ drawl of ground water. Quantity of rain water to be harvested vis- a- vis the norm of CGWA be confirmed as against the proposed drawl of ground water

xiii) Layout map for commercial and residential complex.

xiv) Copy of letter of in-principal approval of building plan by BMC.

xv) Internal drain map.

xvi) Use of Compost converter for treatment of Sewarage solid waste

xvii) STP and ETP process details with technology adopted and post monitoring schedules

xviii) Copy of Airport Authority Clearance for height of the building.

xix) Stack height and position justification.

xx) In view of various options of Water supply provision, WTP is to be shown in the layout plan.

xxi) Provision of Lift, Light, Ventilation, and Fire Safety from the lowest basement to the terrace roof for Health and Safety of the Dwellers to be incorporated in the layout plan.

xxii) Provision of numbers with the capacity of Over Head Tank for Fresh Water for Drinking and Bathing purpose and Treated STP Waste Water exclusively for Toilet Flush with Dual Plumbing System to be incorporated in the Project.

xxiii) Submission of list of measure Electrical equipment like Transformer, DG, Lifts and other Electrical Appliances, Fixtures, Instruments and Devices likely to be installed in the Project along with its Star Rating as per BEE, Ministry of Power, Govt. of India, New Delhi as per the provision of Energy Conservation Act - 2003.

22. The project proponent was requested vide letter no. 228 (2)/ SEAC–(Misc)-28, dated 03.03.2022 to submit the information / documents as sought by the SEAC at para 21 above. But, they have not yet furnished the same

23. The proposed site was visited by the sub-committee of SEAC on 22.03.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

a) Certificate of Structural Stability from appropriate authority as it is situated adjacent to the big drain.
b) Water resources department permission as commercial unit is a part of the project
c) Provision of compost converter and how other solid wastes shall be managed with documentary proof of any agreement done for the same.
d) Traffic study from a reputed institute
e) Technology to be adopted for sewerage, waste water treatment and provision of Bio waste converter if any (details) to be given

f) Revenue map of land superimposing the project site and plot plan starting the entry areas.
g) Kisam and ROR of land
h) Internal drain map showing fall out to existing drain.
i) Permission from BMC for discharging excess treated water.
j) **All points mentioned in proceeding**

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as requested vide letter no: 228 (2)/ SEAC–(Misc)-28, dated 03.03.2022 and as sought by the Sub-Committee of SEAC at para 23 above.

ITEM NO. 13

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. CHHEND HERITAGE HOMES PVT. LTD FOR PROPOSED 2B+G+16 STORIED RESIDENTIAL APARTMENT BUILDING OVER AN AREA OF 1.75 ACRES ON KHATA NO. 9 & PLOT NO. 288 (P) & 289/432(P), MOUZA- CHHEND, R.T.U - 3, P.S. CHHEND, TAHASIL - ROURKELA, SUNDARGARH, ODISHA OF SRI ALOK SHARMA (TOTAL BUILT UP AREA - 7081.94 SQ.MT) - EC

1. The proposal is for Environmental Clearance of M/s. Chhend Heritage Homes Pvt. Ltd for Proposed 2B+G+16 storied Residential Apartment Building over an area of 1.75 Acres on Khata No. 9 & Plot No. 288 (P) & 289/432(P), Mouza- Chhend, R.T.U - 3, P.S. Chhend, Tahasil - Rourkela, Sundargarh, Odisha of Sri Alok Sharma (total built up area - 7081.94 sq.mt).
2. The project falls under category “B” or activity 8 (a)-Building and Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s. Chhend Heritage Homes Pvt. Ltd. has proposed project for construction of Residential Apartments at Plot No. 288(P) & 289/432(P) Khata No. 9, Mouza- Chhend, R.T.U - 3, P.S. Chhend, Tehsil-Rourkela, Sundargarh, Odisha over an area of 1.75 Acres (7081.94 sq.mts) through Public Private Partnership (PPP) mode by Chhend Heritage Homes Pvt. Ltd. and Rourkela Development Authority (RDA). A total area of 5.05 Acres is divided into Affordable Housing Area (AHA) of 3.30 acres on which AHA is undertaken and Developer's area (DA) of 1.75 Acres on which this proposed project (PDP) will be undertaken. The project measuring about to construct 91 Units in 2B + GF + 16 storied building for sale.
4. **Location and connectivity** - The area is located in Survey of India Toposheet No. 73H/15. Nearest Railway station is Panposh Railway station at a distance of 1.5 Km from the project site. The nearest road is Rourkela Ring road, Chhend main Road &Panposh Road at a distance of 1.5Km, 0.3Km &1.5Km respectively. The site is well connected to NH-23 at a distance of 1.7Km. Nearest airport is Rourkela airport at a distance of 1.7Km from the project site. The nearest river is Brahmani River & Koel River located at a distance of 1.3 Km & 2.0 Km respectively. Rourkela Steel Plant & Rourkela industrialship located at a distance of 4.5 Km & 2.5Km respectively.
5. The site is coming under development plan of Rourkela Development Authority.
6. The Building Details Of The Project:

Sl. No.	Area details	Area in Sq.mt.

1.	Total Plot area	7081.94 (1.75 Acres)
2.	Built-up area	47889.13
3.	Ground floor coverage area %	39.94% (3069.85 Sq. mt)
4.	Total open space	4012.09
5.	Green Area	1421.91
6.	Service area	62.5
7.	Parking area	10768.3
8.	Area for Internal Roads	1950
9.	Area of STP & Sewerage	97.2
10.	Maximum height of the building	59.15 meters
11.	FAR (with respect to project Area of 1.75 Acre)	4.92
12.	No. of Apartments/flats.	91 Units
13.	No. of population (office, retail area, residential area)	700 nos. (Approx.)

7. **Water requirement**: The Total amount of water required will be 95 KLD (approx) out of which fresh water requirement will be 63 KLD & it will be made available by PHED, Rourkela and 20 KLD of water will be used for gardening purpose.
8. **Waste water details**: Every building generates wastewater amounting about (80 % of fresh water consumed + 95 % of flushing water). The major source of wastewater includes the grey water from kitchens, bathrooms and black water from toilets. It is expected that the project will generate approx. 89 m3/day of wastewater. The wastewater will be treated in the STP of capacity of 125 KLD provided within the apartment. Out of which 80 m3/day will be recycled within the project for flushing (32 m3/day), landscaping & plantation (20 m3/day), STP loss & for washing purposes (20 m3/day) and discharged to the drain (8 m3/day).
9. The storm water disposal at the site will be made through the peripheral drain system connecting to main drain along with 60-0' wide BT road existing. This work will be taken up during the time of site development work. Total 280 Kg per day amount of solid waste will be generated which will be disposed through the Rourkela Municipal Corporation (RMC).
10. **Power requirement**: The Electricity requirement for the apartment will be 750 KW which will be supplied from the TPWODL, Odisha and 3.4% of the electricity i.e. 25.85 KW will be met through solar energy. Energy conservation measures will be adopted by using maximum use of sunlight and minimize the use of electricity during day time.
11. **Rain Water Harvesting**: Rain Water will be harvested and recharge through 31 recharge pits from the plot area.
12. **Parking Requirement**: Total parking area provided is 10768.36 m^2 Sq.mt. and space provided are lower and upper basement, ground floor and open parking area.
13. **Fire fighting Installations**: Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).
14. **Green Belt Development**: Green belt will be developed over an area of 1421 sqm which is 20.0 % of the plot area; by using the local species like Mango, Sisoo, Chakunda, Karanja, Neem, Sirisa, Kadamba, Krushachuda, Radhachuda, Bottle brush, Gangasiuli, Aonla, Sunari, Coconut, Mango, Guava, Baula, Ashok, Kanchan, Bela, Harida, Bahada,

Kanchana, Mandar, Tagar, Kaniar, ,Karabira, Kamini, Godibana, Ixora, Sugandha raj, Brazil flower, Kagajaphula, Ixora, Kunda, Shtalapadma, Ma, etc.

15. **Solid Waste Management**: From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.4 kg/person/day, which will be about 1000 kg/day for around 750 persons in operational phase. The generated solid waste from the residential apartment will be segregated as biodegradable and non-biodegradable. This will be collected in separate colored bins. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid waste and construction and demolition waste. Two nos of Portable organic converter will be installed.
16. The total population of project will be 700 persons for residential.
17. The estimated project cost is ` 110 Crores.
18. The project proponent along with the consultant **M/s Kalyani Laboratories Pvt. Ltd. Bhubaneswar,** made a detailed presentation on the proposal on 17.01.2022.
19. The SEAC in its meeting held on dated 17.01.2022 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by site visit by the sub-committee of SEAC. 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
	"Kisam" of the land along with relevant document from appropriate Revenue Authority be submitted. The said document needs to be in favour of project proponent with conversion of the Kisam to "Gharabari" before start of the construction of the project.	Land Document is attached as **Annexure 1**. As this is project under PPP mode the land belongs to govt. only.
2.	Since the project site is located at 300 mtrs from Chhend Road and closer to ring road besides being a crowded place, traffic study be undertaken by a domain expert / institute of repute at intersecting point with all public roads, considering the traffic 10 years ahead with other projects and decongestion plan (if any required) based on the study findings be submitted. If the said study has already been undertaken by domain expert, a copy of the same be submitted with its findings and recommendations.	This project is a part of Housing for all scheme proposed by Rourkela Development Authority. A part of this project i.e., Affordable Housing Project has already obtained environment clearance and detail traffic study has been carried out for the project. So, we are submitting the traffic study report for reference. **Annexure 2**.
3.	1421.91m2 land (exactly) has been stated to have been provisioned for green belt development without land scaping. As such, details of dimensions of green belt with continuous stretch surrounding the boundary with three tier plantation (including the species) be submitted, showing in the layout map. Provision of land scaping as possible be worked out, showing in the layout map and be	The land scape map showing the green belt area along with dimension is given as **Annexure 3**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	submitted.	
4.	Stretch with dimension in the layout map for free movement of fire tender alongside the boundary and pedestrian pathways (all the sides) be submitted.	Lay out map showing the internal road and fire tender movement road is given as **Annexure 4**.
5.	Internal drainage layout system with dimension (both for run-off and waste water) be submitted along with its connectivity to external public drain and permission from the authority of the public drain to take the additional of this project along with the ROW of the land necessary to connect the internal drain with the public drain.	Internal drainage layout plan attached along with connectivity to external public drain is attached as **Annexure 5**. The public drain is passing in front of the project site. So additional land is not required. After the completion of rain water harvesting and drainage network permission will be obtained from RMC. Document attached **Annexure 6**.
6.	Width of the peripheral road at all four sides of the project.	The width of the peripheral road is 7.5m along the four side of the project site.
7.	No. of rain water harvesting pits (31 nos.) has been considered with maximum rain fall of 100 mm/hr in 24 years and the calculation has been made with co-efficient of run off for roof top = 0.80, parking = 0.60 and green area=0.20 without retention time. This looks very high and be revisited taking into consideration maximum rainfall in 24 hours in past 30 years based on logical climate data and norm for retention time /co-efficient of runoff with relevant reference be submitted as well.	The detail revised rain water harvesting calculation is given as **Annexure 7**.
8.	Since Rourkela is subject to heat and cold wave weather, specific disaster mitigation management plan including inbuilt construction characteristics (if any) be submitted.	Disaster management plan for hot and cold wave weather in the city attached as **Annexure 8**.
9.	Provision of parking, both in terms of space & ECs confirming to the norms showing the demarcation in the layout map for 4 wheelers / 2 wheelers / bicycles be submitted.	Details of parking in terms of ECS is given as **Annexure 9**.
10.	Detail plan with calculation of solar power consumption vis-à-vis the generation be submitted indicating the % of the total demand.	Detail plan with calculation of solar energy is given as **Annexure 9**.
11.	Correct location of DG set with stack height and installation drawing of exhaust pipe of the stack be submitted in reference to predominant wind direction and the location of the residential town be submitted.	Location of DG set is given in **Annexure 10**. The height of the DG stack will be building height + 1.5m as per the CPCB/ MoEF guidelines.
12.	The layout to accommodate WTP, Waste Water Treatment Plant, STP with Dual plumbing system with matching OVERHEAD tank for fresh water and wastewater and OIL water separation pit for the project.	The lay put plan showing WTP, waste water treatment plant, STP with dual plumbing given as **Annexure 11**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
13.	The recommendation of the Fire Safety Department be obtained on submission of revised layout plan and Superstructure plan prior to construction activity so that it can be accommodated during construction to facilitate issue of Fire Safety Certificate.	The recommendation of Fire safety department is attached as **Annexure 12**.

20. The proposed site was visited by the Sub-Committee of SEAC on 28.01.2022. Following are the observations of the Sub-Committee.

a) No construction has been carried out in the designated area; only preparatory work such as levelling of the surface is being carried out.

b) Adequate provision has been earmarked in the proposed project for movement of fire tender on all sides.

c) The proposed locations of the water treatment plant, sewage treatment plant and the drainage layout are found to be satisfactory.

d) The proposed DG set location is on the south west corner of the project.

e) The proponent was advised to decide the location DG set based on the local meteorological data.

Considering the information furnished and the presentation made by the consultant, **M/s Kalyani Laboratories 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 – F** in addition to the following specific conditions**.**

i) "Khatian" (Patta after Mutation) for the entire land from the appropriate Revenue Authority with 'Kisam' as Gharabari shall be obtained along with ownership before which construction work shall not start. **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 Sewage and treated effluent 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) The proponent shall use solar energy of 5% as proposed.

iv) Trees located within the project area shall be de-rooted and re-rooted / transplanted to alongside the boundary green development area instead of cutting. If there will be any tree cutting required, requisite permission for the same shall be obtained from the Forest Department.

v) To reduce discharge of treated water to open drain, the proponent shall use more water for increased number of trees proposed to be planted in the green belt area & shall also

utilize this treated water for car washing, floor washing to minimize the surplus discharge to drain.

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

vii) The proponent must maintain adequate provisions for the movement of fire tender on all sides.in the affordable housing area in addition to the Developer's Area.

viii) **All the compliances submitted/ committed by PP (s) shall be strictly adhered to by them.**

ITEM NO. 14

PROPOSAL FOR EXTENSION OF VALIDITY OF ENVIRONMENTAL CLEARANCE FOR DINDIPALLI DECORATIVE STONE MINES OVER AN AREA OF 4.055 HA LOCATED IN VILLAGE - DINDIPALLI, TAHASIL - BHANJANAGAR, DIST- GANJAM OF SMT. RANJULATA SWAIN – EXTENSION OF EC.

1. This proposal is for Extension of validity of Environmental Clearance for Dindipalli Decorative Stone Mines over an area of 4.055 Ha located in village - Dindipalli, Tahasil - Bhanjanagar, Dist- Ganjam of Smt. Ranjulata Swain.
2. Environmental Clearance was granted by the District Environmental Impact Assessment (DEIAA), Odisha vide Letter no. 1738/ DEIAA dated 20.12.2016 valid till 31.03.2020.
3. The lease of Dindipalli Decorative Stone Mines of Smt. Ranjulata Swain over an area of 4.055Ha was granted by Steels & Mines Dept., Govt. of Odisha vide letter no. 3033/SM, dated 10.04.2015.
4. The lease was executed on 19.12.2017 and based on the execution the validity of mining plan is up to 2022.
5. Consent to Operate obtained from Odisha State Pollution Control Board vide letter no 1685/CTO-1653/2018 dated 24.04.2018 valid till 31.03.2020.
6. Though the opening notice has been given to mining office on 02.08.218 due to local transportation issue mining could not initiated till March 2020. Further the mining activity initiated in 17th March 2020 and a total of 117.218 m^3 decorative stone was excavated and again mine was closed from 22.03.2020 due to COVID-19 Pandemic situation.
7. The EC was granted for 5 years i.e. upto 31.03.2020. As per MoEF&CC, Govt. of India circular J-11011/15/2012-IA(II)M dated 20.03.2015 the validity of EC will be for 30 years irrespective of mining lease renewal
8. The entire Mining Lease area of 4.055 hectares comprises of non-forest land.
9. There is no sensitive ecological habitat like National Parks, Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant reserves within 10 km radius of ML area. No Schedule I species are found within the study area.
10. The Environment consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** along with the proponent has made a briefing on the proposal before the Committee.

21. The SEAC in its meeting held on dated 19.02.2021 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
1.	Certified copy of half yearly condition wise compliance Report on Environmental Clearance conditions submitted to MoEF&CC, Regional Office, Bhubaneswar	Copy of compliance report submitted to SEIAA and MoEF&CC, Regional Office, Bhubaneswar has been submitted by Project proponent.
2.	Copy of lease sanctioned by the Steel and Mines Department, Govt. of Odisha	Copy submitted.
3.	No interference with ongoing LI project in area- a certificate regarding from concerned Executive Engineer, Water Resources Deptt	Not submitted
4.	Year wise production details duly certified by Mining Officer	Copy submitted.

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

a) No interference with ongoing LI project in area- a certificate regarding from concerned Executive Engineer, Water Resources Deptt.

ITEM NO. 15

PROPOSAL FOR EXTENTION OF VALIDITY OF ENVIRONMENTAL CLEARANCE FOR GANGANAPUR DECORATIVE STONE DEPOSIT OVER 4.974 HA. IN VILLAGE GANGANAPUR, TAHASIL - PURUSOTTAMPUR, GANJAM FOR PRODUCTION OF DECORATIVE STONE @ 2980.50 CUM(MAXIMUM)/ANNUM OF SRI SIBARAM PATTNAYAK – EC

1. The proposal is for Environmental Clearance of Ganganapur Decorative Stone Deposit over 4.974 Ha. in village Ganganapur, Tahasil - Purusottampur, Ganjam for production of decorative stone @ 2980.50 Cum(Maximum)/annum of Sri Sibaram Pattnayak.
2. As per the EIA Notification S.O. 1533, dated 14th September 2006 and subsequent amendments, this project falls under Category B (B1) Project or Activity 1(a) Mining of minerals.
3. Mining Plan was approved by Directorate of Mines vide letter no. 9777, dated 31st October 2016.
4. Environmental Clearance was granted in favour of Ganganapur Decorative Stone Deposit by DEIAA, Ganjam, vide letter no.255/DEIAA, dated 29th April 2017, valid till 31st March 2021 for production of Decorative Stone @ 2980.50 CuM/Annum (Maximum).
5. Mining Lease for the said mine has been granted by Steel & Mines Department, Govt. of Odisha vide letter no.8326/SM, Bhubaneswar, dated 16th October 2021 valid for 30 years.
6. Mine is not operated yet due to delay in grant of Lease.

7. Proponent proposes for Extension of Environmental Clearance.
8. **Location and Connectivity** - Ganganapur Decorative Stone Deposit, over an area of 12.290 Acres or 4.974 Hectares is located in village Ganganapur under Purusottampur Tahasil of Ganjam District. The proposed lease area is bounded by latitude N19° 30' 11.00" – N19° 30' 17.80" and longitude E84° 47' 04.20" – E84° 47' 16.40" & It is a part of the area covered in the Survey of India Toposheet No. E 45 A 14 (74A/14). The lease area is accessible from Ganjam, the district headquarter, covering a distance of 25 km State Highway on Ganjam-Hinjilicut road up to Hinjilicut, further 12km metal road between Hinjilicut and Ganganpur via Sikiri. The nearest Railway station is Berhampur located at a distance of 40 km from the mine area.Other facilities like electricity, water are available at Hanumantapalli which is situated at 0.50 km from the lease area. Education upto class-V is available at Hanumantapalli village while education up-to high school level is available at Kolidaspur. Police station and Tahsil are located at Hinjilicut and Purushottampur respectively. Primary Hospital is located at Purushottampur and Postal facility is available at Kolidaspur.
9. The area is a hill ridge trending NE-SW with parts of intervening valleys with small bushes. There is no forest land in the M.L. area. The highest hill peak is in the northeastern part of the area and lowest is at the southwestern corner of the lease area. The highest and lowest altitude of the lease area is 61 mRL and 33 mRL respectively. There is neither any seasonal nor any perennial nalaflows within the lease M.L. area. The drainage pattern of the area is dendritic. Surface run-off of the lease area is drained through the natural gradient. A canal is flowing almost parallel to the southern boundary of the lease M.L. joins with the Rushikulya River which flows at a distance of 0.50 km from the western boundary of the lease M.L. area and controls the drainage system of the region.
10. **Method of Mining** - During the mining plan period mining will be done by opencast semi-mechanized method will be adopted using machineries such as Excavator, Line offset, compressor, jack hammer, wire ropes & drill rod etc. Firstly the weathered zone of 0.5-1.0 m will be scraped from the top. After removal of weathered zone, drilling will be carried out by using jack hammers driven by air compressors as per the requirements adhering to the drilling norms. Both vertical & horizontal holes will be done to expedite wire saw cutter to detach the stone blocks from the quarry face. The Depth of the hole is proposed to be 2 m, 3 m & diameter will be 32mm.
11. **Geological and Mineable Reserves** - It has been estimated that the geological resource of the decorative stone deposit is 183621.00 m3 and mineable reserve is 98140.50 m3.
12. **Production and waste management details** – The details of production of decorative stone and waste is mentioned in below table.

Year	Volume of Rocks	Volume of Marketable Ore	Volume of Blocks	Volume of Tiles	Volume of Waste

	(m^3)	(m^3)	(m^3)	(m^3)	(m^3)
1st Year	8415.00	2524.50	1691.42	833.09	5890.50
2nd Year	8685.00	2605.50	1745.69	859.82	6079.50
3rd Year	8865.00	2659.50	1781.87	877.64	6205.50
4th Year	9150.00	2745.00	1839.15	905.85	6405.00
5th Year	9935.00	2980.50	1996.94	983.57	6954.50
Total	45050.00	13515.00	9055.05	4459.95	31535.00

13. **Solid Waste Management** - The waste generated from the quarry is proposed to be dumped in earmarked site. 3.762 Ha. in conceptual period. About 40 % of wastes will be utilized in construction and maintenance of road. The wastes are proposed to be stacked maintaining the overall slope at less than 280 and to be sequentially graded, compacted and leveled. Retaining wall of 80 mtr and garland drain of 75 mtr will be erected around the dumping yard to arrest the washing off of loose sediments.Since the dump constitutes of rocky mass, no plantation of saplings on the dump slope is envisaged.
14. **Power Requirement** - 100 KVA shall be required which shall be met through DG Set.
15. **Water Requirement** – 1.5KLD of water shall be required which will be sourced from nearby villages.
16. **Green Belt**– Total area provided for green belt is 2600sqm and 400 nos of saplings will be planted around safety zone.
17. **Employment Potential** - Total number of employee will be around 30 which includes skilled, semi-skilled & unskilled category in the mine.
18. The **project cost** is ` 2.5 Crores and Environmental Management Cost – Rs. 90,000 per annum.
19. The Environment consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar** along with the proponent have made a detailed presentation on the proposal before the Committee on 22.12.2021.
20. The SEAC in its meeting held on dated 22.12.2021 decided to take decision on the proposal after receipt of the following information / documents 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
1.	EC granted by DEIAA in April '2017. So, compliance to earlier EC be submitted duly authenticated by appropriate authority.	Mining operation has not yet started as there was delay in grant of mining lease. MINING LEASE has been granted by Steel & Mines Department, Govt. of Odisha vide letter no.8326/SM, Bhubaneswar, dated 16th

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		October 2021 valid for 30 years. The lease has not been executed also. Letter of Mining Officer is enclosed as **Annexure-1** for reference.
2.	How far is Rushikulya Turtle nesting place from the project site? If nearer to the site, then measures w.r.t height & noise be submitted for avoiding distance of any nature to turtle nesting.	Rushikulya River is at 0.51 Km in west direction of mine. But, Olive Ridley Turtle nesting place near the Rushikulya River estuary is located at VillageSipakuda, Tehsil-Rambha of Ganjam District. This place is 34 Km (SE) from proposed Ganganapur Decorative stone Deposit. Google map showing aerial distance between the mine and turtle nesting place is given in **Annexure-2**. Hence, there will not be any impact of proposed mining on the Rushikulya Turtle nesting place.
3.	Volume of rock mas / waste / non-saleable stone together is very high to the tune of 6, 12,070m3. So the management of the same on vis-à-vis basis be submitted.	In the scheme period of 5 years, 31,535 CuM of waste will be generated. Out of which 40% of waste will be utilized for construction and maintenance of road. Rest of the wastes i.e. 18,921 CuM will be dumped in the earmarked area of 2176 m2 area. Height of the dump will be 10m with 2nos. of terraces. The wastes are proposed to be stacked maintaining the overall slope at less than 280 and to be sequentially graded, compacted and leveled. Since the dump constitutes of rocky mass, no plantation on the dump slope is envisaged. Further details of waste management along with calculation is given in **Annexure-3**.
4.	Source of water? Why not STP of low capacity?	• Total water requirement of the mine is 1.5 KLD, which will be sourced from nearby villages. • Out of which domestic water requirement is 0.7 KLD for 35 number of employees. • Generation of domestic waste water will be 0.56 KLD, which will be discharged to soak pit via septic tank. • Due to less quantity of domestic waste water, STP is not required. • Soak pits will be cleaned and maintained periodically.
5.	Details of garland drain, settling pond,	**DIMENSION OF RETAINING WALL,**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	silt management to nearest surface run-off / wash off be submitted.	**GARLAND DRAIN & SETTLING POND** Retaining Wall around dump = 80m X 1m X 0.8m Garland Drain Around dump = 85m X 1m X 0.8m Settling Pond = 25m X 20m X 5m. Silt Management is given against **point no.x.**
6.	Haulage road details be submitted.	Dimension of haulage roads are given below: • Height = 3m • Width = more than the height. • Haul roads will be compacted from time to time. • Water sprinkling will be done by water tankers to suppress fugitive dust generated from haul roads. • A part of the wastes will be used for maintenance of haul roads.
7.	Dump management with detail calculations of waste utilization / inventory / sale including its chemical characteristics be submitted.	Dump management and utilization is explained against **point no. iii.** Characteristics of waste is enclosed in **Annexure-4.**
8.	Water management with rain water harvesting along with calculation be submitted.	No water body is present inside the mine. **Surface Water Management** • No waste water will be generated from the mine. • Hence impact on nearest surface water bodies will be negligible. • Surface run-off to be generated during rainy season will be collected through garland drains and settling pond. **Ground water Management** • Depth of excavation /mining shall be restricted to above water level. • Ultimate pit level will be at 33 mRL and Ground water table is at 20 mRL. • As mining will not touch ground water table, there will be no impact on ground water regime. **Water Conservation** Rain water harvesting in quarry pits is proposed for the present project. **Calculation of Surface run-off / Rain**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		Water Harvesting: Lease area= 4.974 Ha. = 49,740 m2 Water harvesting Potential = 49,740 X 0.6 X 20 X 4 /1000 = 2388 CuM considering 4 hours retention. This much of water will be collected in settling tank 25m X 20m X 5m. After 4 hours of retention, clear water will be discharged / reused After the scheme period, mined out voids will be used for storage of rain water for further utilization for dust suppression and green belt.
9.	Soil profile study undertaken by approved domain expert be submitted.	**Annexure-5.**
10.	Silt management including SOP for silt management for desliting of surrounding water body(s) / Agricultural land be submitted.	**Annexure-6.**
11.	Proposed "Zero discharge" mechanism be submitted.	**Annexure-7.**
12.	"NOC" from CGWA / permission from W.R Deptt. Govt. of Odisha for use of ground water be submitted.	Water requirement is very less i.e. 1.5 KLD, which will be sourced from nearby village wells. After the scheme period, mined out voids will be used for storage of rain water for further utilization for dust suppression and green belt. Hence, only 0.7 KLD will be sourced from nearby villages for domestic purpose. Hence, permission from WR Dept/CGWA is not required
13.	Proposed budget for CSR / CER as per the law with due approval of the Govt. authority be submitted.	As per the MoEF&CC guidelines, 2% of the Project cost (2% of Rs.2.5 Crore = Rs. 5 Lakhs) will be spent for peripheral development activities on CER head.
14.	Certificate from the concerned mining officer that there is no mine within 500m radius of proposed quarry.	Letter of Mining Officer is enclosed as **Annexure-1** for reference.
15.	Certificate from the concerned DFO that there is no forest land involved in the lease area.	Copy enclosed as **Annexure-8**.
16.	Details of waste management along with the composition of waste is to be provided.	• Details of waste management is explained in **point no. iii**. • Composition of waste is enclosed as **Annexure-4**.

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 extension of validity period of Environmental Clearance upto lease period with stipulated conditions as per **Annexure – D.**

ITEM NO. 16

PROPOSAL FOR DEMERGER OF EXISTING ENVIRONMENTAL CLEARANCE FROM M/S DALMIA CEMENT (BHARAT) LTD.UNIT: KAPILAS CEMENT MANUFACTURING WORKS TO KAPILAS CEMENT MANUFACTURING WORKS (A UNIT OF DALMIA CEMENT (BHARAT) LTD.) AND DALMIA DSP (A UNIT OF DALMIA CEMENT (BHARAT) LTD.) AT EXISTING SITE AT VILL- BISWALI, TAHASIL – TANGI, DIST – CUTTACK, ODISHA OF SRI RAMAWTAR SHARMA – MODIFIED EC

1. This proposal is for Demerger of existing Environmental Clearance from M/S Dalmia Cement (Bharat) Ltd. Unit: Kapilas Cement Manufacturing Works to Kapilas Cement Manufacturing Works (A unit of Dalmia Cement (Bharat) Ltd.) and Dalmia DSP (A unit of Dalmia Cement (Bharat) Ltd.) at existing site at Vill- Biswali, Tahasil – Tangi, Dist – Cuttack, Odisha.
2. As per EIA Notification dated 14th Sep, 2006, as amended from time to time; this project falls under Category “B”, Project or Activity 3 (b) Cement Plants.
3. Dalmia Cement (Bharat) Limited operates Rajgangpur Works, in Sundargarh District as mother Clinkerisation unit and Kapilas Cement Manufacturing Works in Cuttack District as only grinding unit. The KCMW is operating with a capacity of 4.2 MTPA (1.7 MTPA + 2.5 MTPA). In addition, a Solar PV Captive Power Plant is in operation with capacity 2.5 MW and now newly another 17.5 MW Solar PV Captive Power Plant has been installed in the same premises which will be in operation very soon.
4. Earlier in 2018, it was proposed and planned for the expansion of existing KCMW from 1.7 MTPA to 4.2 MTPA, accordingly, the EC, CTE & CTO have been issued stipulated with all requisite conditions but later the management proposed to separate the expansion unit (capacity 2.5 MTPA) from the parent unit by demerging present Environmental Clearance.
5. The Unit predominantly manufactures Cement under the reputed brand of ‘Konark’ & ‘Dalmia’ Catering to the coastal, northern and southern belts of Odisha.
6. Dalmia DSP, Cuttack unit is a branch unit of Dalmia DSP’s Rajgangpur, which is the parent unit. Both have the same IEM Acknowledgement Number. Both units are sharing same GST number.
7. Dalmia DSP, Cuttack unit is an extension of Dalmia DSP’s parent unit at Rajgangpur. So, it is proposed to be declared as separate identity, not the expansion of Kapilas Cement Manufacturing Works, unit of Dalmia Cement (Bharat) Limited, Cuttack. Previously, it was recorded as expansion of Kapilas Cement Manufacturing Works, unit of Dalmia Cement (Bharat) Ltd., Cuttack. Presently, PP propose to separate both units.
8. After approval for EC demerger, PP will approach Odisha State Pollution Control Board (OSPCB) for necessary correction in CTO for the Dalmia DSP Unit, Cuttack.
9. Though the new mill is a expansion of the existing one, now proposed to demerge and separate the new mill of 2.5 MTPA as every equipment, silo, packers, etc… are newly

installed/built and will be operated separately and the finished product will be packed separately. It is to be therefore treated as a new and separate entity for better raw material sourcing, business tracking, accountability and profitability at all the time with the mother clinkerisation unit at Rajgangpur.

10. Present statutory Clearances has been obtained are transfer of EC from Kapilas Cement Manufacturing Works (A unit of OCL India Ltd.) to Dalmia Cement (Bharat) Ltd., Unit: Kapilas Cement Manufacturing Works for the proposal of cement grinding unit, expansion from 1.70 MTPA to 4.20 MTPA, at village- Biswali, Tehsil- Tangi, Dist.- Cuttack, Odisha vide letter no. 895/SEIAA Dt. 12.03.2021
11. **Location and connectivity** - The site is located at Village Biswali, PO. Barunia, District. Cuttack, Odisha. The site falls under the Survey of India Toposheet No. 73 H/14, 73 L/2. The Latitude and Longitude of the proposed site is 20^0 37' 26" N and 85^0 59' 45" E. The Plant is located at about 10 km from NH-16 (Formerly NH-5). The nearest major town is Cuttack at a distance of 35 KMs from the plant site. The major Railway station is at Cuttack, which is 35 km from the existing Plant site. KCMW is having its own private Railway siding within the Plant premises which is connected to Byree railway station located at a distance of about 4 km from the plant site. The existing Railway siding is sufficient to take care of the proposed expanded plant's requirement. The nearest airport is at Bhubaneswar, which is about 65 kms from the Plant site. No National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger / Elephant Reserve, Wildlife Corridor etc… fall within a 10 km radius of the plant site.
12. **Raw Materials obtained** - Raw materials required for the proposed project are Clinker, Slag, Gypsum & Fly ash. Clinker will be sourced from its parent Unit at Rajgangpur, Odisha and from other Group Units as & when required, BF Granulated slag will be sourced from nearby Steel Plants in Kalinga Nagar, Dhenkanal-Angul Belt, Vizag, etc., Gypsum from nearby Chemical/Fertilizer Plants in Odisha, West Bengal, Andhra Pradesh and from imported sources and Fly ash from nearby Thermal Power Plants in the State of Odisha. Transportation of raw material and finished product (cement) would be done by road and rail.
13. **Water requirement** -The total water requirement of the proposed project is 680 KLD. 400 KLD for existing 1.7 MTPA & additional 280 KLD for 2.5 MTPA. The Unit is already a Water positive Unit with proper Rainwater harvesting facilities.
14. **Power requirement** - The total power requirement for the proposed project will be 25 MVA which will be sourced from Open Access Power from own CPP at Rajgangpur/ Existing Captive Solar PV Power Plant of 2.5 MW capacity & Proposed Solar PV Power Plant/ OPTCL/ CESU.
15. **Rain Water Harvesting**: There is the proposal for construction of rain water harvesting pits 7 nos. within the premises of the project area to collect about 50% of the rainfall received from the area and used for ground water recharge.
16. **Green Belt Development** - The total project area is 348 acres. About 115 acre (33%) of the total project area has already been covered under green belt & plantation.
17. The total nos. of employees will be 827(733+94).

18. The project proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar,** made a detailed presentation on the proposal on 17.12.2021.

19. The SEAC in its meeting held on dated 17.12.2021 decided to take decision on the proposal after receipt of the certain information / documents from the proponent. The project proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
i)	Board resolution of the holding company (to be demerged) and the proposed two to be demerged companies for the purpose.	Extract of Board Resolution Indicating separate unit. As per **Annexure-1**.
ii)	Status on this w.r.t to factory & labour licences (s) from Directorate of Factories & Boilers and Labour Commission rate respectively.	On receipt of Environmental Clearance (EC) followed by CTO, we will make applications to the Labour Commissioner and Directorate of Factories & Boilers for license/occupational certificate as per law.
iii)	"Kisam" of the part of the land is said to be Agriculture, "Gharabari & Private" which need to have been converted to "Industrial use" as of today. A clarification on this be submitted.	Private Land 152.262 Ac. Out of which 127.262 Ac is converted to industrial Kissam and only 25 Ac. Of land is under the process of conversion to industrial Kissam. The letter is submitted to the Tahsildar, Darpan & Tahsildar, Tangi-Choudwar. As per **Annexure-2**. Forest Land of 11.970 Ac., has obtained stage-II clearance. As per **Annexure-3**. The total Govt. land is 183.77 Ac. As per the Notification the demised land will be utilized for the purpose for which it is alienated and not directed/ transferred in favour of any individual or others for any purpose. As per **Annexure-4**.
iv)	A legal affidavit from an Executive Magistrate need to be submitted by the applicant / PP seeking demerger of EC that they shall own any legal liability as & if necessary as per applicable laws for the purpose including indemnity for ay financial liability arising out of this demerge.	A legal Affidavit from the Executive Magistrate is enclosed as per **Annexure-5**.
v)	Latest EC compliance duly authenticated by Regional office	The Environmental Clearance (EC) granted vide letter No. 7482/SEIAA dated

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	MoEF & CC, Bhubaneswar.	06.11.2019 and subsequently transferred to DCBL vide letter No. 895/SEIAA dated 12.03.2021. We have been uploading half-yearly EC compliance in the MoEF portal regularly. Such authentication is usually required for compliance in case of expansion/modification of the plant and our application is for neither of both.
vi)	All the physical features, use of natural resources, raw materials, inputs & outputs, environmental parameters etc. be shown in a tabular (matrix) form for stand-alone proposed to be demerged units, common services, total corresponding existing and basis of apportionment be submitted.	Details of all physical features, use of natural resources, raw materials, input & output, environmental parameter etc, is shown in a tabular (matrix) for stand-alone cement mill proposed to be demerged, common services have been attached as per **Annexure-6**.
vii)	Copy of Agreement (legal instrument) for sharing the common services including responsibility of operation & maintenance of the some with accountability & compliance to Regulatory Authority (S) be submitted.	A mutual Agreement in the shape of an Affidavit between demerged units for sharing the common services including the responsibility of operation & maintenance of the same with accountability & compliance to Regulatory Authority attached as per **Annexure-7**.
viii)	Separate layout with dimensions of the demerged units vis-à-vis the existing original undivided unit be submitted with separate boundary walls and separate entry / exit gates for demerged (proposed) units with separately for employees / visitors & materials movement gate(s).	The detailed layout has been attached as per **Annexure-8**.
ix)	Physical area apartment proposed including manpower looks disproportimate with reference to capacity (s) of the proposed demerged units. Justification for the same be submitted.	Details have been attached as per **Annexure-9**.
x)	Separate demarcation of the proposed demerged units and the common services be shown in the	Separate demarcation of the proposed demerged units and the common services has been shown in the layout.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	existing layout map of the existing plant and respective boundary wall(s) need to be in place.	Once the Environmental Clearance (EC) is granted for the proposed demerge units, the boundary wall be placed with the respective gate within 6 months since it involves civil construction is over, we will submit the copy of the drawing to SEIAA.
xi)	Subject to compliance on (i) to (x) above if the same are found in order, EC (s) for proposed demerged unit may be considered without prejudice to any order or direction from any court of competent jurisdiction and / or competent authority (s) under applicable laws.	We agree for the same and the same may be put as a specific condition.
xii)	On the event of grant of EC(s), if anything is found otherwise at any point of time, the EC so granted shall deem to have withdrawn / revoked with immediately effect besides levy of penalty and or any action as considered deem fit under the applicable laws.	We agree for the same the same may be put as a specific condition.
xiii)	Copies of Environmental Clearance and minutes of meeting of similar type of proposals if any considered by MoEF&CC, Govt. of India.	A similar demerger proposal of JSL has been attached as per **Annexure-10** for ready reference.

20. The SEAC in its meeting held on 15.03.2022 observed that the proponent has not furnished "Copies of Environmental Clearance and minutes of meeting of similar type of proposals if any considered by MoEF&CC, Govt. of India" as pointed out at para 19 (xiii). The copy which the proponent has submitted is nothing but Terms of Reference issued to JSL. Further, the proponent has not furnished detailed CTE and CTO status of the Board for both the proposals for which demerger has been sought for.

21. The SEAC in its meeting held on 15.03.2022 decided to take decision on the proposal after receipt of the following from the proponent. The project 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.	Copies of Environmental Clearance and minutes of meeting of similar type of proposals if any considered by	A similar demerger proposal of JSL has been attached as per **Annexure-1** for ready reference.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	MoEF&CC, Govt. of India	
2.	All the physical features, use of natural resources, raw materials, inputs & outputs, environmental parameters etc. be shown in a tabular (matrix) form for stand-alone proposed to be demerged units, common services, total corresponding existing and basis of apportionment be submitted.	Details of all the physical features, use of natural resources, raw materials, input & output, environmental parameters etc., are shown in a tabular (matrix) for the stand-alone cement mill proposed to be demerged, common services have been attached as per **Annexure-2.**
3.	CTE and CTO status of the Board and Environmental Clearance status of the existing projects.	The CTE, CTO and Environmental Clearance status of the existing project is attached as **Annexure-3** for ready reference
4.	Separate layout maps for both the units proposed to be de-merged.	The detailed layout has been attached as per **Annexure-4**.
5.	Plant and Machinery, Buildings, and any other structure in the proposed independent Boundary of 02 Adjacent units proposed to be de-merged.	The details have been attached as per **Annexure-5.**

22. The Committee observed the following:

A. **Transfer of Environmental Clearance of Cement Grinding Unit (1.7 MTPA) from M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works to M/s Kapilash Cement Manufacturing Works (a unit of Dalmia cement (Bharat) Limited) (new company)**:

i) M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works was granted Environmental Clearance for cement grinding Unit (4.2 MTPA) at village- Biswali, P.0-Barunia, Tehsil- Tangi, District- Cuttack, Odisha vide letter No.-895/SEIAA dated 12th March 2021.

ii) Further, M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works was granted Environmental Clearance for expansion of the Cement Grinding Unit vide letter no. 21592/02-IND/04-2019 dated 6th November 2019 for addition of new facilities as below:

Sl. No.	Unit	Existing	Modification	New facility	Configuration accorded in EC
1	**Cement Grinding Unit-I**	**1.7 MTPA**	**-**	**--**	**1.7 MTPA**
2	Cement Grinding Unit-II	--	--	2.5 MTPA	2.5 MTPA

iii) The status of implementation of the project at village- Biswali, P.0-Barunia, Tehsil- Tangi as per Environmental Clearances accorded to M /s

Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works, for cement Grinding Unit vide Letter No. 895/SEIAA, dated 6th November 2019 for Expansion , as below:

Sl. No.	Facility	Capacities as per EC	Existing Installation
1	**Cement Grinding Unit-I**	**1.7 MTPA**	**1.7 MTPA**
2	Cement Grinding Unit-II	2.5 MTPA	2.5 MTPA

iv) M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works, has proposed to transfer the existing Cement Grinding Unit of capacity 1.7 MTPA to M/s Kapilash Cement Manufacturing Works (a unit of Dalmia cement (Bharat) Limited) and capacity 2.5 MTPA to M/s Dalmia DSP (a unit of Dalmia cement (Bharat) Limited).

v) It was reported that the 1.7 MTPA Cement Grinding Unit is located in 311 Ac. of land within the premises of the Plant of M/s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works within the bounded coordinates as given below:

S. No.	LONGITUDE	LATITUDE
1	**89° 59' 45"**	**20° 37' 26"**

vi) The raw material requirement for M/s Kapilash Cement Manufacturing Works (a unit of Dalmia cement (Bharat) Limited) for 1.7 MTPA Cement Grinding Unit will be 1.7 MTPA.

Sl. No.	Raw Materials Details	Quantity
1	Clinker	629595TPA
2	Fly Ash	150450TPA
3	Slag	885955TPA
4	Gypsum	34000TPA
5	Coal	40000 TPA
6	Power	7.5 MW
7	F.0. (KLPA)	32

vii) The water requirement for the Cement Grinding Unit will be 400 m3/day and the power requirement will be 10MVA.

viii) The capital cost of the 1.7 MTPA Cement Grinding Unit was Rs.487.64 Cr and the Rs. 20 Cr was earmarked for the Environmental Protection measures as a capital.

ix) No court case or violation under EIA Notification, 2006 to the project or related activity reported by project proponent.

B. Transfer of Environmental Clearance of Cement Grinding Unit (2.5 MTPA) from M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works to M/s Dalmia DSP (a unit of Dalmia cement (Bharat) Limited) (new company):

i) M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works was granted Environmental Clearance for cement grinding Unit (4.2 MTPA) at village- Biswali, P.O-Barunia, Tehsil- Tangi, District- Cuttack, Odisha vide letter No.- 895/SEIAA dated 12th March 2021.

ii) Further, M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works was granted Environmental Clearance for expansion of the Cement Grinding Unit vide letter no. 21592/02-IND/04-2019 dated 6th November 2019 for addition of new facilities as below:

Sl. No.	Unit	Existing	Modification	New facility	Configuration accorded in EC
1	Cement Grinding Unit-I	1.7 MTPA	-	--	1.7 MTPA
2	**Cement Grinding Unit-II**	**--**	**--**	**2.5 MTPA**	**2.5 MTPA**

iii) The status of implementation of the project at village- Biswali, P.0-Barunia, Tehsil- Tangi as per Environmental Clearances accorded to M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works, for cement Grinding Unit vide Letter No. 895/SEIAA, dated 6th November 2019 for Expansion, as below:

Sl. No.	Facility	Capacities as per EC	Existing Installation
1	Cement Grinding Unit-I	1.7 MTPA	1.7 MTPA
2	**Cement Grinding Unit-II**	**2.5 MTPA**	**2.5 MTPA**

iv) M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works, has proposed to transfer the existing Cement Grinding Unit of capacity 2.5 MTPA to M/s Dalmia DSP (a unit of Dalmia cement (Bharat) Limited) and capacity 1.7 MTPA to M/s Kapilash Cement Manufacturing works (a unit of Dalmia cement (Bharat) Limited).

v) It was reported that the 2.5 MTPA Cement Grinding Unit is located in 37 Ac. of land within the premises of the Plant of M/s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works within the bounded coordinates as given below:

S. No.	LONGITUDE	LATITUDE
1	89° 59’ 45”	20° 37’ 26”

vi) The raw material requirement for M/s Dalmia DSP (a unit of Dalmia cement (Bharat) Limited) for 2.5 MTPA Cement Grinding Unit will be 2.5 MTPA.

Sl. No.	Raw Materials Details	Quantity
1	Clinker	925875 TPA
2	Fly Ash	221250 TPA
3	Slag	1302875 TPA
4	Gypsum	50000 TPA
5	Coal	59000 TPA
6	Power	10.5 MW
7	F.0. (KLPA)	50

vii) The water requirement for the Cement Grinding Unit will be 280 m3/day and the power requirement will be 15 MVA.

viii) The capital cost of the 2.5 MTPA Cement Grinding Unit was Rs.330.6 Cr and the Rs. 13 Cr was earmarked for the Environmental Protection measures as a capital.

ix) No court case or violation under EIA Notification, 2006 to the project or related activity reported by project proponent.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar**, The SEAC recommended for the transfer of Environmental Clearance of Cement Grinding Unit (1.7 MTPA) from M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works to M/s Kapilash Cement Manufacturing Works (a unit of Dalmia cement (Bharat) Limited) (new company) and transfer of Environmental Clearance of Cement Grinding Unit (2.5 MTPA) from M /s Dalmia cement (Bharat) Limited Unit: Kapilash Cement Manufacturing Works to M/s Dalmia DSP (a unit of Dalmia cement (Bharat) Limited) (new company) with specific conditions.

i) The proponent shall register two bifurcated industrial units with Directorate of Factories and Boilers, Government of Odisha under the provision of Factories Act 1948.

ii) The proponent shall prepare and submit separate layout plans for both the units to Directorate of Factories & Boilers, Government of Odisha for their Approval.

iii) The proponent shall submit Plant and Machinery, Buildings, and any other structure in the proposed independent Boundary of two Adjacent units to the Directorate of Factories & Boilers for their Approval.

iv) The proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Odisha for both bifurcated industrial units under the provision of Water (P & CP) Act 1974 and Air (P & CP) Act 1981

ITEM NO. 17

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S UTKAL BUILDERS LTD. FOR PROPOSED CONSTRUCTION OF (2B+S+11) MULTI STORIED RESIDENTIAL APARTMENT & (2B+G+9) STORIED COMMERCIAL BUILDING OVER AN AREA 4809.70 SQMT WITH TOTAL BUILT UP AREA- 25385.95 SQM AT MOUZA- PATIA, BHUBANESWAR, DIST- KHURDA OF SRI RAKESH BHURA (DIRECTOR) – EC

1. The proposal is for Environmental Clearance of M/s Utkal Builders Ltd. for Proposed Construction of (2B+S+11) Multi Storied Residential Apartment & (2B+G+9) Storied Commercial Building over an area 4809.70 SqMt With Total Built Up Area- 25385.95 Sqm At Mouza- Patia, Bhubaneswar, Dist- Khurda, Odisha.
2. The project falls under category "B" or activity 8 (a) - Building and Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Utkal Builders Ltd has awarded for Development of Private Housing Project 1.2 Acres of land at Plot No.: 369/1940/4889, 369/1940/4892, 369/1940/4891, 369/2381. Mouza-Patia, Bhubaneswar, Dist-Khurdha, Pincode-751024 Odisha.
4. **Location and connectivity** - The proposed site is located at Patia, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude 20°20'36.93" to 20°20'38.61" Longitude 85°49' 17.83" to 85° 49' 22.75". The project site is well connected with Nandankanan Road and The National Highway-5 is located at the distance of 5.2 km. The nearest Railway station is Mancheswar Railway Station which is 3.28 Km from the project site. The nearest Airport is Biju Patnaik International Airport, Bhubaneswar which is 10.79 Km from the project site.
5. The site is coming under development plan of Bhubaneswar Development Authority.
6. The Building Details Of The Project:

Particular	Proposed	Permissible
Project Name	Proposed Commercial Tower (LB+UB+G+9) & Residential Tower (LB+UB+S+11)	--
Plot Area	4809.70 Sqm	--
Ground Coverage	1635.29 Sqm (34 % of plot area)	--
Total Built up Area	25,385.95 Sqm	--
Total FAR Area	18283.08 Sqm	--
Built Up Area (Residential)	11116.97 Sqm	--
Built Up Area (Commercial)	6659.60 Sqm	--
FAR	3.80	3.80
Maximum Height	39.07 mtr	--
Road & Paved Area	1106.2 Sqm	--

Parking Area	7609.38 Sqm	6150.80 Sqm (30 % of Residential FAR Area + 40 % of commercial FAR Area)
Green Belt Area	1045.59 Sqm (21.7 % of Plot area)	961.9 Sqm (20 % of Plot area)
Power/Electricity Requirement & Sources	1652.8 KW	--
No. of DG sets	2 x 250 KVA & 1 x 125 KVA	--
Fresh Water requirement & Sources	96.69 KLD Source-Ground Water Supply	--
Sewage Treatment & Disposal	STP Capacity, 150 KLD	--
Estimated Population-Residential, Floating/visitors	696 nos.	--
Estimated Population-Commercial, Floating/visitors	660 nos.	--

7. **Water requirement**: Fresh make up of 96.69 m^3/day will be required for the project which will be sourced from Ground water. Waste water of 129.76 KLD will be treated in a STP of 150 KLD capacity, which includes primary, secondary and tertiary treatment.

8. **Waste water details**: Every building generates wastewater amounting about (80 % of fresh water consumed + 100 % of flushing water). The major source of wastewater includes the grey water from kitchens, bathrooms and black water from toilets. It is expected that the project will generate approx. 109.7 m^3/day of wastewater. The wastewater will be treated in the STP of capacity of 150 m^3/day provided within the complex. Out of which 123.27 m^3/day will be recycled within the project for flushing (52.413 m^3/day), landscaping (2.42 m^3/day),STP loss (6.4 m^3/day) and 68.44 m^3/day surplus will be generated which will be discharged to the drain.

9. **Power requirement**: The total consolidated electrical load estimate for proposed project is about 1652.82 KW (Connected Load)/701.0 KW (Demand Load). The power will be entirely supplied by 11 KV source of TPCODL of Odisha State Electricity Board. Also, in case of power cut, 100 % power backup generator will be provided for common uses only. For this purpose diesel generator having 250 KVA (2 Nos.) & 125 KVA (1 No.) capacities will be provided.

   There are 110 nos of Solar Lighting poles (@72 Watt) has been proposed for Street lighting,

   Energy conservation by using Solar Street Lighting = 110 x 72 = 7920 watt = 7.9 KW

   Energy conservation by using Solar lighting for common area = 98 KW

   Total Energy Conservation = (98 + 7.9) KW = 105.9 KW

Total Energy Saving = 105.9/1652.8 = 0.0640 x 100 = 6.4%

10. **Rain Water Harvesting**: Rain Water will be harvested and recharge through 3 recharge pits from the plot area.
11. **Parking Requirement**: Total parking area provided is for residents 4926.36m^2 or 152 ECS and for commercial purpose is 2683.02m^2 or 77ECS. Space provided is lower, upper basement and ground floor.
12. **Fire fighting Installations**: Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).
13. **Green Belt Development**: Green belt will be developed over an area of 1045.59 Sqm which is 21.7 % of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.
14. **Solid Waste Management**: From the proposed private Housing project solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 313.2 kg/day and waste generated from the commercial will be @0.15 kg/day, which will be 99 kg/day. The generated solid waste from the residential and commercial complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate colored bins. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid waste and construction and demolition waste.

S. No.	**Category**	**Counts (heads)**	**Waste generated**
i)	Residents	696 @ 0.45 kg/day	313.2 kg/day
ii)	Commercial population (including Floating Population)	660 @ 0.15 kg/day	99 kg/day
iii)	STP sludge		54.85 kg/day
Total Solid Waste Generated			**467.05 kg/day Say 467 kg/day**

15. The total population of project will be 696 persons for residential and 660nos for commercial.
16. The estimated project cost is ` 46 Crores and Environment Management Cost is ` 2.3 crores.
17. The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar,** made a detailed presentation on the proposal on 17.12.2021.
18. The SEAC in its meeting held on dated 17.12.2021 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by visit of sub-committee of SEAC to the proposed site. The project proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
i)	Kisam" of the land with conversion to "Gharabari" from appropriate Revenue Authority.	Total land area of the proposed project is 4809.70 Sqm and Land document is attached in **Annexure -1**.
ii)	Source of water WATCO / Municipality with provision of sump. If the authority regrets, the said letter to be submitted. One bore well may be allowed to meet emergency need.	The Public water supply is not available in project area; once the public water supply is available the permission will be obtained from Public Health Division (PHD). The letter from PH Division regarding Non-availability of Public Water Supply is attached in **Annexure-2**.
iii)	In case of drawl of ground water, "NOC" from CGWA & permission from W.R Deptt, Govt of Odisha to be submitted.	Application for Ground Water clearance is already applied to CGWA. Once the Ground Water NoC received from CGWA, we will apply to Water Resource Department, Govt. of Odisha for final approval.
iv)	Lateral distance between the boundary of the project site and public drain for discharging treated waste water with ownership / ROW of the said land and permission from drain authority to take the additional land of this project.	The public drain is adjacent to the project site. We have already submitted the Drainage Plan to Bhubaneswar Municipal Corporation & the vetting process is under process. Once the Drainage Approval we will submit the NoC to SEAC/SEIAA Committee before commencement of the project. Undertaking regarding drainage is attached in **Annexure-3**.
v)	21% of rain water available is stated to be recharged / harvested. The method of disposal of balance 79% rain water is required to be specified, since it is likely to create local flooding.	Total 25 m^3 rain water will be available for recharged/harvested through 1 no. of rain water harvesting storage tank & 100% rain water will recharged through this tank. Details rain water harvesting calculation is attached in **Annexure-4**.
vi)	No. of rain water harvesting pits (RWHP) be re-calculated considering maximum hourly rainfall in 24 Hours on the basis of logical climate data in past 30 years with co-efficient of run-off on real time input. The design of RWH pits are required to be submitted.	Rain water harvesting pits (RWHP) has been calculated as per 30 years Rainfall data (1988-2021), as per 30 years data maximum rainfall is 364 mm/day and hourly rainfall is 37mm/hr. So total rain water available for recharging is 25m^3/hr and total 1 no. of rain water harvesting tank will be provided for ground water recharging. Detail calculation is given in **Annexure-4**.
vii)	Parking in terms of space & ECS for 4 wheelers, 2 wheelers including Bi-cycles be re-visited separately for residential & commercial complex for dwellers and visitors and floating population indicating the norm as well showing it in the layout map.	As per BDA Norms total ECS required for the proposed residential & commercial building is 152nos. and total ECS provided for the proposed building is 158 nos. So total 158 nos. of 4 wheeler & 27 nos. of 2 wheelers will be provided in the proposed building. Detail Layout plan showing parking plan is attached in **Annexure-5**.
viii)	Both entry & exit Gates for residential & commercial complex	Separate entry & exist gate has been provided for Residential unit with dimension of 6.015m

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	to be provisioned separately with adequate dimension & pedestrian rain pathways.	and Separate entry & exist gate has been provided for Commercial unit with dimension of 6.015m. Layout plan showing separate entry & exit for residential & commercial building is attached in **Annexure-6**.
ix)	Green belt of 961.9m^2 (exactly 20%) of plot area detail calculation with dimension continuous around the boundary showing in the layout map be submitted.	Total greenbelt area provided for the proposed building is 1104.03 sqm is 21.14% of the total plot area (5221.15 sqm). We proposed to develop three tier hierarchal greenbelt along the periphery of the building. Greenbelt drawing is attached in **Annexure-7**.
x)	Detail plan with calculation of solar power consumption against generation with percentage of the same against total power demand, both for street lighting and open space be submitted.	Total power generation from solar system is 107.8 kw through 75 nos. of PV Panels & 60 nos. of Solar Street Lighting. Total power demand of the proposed building is 1652.8 kw. So total solar power generation from the proposed building is 6.5% of total power demand. Details solar calculation is attached in **Annexure-8**.
xi)	Stack height of DG set (S) with installation drawing be submitted.	For required backup power, 2x250 KVA & 1x125 KVA DG sets will be proposed for the proposed building. The stack height of the DG set is 43m. The exhaust shall be provided as per pollution norms laid by CPCB. Since our DG Sets location are along the compound wall, we proposed the vent pipe along the building wall to highest point of the building & vent is 3m in highest point. Detail proposal for DG sets is attached in **Annexure-9**.
xii)	Traffic study be undertaken by domain expert at entry & exit gates of the project and intersecting point of the lead road of the project with NH / Public road with decongestion plan (as & if necessary) based on study finding taking into consideration traffic load 10years ahead with this project and projects in the vicinity & public traffic be submitted.	We have already deposit the fee & building plan to Indian Institute of Technology (IIT) Bhubaneswar for vetting of Traffic Report. Traffic Study report is attached in **Annexure-10**.

19. The SEAC in its meeting held on dated 15.03.2022 decided to take decision on the proposal after the site visit by the sub-committee of SEAC.

20. The proposed site was visited by the sub-committee of SEAC on 06.04.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

a) Revenue map superimposing the project site and road connectivity with documentary support for land between road and boundary (meant for road purposes).
b) Copy of BMC bye law for internal road and drive way.
c) To increase the width of entry and exit gates and revised Layout map with entry and exit and ramp separate for residential and commercial vehicle movements. Accordingly, revised green belt to be shown and calculated.
d) Parking (4 and 2 wheelers) areas for residential, commercial and visitors (for both separately) with ECS calculation vs norms and also mention the % of each parking w.r.t. total parking and no of duelling units.
e) As there are 2 DG set and 2 separate stacks, it was advised to work out the possibility to connect them to make one stack and as per norms of CPCB.
f) Internal drainage map of internal drains, Rain water harvesting their nos, dual plumbing lines and final connection. Calculation of Rain water harvesting (if not submitted earlier).
g) No of OHT and dual plumbing units
h) Source of water with permission letter from Ground water authority as well as Water Resource department as commercial uses are envisaged. Also Fire authority permission copy.
i) Permission from BMC for discharge of extra load of treated water to the adjacent drain.
j) Solid waste disposal facilities including STP waste and any tie up for garbage disposal (documents to be provided with a brief on how the types of solid wastes to be separated)
k) Provision of integrated Roof top Solar PV system and Solar calculation details with generation and consumption in terms of % of total power to be provided
l) Summary of traffic report and mitigation measure as the front road has high traffic movements.
m) All points raised in proceedings (if not submitted)

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as sought by the Sub-Committee of SEAC at para 37 above.

ITEM NO. 18

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S ALISHAN REALCON PVT. LTD FOR PROPOSED HOUSING PROJECT OF S+5 STORIED RESIDENTIAL APARTMENT BUILDING OVER AN BUILT-UP AREA OF 39,288.93 SQ.M. AT MOUZA- NUAHATA, DIST – CUTTACK, ODISHA OF SRI MANOJ KUMAR DASH (DIRECTOR) – EC

1. The proposal is for Environmental Clearance of M/s Alishan Realcon Pvt. Ltd for Proposed housing Project of S+5 storied residential apartment building over an built-up area of 39,288.93 Sq.m. at Mouza- Nuahata, Dist – Cuttack, Odisha.

2. The project falls under category “B” or activity 8 (a) - Building and Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.

3. Alishan Realcon Private Limited has proposed for development of private housing project of area 15256.64 sqm in plot No.: 1085, 1122, 1124, 1090 Khata No- 13-D1, 498/240, 139 & 498/2111 at Mouza- Nuahata, Cuttack, Dist-Cuttack..

4. **Location and connectivity** - The proposed site is located at Mouza- Nuahata, Cuttack, PS- Balianta, Dist- Cuttack, Odisha. The Geographical co-ordinate of the project site is Latitude 20°22'24.81"N & Longitude 85°53'19.57"E. The project site is well connected with the National Highway-16 & Puri-cnanal road located at the distance of 0.1 Km & 0.2 km. The nearest Railway station is Mancheswar Railway Station at a distance of approximately 5.5 Km from the project site. The nearest Airport is Biju Patnaik International Airport, Bhubaneswar which is at a distance of 16 Km from the project site.
5. The site is coming under development plan of Cuttack Development Authority.
6. The Building Details Of The Project:

Particular	Proposed	Permissible
Project Name	Proposed S+5 storied Residential Apartment Buildings	
Plot Area	15256.64 Sqm (1.52 Ha)	--
Ground Coverage	7635.57 Sqm (50 %)	--
FAR (Floor Area Ratio)	2.1	--
Built up Area	39288.93 sqm	--
Maximum Height	38 m	--
Road Area	3465.32 sqm	--
Open Parking Area	1104.43 sqm	8061.80 sqm
Total Parking Area	8146.17 sqm	
Green Belt Area	3051.32 sqm (20.0 %)	3051.32 sqm (20.0 %)
Maximum No. of Floor	S+5	--
Power/Electricity Requirement & Sources	Total – 1435 KW	--
No. of DG sets	2x700 KVA	--
Water requirement	129.7 KLD (Fresh)	--
Sewage Treatment Plant	STP Capacity - 170 KLD	--
Estimated Population-Residential, Floating /visitors	1390 nos.	--

7. **Water requirement**: Fresh make up of 129.7 m3/day will be required for the project which will be sourced from Ground water. Waste water of 166.08 KLD will be treated in a STP of 170 KLD capacity, which includes primary, secondary and tertiary treatment.
8. **Waste water details**: Every building generates wastewater amounting about (80 % of fresh water consumed + 95 % of flushing water). The major source of wastewater includes the grey water from kitchens, bathrooms and black water from toilets. It is expected that the project will generate approx. 166.08 m3/day of wastewater. The wastewater will be treated in the STP of capacity of 170 m3/day provided within the complex. Out of which 170 m3/day will be recycled within the project for flushing (65.6 m3/day), landscaping (12.38 m3/day),STP loss (8.5 m3/day) & Dust suppression in Road Area (6.67 m3/day). 65

m3/day will be used as HVAC system in case of non-monsoon period. In case of Monsoon period 170 m3/day will be recycled within the project for flushing (65.6 m3/day), 65 m3/day will be used as HVAC system, STP loss will be 8.5 m3/day and 26.98 m3/day surplus will be generated which will be discharged to the drain.

9. **Power requirement**: The total consolidated electrical load estimate for proposed project is about 1435 KW. The power will be entirely supplied by source of TPCODL of Odisha State Electricity Board. Also, in case of power cut, 100 % power backup generator will be provided for common uses only. For this purpose diesel generator having 700 KVA (2 nos.) capacities will be provided.

   There are 70 nos. of Solar Lighting poles (@72 Watt) has been proposed for Street lighting,

   Energy conservation by using Solar Street Lighting = 70 x 72 = 5040 watt = 5.04 KW

   Energy Saving by using Solar Lighting = 71 KW

   Energy Saving by using Solar Street Lighting = 5.04 KW

   Total Energy Saving = 71 + 5.04 = 76.04 KW

   Total Energy Saving = 76.04/1435 = 0.0529 = 5.2 %

10. **Rain Water Harvesting**: Rain Water will be harvested and recharge through 07 recharge pits from the plot area.

11. **Parking Requirement**: Total parking area provided is 8146.17 m^2 sq.mt./ 278ECS and space provided is stilt and open parking area.

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

13. **Green Belt Development**: Green belt will be developed over an area of 3051.32 sqm which is 20.0 % of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.

14. **Solid Waste Management**: From the proposed housing project solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 556 kg/day. The waste generated from floating population in residents will be @ 0.15 kg/day, which will be 21 kg/day. The generated solid waste from the residential apartment will be segregated as biodegradable and non-biodegradable. This will be collected in separate colored bins. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid waste and construction and demolition waste.

Sl. No.	Category	Counts (heads)	Waste generated
1.	Residents	1390 @ 0.45 kg/day	556 kg/day
2.	Floating population in residents	140 @ 0.15 kg/day	21 kg/day
3.	STP sludge		83.04 ~83 kg/day kg/day
Total Solid Waste Generated			**660 kg/day**

15. The total population of project will be 1390 persons for residential and floating population.

16. The estimated project cost is ` 72 Crores and Environment Management Cost is ` 3.6 crores.

17. The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar,** made a detailed presentation on the proposal on 17.12.2021.

18. The SEAC in its meeting held on dated 17.12.2021 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by visit of sub-committee of SEAC to the proposed site. The project proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
i)	"Kisam" of the land with conversation to "Gharbari" from appropriate Revenue Authority.	Total land area of the proposed project is 15256.64 sqm and the kissam of land is Gharabari, Land document is attached in **Annexure - 1**.
ii)	Source of water: why not from public water supply with provision of sump & maximum one bore well of suitable capacity to meet emergency need. If the authority does not allow, the letter to this effect from the later be submitted.	The Public water supply is not available in the vicinity of the project area; once the public water supply is available the permission will be obtained from Public Health Division (PHD). The letter from PH Division regarding Non-availability of Public Water Supply is attached in **Annexure-2**.
iii)	In case of drawl of ground water "NOC" from CGWA & permission from W.R Deptt, Govt of Odisha be submitted.	Ground Water permission has been obtained from CGWA vide NoC No. CGWA/NOC/INF/ORIG/2021/13373, dated 19.10.2021. Ground Water Clearance copy is attached in **Annexure -3.**
iv)	Distance between boundary of the project and Public drain for discharge of treated waste water is stated to be approx. 200mtr. The ownership / ROW of the said land and permission from drain authority to take the additional land of this project to be submitted.	We have already submitted the Drainage Plan to Cuttack Municipality Corporation & the vetting process is under process. Once the Drainage Approval will be obtained from respected Authority we will submit the NOC to SEAC/SEIAA committee before commencement of the project. We have already deposit the Infrastructure development fee to EIDP. Letter & fee deposit receipt is attached in **Annexure -4**.
v)	How much rain water available shall be recharged / harvested and balance disposal?	Total 111 m^3/day rain water will be available for recharged/ harvested through 7 nos. of rain water harvesting calculation is attached in **Annexure-5**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
vi)	No. of rain water harvesting pits (RWHP) be re-calculated considering maximum hourly rainfall in 24 hrs on the basis of logical climate data in past 30 years with co-efficient of run off on real time input, retention time and water table being a low level / lying area. The design of recharge pits are required to be submitted.	Rain water harvesting pits (RWHP) has been calculated as per 30 years Rainfall data (1988-2021), as per 30 years data maximum rainfall is 330 mm/day and hourly rainfall is 33 mm/hr. So total rain water available for recharging is 111m^3/hr and total 7 nos. of rain water harvesting pits has been provided for ground water recharging. Detail calculation is given in **Annexure-5**.
vii)	Being low lying area, and NH-16 being any at 100 mtr distance & Puri canal at 200 mtr distance, elevation of the base be suitably worked out & confirmed.	A detailed contour survey has been made and drainage plan has been prepared by a consultant. The plinth level of the project is proposed there so that the storm water will be discharged in the concrete storm water drain already available adjacent to canal. Drainage drawing is attached in **Annexure -12**.
viii)	Green Belt is said to be 3051.52m^2 (exactly 20% of plot area); Detailed calculation with dimension continuous around the boundary showing in the layout map be submitted.	Total greenbelt area provided for the proposed building is 3188.75 sqm, which is 20.6% of the total plot area (15479.21 sqm). We proposed to develop three tier hierarchal greenbelt along the periphery of the building. Greenbelt drawing is attached in **Annexure-6**.
ix)	Parking is terms of space & ECS for 4 wheelers, 2 wheelers including bicycles in terms of the norm as well compatibility for dwellers/ residents, visitors / floating population be re-worked out & submitted showing the space for the same in the layout map.	Total parking area provided for the proposed building is 8146.17 sqm and ECS provided for the building is 253 nos. of 4 wheelers & 204 nos. of 2 Wheelers including bicycles, Parking layout showing 4 wheelers & 2 wheelers parking is attached in **Annexure-7**.
x)	Detail plan with solar Power Consumption against generation with percentage of total power demand, both for street lighting, open space and any other use be submitted.	Total power generation from Solar system is 80.92 KW through 55 nos. of PV Panels & 70 nos. of Solar Street Lighting. Total power demand of the proposed building is 1435.0 kw. So total solar power generation from the proposed building is 5.6% of total power demand. Details solar calculation is attached in **Annexure-8**.
xi)	Stack height of DG set (s) with installation drawing of exhaust pipe (s) be submitted.	For required backup power, 1 no. of DG Set of capacity 250 KVA is proposed. The exhaust shall be provided as per pollution norms laid

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		by CPCB. Since our DG Sets location are along the compound wall, we proposed the vent pipe along the building wall to highest point of the building & vent is 3 m in highest point. Details proposal for DG Sets is attached in **Annexure-9**.
xii)	Traffic study be undertaken by domain expert at entry & exit gates of the project and intersecting point (s) of the lead road of the project with NH-16 (any 100mtr away) / public road with decongestion plan as necessary based on study finding taking into consideration the traffic load 10 years ahead with this project & projects in the vicinity & public traffic be submitted.	The traffic Study report has been vetted by Indian Institute of Technology (IIT) Bhubaneswar. Traffic Study report is attached in **Annexure-10**.
xiii)	DG set location to be shifted in reference to predominant wind direction & location of the towers and shown in the layout map & submitted along with installation drawing of exhaust pipe.	The predominant wind direction of the proposed project area is South and the DG set will be installed as wind flow from South to North. The DG Set position is marked in the layout with respect to predominant wind direction and location of the building tower along with installation drawing/ layout is enclosed as **Annexure-11**.

19. The SEAC in its meeting held on dated 15.03.2022 decided to take decision on the proposal after the site visit by the sub-committee of SEAC.

20. The proposed site was visited by the sub-committee of SEAC on 06.04.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    a) Documentary evidence of existing sub roads connecting the high way from plot site with Revenue map indicating details of sub roads ownership (like- POA, Free gift, Revenue Road etc). Also, the Appropriate authority/committee report on road and its development
    b) Visitor parking area, number of 4 and 2 wheelers and percentage to be provided with total parking of residentials.
    c) Land Kisam to be converted to Gharabari if not done.
    d) Solid waste disposal facilities including STP waste and any tie up for garbage disposal (documents to be provided with a brief on how the types of solid wastes to be separated)
    e) NOC from CMC for drain connection and disposal of treated water load of the project
    f) Copy with Possession/POA of Private land connecting the final drain (external)
    g) Internal drainage map of internal drains, Rain water harvesting their nos, dual plumbing lines and final connection. Calculation of Rain water harvesting

h) Source of water with permission letter. Also fire authority recommendation/permission(if not submitted)
i) No of OHT and Tanks for Dual Plumbing
j) Stack height in meter with calculation vis-à-vis building height and placement of DG set
k) Integrated Solar PV set on roof top with generation, consumption and percentage to be provided.
l) As the drain is at higher height than the current ground level, the PP to maintain the terrane with piling operation so that the excess treated water could be discharged to the drain. The PP to ensure maximum utilization of treated water for internal use with more plantations.
m) Traffic summary and mitigation measure
n) All points raised in proceedings (if not submitted)

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as sought by the Sub-Committee of SEAC at para 20 above.

ITEM NO. 19

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. DNT INFRASTRUCTURES PVT. LTD. FOR PROPOSED RESIDENTIAL APARTMENT & COMMERCIAL COMPLEX OVER AN TOTAL BUILT UP AREA OF 68196.4 SQM. LOCATED AT MOUZA -DADHA, TAHASIL - BHUBANESWAR, DIST - KHURDA OF SRI NIKUNJA KISHORE DAS – EC

1. The proposal is for Environmental Clearance of M/s. DNT Infrastructures Pvt. Ltd. for proposed residential apartment & commercial complex over a total built up area of 68196.4 sqm. located at Mouza -Dadha, Tahasil - Bhubaneswar, Dist - Khurda of Sri Nikunja Kishore Das.

2. As per EIA Notification dated 14th Sept, 2006, as amended from time to time; this project falls under Category "B", Project or Activity 8(a) Building and Construction projects (EIA Notification dated 14th Sep, 2006 as amended on 2009).

3. DNT Infrastructures Pvt. Ltd. has awarded for Development of Private Housing Project 3.158 Acres of land at Plot No.:591, 615, 614, 613, 612, 611, 610, 600, 599, 601, 602, at Mouza Dadha, Bhubaneswar, Khurda, Odisha**.**

4. **Location and Connectivity –** The proposed site is located at Mouza -Dadha, Bhubaneswar, Khurda, Odisha-754005. The Geographical co-ordinate of the project site is: Latitude -Latitude - 20° 24' 44.60", 20° 24' 0.13" 20° 23' 57.79", 20° 24' 5.14", 20° 24' 0.16", 20° 24' 01.22", 20° 23' 57.73", 20° 24' 03.15" N & Longitude - 85° 49' 44.60" , 85° 49' 44.61" , 85° 49' 44.71" 85° 49' 44.76" , 85° 49' 45. 90", 85° 49' 46.08" , 85° 49' 48.21", 85° 49' 49.51" E. The project site is well connected with National Highway-5. 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..

5. The site is coming under Bhubaneswar Development Authority.

6. The total plot area is 12783.58sq.m with total built-up area 68196 Sqm.

7. The building details of the Project:

Particular	Proposed	Permissible
Project Name	Proposed Residential Apartment & Commercial complex for DNT Infrastructures Pvt. Ltd.	
Plot Area	12783.58 sqm or 3.158 AC.	--
Ground Coverage	4346.41 sqm	--
Total Built up Area	68196.4 sqm	--
Total FAR Area	53713.11 sqm	--
Built Up Area (Residential)	51324.13 sqm	--
Built Up Area (Commercial)	2388.98 sqm	--
FAR	4.3	--
Maximum Height	91.5 meter	--
Road & Paved Area	6202.36 sqm	--
Parking Area	16012.31 sqm(Open Parking +Basement Parking)	13786.62 sqm (25 % of Residential FAR Area + 40 % of commercial FAR Area)
Green Belt Area	2556.71 sqm (20 % of Plot area)	2556.71 sqm (20 % of Plot area)
Power/Electricity Requirement & Sources	2644.8 KW	--
No. of DG sets	2 x 700 KVA	--
Fresh Water requirement & Sources	195 KLD	--
Sewage Treatment & Disposal	STP Capacity 250 KLD	--
Estimated Population-Residential, Floating/visitors	1979 nos. Residential, 200 visitors	--
Estimated Population-Commercial, Floating/visitors	240nos.	--

8. **Water Requirement** – Fresh make up of 195 m3/day will be required for the project which will be sourced from Ground water. Waste water of 246.8 KLD will be treated in a STP of 250 KLD capacity, which includes primary, secondary and tertiary treatment.
9. Rain Water will be harvested through 10 nos. of Rain Water recharging pits.
10. **Power Requirement** - The total consolidated electrical load estimate for proposed project is about **2644.8 KW.** The power will be entirely supplied by source of TPCODL of Odisha State Electricity Board. Also, in case of power cut, 100 % power backup generator will be provided for common uses only. For this purpose diesel generator having 700 KVA (2 nos.) capacities will be provided.

    There are 60 nos of Solar Lighting poles (@72 Watt with panel for generation) has been proposed for Street lighting,

    Energy conservation by using Solar Street Lighting = 60 x 72 = 4320 watt = 4.3 KW

    SOLAR LIGHTING FOR COMMON AREA

    In the proposed area, we can propose 95 nos. of solar PV panels.

Therefore, total amount of electrical energy generated by 95 nos. of PV Solar panel = 32.77 KW-hr.

Assuming, only 4 hours of sunlight available throughout the day time, therefore electrical energy generated by 95 nos. of PV solar panel per day = 131.08 KW

Saving Using Solar System:

Total Energy Saving = (131.08 + 4.3) KW = 135.38 KW

Total Energy Saving = 95.48/1435 = 0.066 = 6.6 %

11. **Solid waste Management -** From the proposed private Housing project solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 890.5 kg/day and waste generated from the commercial will be @0.15 kg/day , which will be 36 kg/day. The waste generated from floating population in residents will be @ 0.15 kg/day, which will be 30 kg/day.

Sl. No.	Category	Counts (heads)	Waste generated
1.	Residents	1979 @ 0.45 kg/day	890.55 kg/day
2.	Commercial Population (including Floating Population)	240 @ 0.15 kg/day	36 kg/day
3.	Floating population in residents	200 @ 0.15 kg/day	30 kg/day
5.	STP sludge		123.4 kg/day
Total Solid Waste Generated			**1079.95 kg/day**

12. **Green Belt**- Green belt will be developed over an area of 2556.71 sqm which is 20.0 % of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.
13. **Parking Details –** Total parking area allocated to the project is 16012.31sqm(Residential – 51324.13sqm+Commercial – 2388.98sqm)/ 325ECS.
14. The project cost is ` 124 crores and Environmental Monitoring programme – 6.24 crores.
15. The proponent along with the consultant **M/s. Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar** made a detailed presentation before the SEAC on the proposal on **22.12.2021**.
16. The SEAC in its meeting held on 22.12.2021 decided to take decision on the proposal after receipt of the following information / documents from the project proponent followed by site visit by the Sub-Committee of SEAC to the proposed site.

(i) Part of the land (total 11 plots) is stated to be of “Kisam”- “Sarad 1” and part as “Gharabari” as per the documents submitted by project proponent. As such, the entire land need to be converted to “Gharabari” kisam by appropriate Revenue Authority and accordingly, relevant document to be submitted by the project proponent.

(ii) PH value of ground water from base line study data reveals that it is 6.82 against the norm of 6.5-8.5 and thus it is critical from human health point of view. As such, measures to improve the same be submitted.

(iii) No. of rain water harvesting pits (10 nos.) has been arrived at with maximum rain fall as 120 mm/hr in 24 hours and co-effluent of run-off for paved area as 0.70. The above calculation be revisited, taking into consideration of maximum rain fall is 24 hours in past 30 years based in logical climate data (in this case data taken for 10 years up to 2018 by project proponent) and norm for co-effluent of run-off taken as 0.70 for paved area with relevant reference by submitted.

(iv) Since it is a low lying and water logging area prone to local flooding during rainy season, the elevation of base with appropriate height be confirmed is reference to the public road.

(v) Provision for parking for commercial complex is said to be considered with 240 people. Hoe it has been arrived at? Parking showing the demarcation in the layout map for 4 wheelers / 2 wheelers / Bicycles be submitted considering residential & commercial complex separately with separate provision for visitors / floating populations.

(vi) Provisions of solar power (4.9%) of total power demand of 2783 kw is stated to have been made. While connected load of each residential unit is given, detail plan & consumption of solar power vis-à-vis the generation be submitted.

(vii) 2556.71m^2 land (exactly 20%) has been stated to have been provided for green belt development. As such, details of dimensions of green belt continuous stretch surrounding the boundary with three tier plantation be submitted.

(viii) Findings of traffic study as undertaken by the project proponent shows “LOS” as ‘C’ means ‘Average’ or ‘Nandankanan Road’ which is alarming. Thus, traffic study be undertaken by a domain expert, considering other projects as well & traffic projection 10 years a head and decongestion plan accordingly be submitted.

(ix) Provision of pedestrian pathways be made at entry & exit gates of appropriate dimension & show in the layout map and submitted.

(x) How many DG sets is provisional, 3 or 4 & their capacity (s)? Location of DG sets with stack height & installation of drawing of exhaust pipe of the stack be submitted with location of the DG sets in reference to predominate wind direction & the residential towers and commercial complex.

(xi) Maximum height of the building is stated to be 91.5 mtrs and the project is located at about 500mtr away from “Nandankanan Zoo”. As such, what mitigation measures are proposed to avoid disturbance due to “Noise” and “Light” both during construction and operation stage so that the animals in the Zoo and not distributed at all.

(xii) How far the project site is from the boundary of the “NandanKanan Zoo” & from the “ESZ” of NandanKanan? Certificate to this effect is to be submitted by the respective DFO/Authority(s).

(xiii) No objection Certificate from the Director, Nandan Kanan Zoo for construction of such projects near to the Nandan Kanan Zoo.

17. The project proponent was requested vide letter no. 91(9)/ SEAC–(Misc)-28, dated 25.01.2022 to submit the information / documents as sought by the SEAC at para 15 above. But, they have not yet furnished the same.

18. The proposed site was visited by the sub-committee of SEAC on 06.04.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    a) Land documents with conversion to Gharabari kisam

    b) Copy of Fire authority recommendation

    c) NOC from appropriate authority for connecting the excess treated to final drain. At present there is no drain available adjacent to site. The PP needs to submit proof of documents with timeline, responsibility and drain plan for such construction if any.

    d) Provision of solid waste disposal system to be submitted in details including STP waste. In case of any tie up with any agency documentary support to be provided

    e) Internal drain map with final fall out planned. Also rain water harvesting, recharg to be shown in the map.

    f) No of OHT and Dual plumbing along with residential units

    g) Source of water with permission letter from Ground water authority as well as Water Resource department as commercial uses are envisaged. Also Fire authority permission copy

    h) Provision of integrated Roof top Solar PV system and Solar calculation details with generation and consumption in terms of % of total power to be provided

    i) Revised Map showing Entry and exit gates (Needs to be separate for residential and commercial) for both residential and commercial area. Parking areas for residential, commercial and visitors (for both separately) with ECS calculation vs norms and also mention the % of each parking w.r.t. total parking. Visitor parking for commercials to be adequate qualifying the norms and area for open parking.

    j) Revised green belt map with percentage.

    k) Traffic study summary with mitigation measure.

    l) Documents in support of not falling under ESZ

    m) All points raised in proceedings (if not submitted)

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as requested vide letter no. 91(9)/ SEAC–(Misc)-28, dated 25.01.2022 and as sought by the Sub-Committee of SEAC at para 18 above.

ITEM NO. 20

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. VIKASH MULTI SPECIALITY HOSPITAL PROJECT FOR EXPANSION OF VIKASH MULTI SPECIALITY HOSPITAL OVER AN AREA OF 82,313.06 M2 (20.34 ACRES) LOCATED AT BARAHAGUDA CANAL CHOWK, DISTRICT-BARGARH, ODISHA OF SRI D MURLI KRISHNA (PARTNER) & TOTAL BUILT UP AREA - 1,24,483.00 M^2 - EC

1. M/s Vikash Multi Speciality Hospital aims to expand the existing Hospital from 150 beds to 1050 beds over Chaka Plot No.-1396,1397,1398,1390,3541,3546(P), 3531, 3547, 3551, 3528, 3529, 3549, 3533, 3550, 3533/16270, 3542, 1403, 3560, 3566, 1389, 2113(P), 3558, 1393, 1401, 3560(P), 1395, 1394, 1399, 1400, 3561, 3548, 1402, 1402/3968, 1392,1391 at Barahaguda Canal Chowk, District-Bargarh, Odisha for land measuring 2.32 ha (20.34 acres) or 82,313.06 m^2.
2. The project falls under category “B” or activity 8 (a)-Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. The site is coming under Bargarh Panchayat. There are total 11 blocks i.e existing Hospital, proposed Hospital Wing-1, Hospital Wing-2, Hospital Wing-3 (Medical College), Hospital Wing-4, Boys Hostel-Block -1, Boys Hostel-Block-2, Girls Hostel-Block -1, Girls Hostel-Block-2, Nurses Hostel, Nurses Quarters.
4. The EC application was submitted online to SEIAA, Odisha on 4th January 2022 vide proposal no. SIA/OR/NCP/249833/2022.
5. The site is adjacent to NH-53 towards North direction. The nearest railway station is Bargarh Railway Station approx. 2.4 km in SW direction from the project site and Veer Surendra Sai Airport, Jharsuguda is at a distance of approx. 73 km in North East direction from the project site.
6. The project has 1 basement and 6 floors (B+G+6). The maximum height of the building will be 23.4 m. The total plot area is 82,313.06 sqm. The permissible ground coverage will be 41,156.53 sqm (50%) and proposed Ground Coverage will be 18,960.00 sqm (23.03%). The permissible FAR will be 4,93,878.36 sqm (@ 6 of plot area) and proposed FAR will be 1,07,573.00 sqm (1.31 of plot area). The non-FAR for the project will be 16,910.00 sqm. Total Basement area will be 10,699.00 sqm. Total Built up area for the project will be 1,24,483.00 sqm. The total population of project after proposed expansion will be 4825 persons.
7. The total water requirement will be 1006 KLD. The total domestic water will be 687 KLD, out of which fresh water requirement is approx. 525 KLD will be met through Ground water and Bore well.
8. The project will generate approx. 603 KLD of wastewater.
9. The wastewater will be treated in an onsite STP of 560 KLD capacity and ETP of 170 KLD. The treated water (419 KLD @ 90% of total waste water) will be reused for flushing (162 KLD), horticulture (140 KLD) & HVAC Cooling (12 KLD). Surplus treated water during dry season (229 KLD), monsoon season (355 KLD) and winter season (318 KLD) will be

discharged to external sewer with the requisite permission. Total 28 RWH pit at different locations will be constructed.

10. Total parking area requirement will be 32,271.9 m^2 and provision will 33,200 m^2. And Total Parking i.e. 1,273 ECS will be provided.

11. Power Requirement: The power supply will be supplied by TPCODL, Bhubaneswar City Distribution. The requirement load for the project will be approx. 4200 kVA.

12. Power Backup: Total 7 nos. of DG sets total 3365 kVA (6*500 kVA+1*365 kVA) capacity for power back up in the residential block and the services and annexure block. Silent DG sets (Radiator cooled). Separate generator yard will be constructed for the residential block. The total solid waste generation will be 2355 kg/day. Total green area measures 27,986.5 m^2 i.e. 34% of the plot area. Tree Plantation area = 18,108.87 m2 (22%) + Lawn area = 9,877.56 m2 (12%). As per MoEF&CC guidelines, no. of trees required= Plot area/80 sqm. Hence, 82,313.06/80 = 1028.9 say 1029 Nos. Total no. of trees proposed = 1035 no's Total Project cost is INR 262.42 Crores including land and development cost.

13. Vikash Multi Specialty Hospital is an existing hospital at Barahaguda Canal Chowk, District-Bargarh, Odisha with 150 beds (total existing built-up area – 11,148 m^2) and aims to expand the same to 1050 beds. Total built-up area will be increased from 11,148 m^2 to 1,24,483 m^2 for the proposed expansion.

14. The chronology of the project is as follows:

    i) They had obtained Consent to Establish vide No.13847/IND-II-NOC-6076, dated 16.10.2017 for construction of Hospital Project of 150 Beds (with total built-up area 11,148 m^2) and construction of the project was started after getting Consent to Establish.

    ii) They also had obtained the provisional Occupancy certificate on 13.10.2017 for B+G+3 and Bio Medical Waste Authorization vide no. 16347/SPCB/Authorization (Bio Medical Waste) dated 19.12.2017 for Generation, Segregation, Collection, storage, packaging, reception, Transportation, Treatment, Recycling, which is valid till 31.03.2022.

    iii) After completion of the construction of the project, they obtained Consent to Operate vide no. 6618/III-Con (Operate)133/2017-18, dated 14.12.2017 which is valid up to 31.03.2022 for 150 beds to start the operation.

15. The total site area measures 82,313.06 m^2 (approx. 20.34 acre) and total estimated built-up area is 1,24,483.00 m^2 and requires Environmental Clearance.

16. The Environment consultant **M/s Grass Roots Research & Creation India (P) Ltd., F-374-375, Sector-63, NOIDA-201301, U.P** along with the proponent has made a presentation on the proposal before the Committee on 31.01.2022.

17. The SEAC in its meeting held on dated 31.01.2022 decided to take decision on the proposal after receipt of the certain information / documents from the proponent followed by site visit of the sub-committee of SEAC.The project proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	Through the proposed source of water is ground water for a quantity of 687 KLD, the PP need to take up suitably with W.R Deptt and explore the possibility of getting river (surface) water from the nearest river located at about 1km away through intake point in the river & pipe line till the project site. In case it is not agreed upon by W.R Deptt, then necessary 'NOC' to be obtained from CGWA for ground water and corresponding permission from W.R Deptt, Govt of Odisha.	We have applied to the Irrigation department, Bargarh Division, Bargarh for drawing water from Danta River. Copy of the same is attached as **Annexure-I**. We have obtained NOC from CGWA and also have been submitted the application for renewal. Copy of the same is attached as **Annexure-II**. Undertaking to obtain permission from CGWA for expansion part is attached as **Annexure –III.**
i)	Existing capacity of ETP & STP with quantity of input to ETP & STP including the source be indicated. So also, the projected estimated quantity of input to STP & ETP including the source be confirmed. Chemical analysis of input to existing ETP & output discharge of the same be submitted. Flow sheet of ETP (existing and proposed) is to be submitted.	**The existing details for STP and ETP.** The waste water input to ETP-5 KLD ETP capacity =6KLD The waste water input to STP=100 KLD STP capacity=120KLD The post expansion of the project. The waste water input to ETP = 138 KLD ETP capacity = 170 KLD The waste water input to STP = 465 KLD STP capacity = 560 KLD The chemical analysis and flow sheet for technology of ETP is attached as **Annexure-IV**.
ii)	To confirm that the output discharge from ETP (both existing & proposed) shall not be discharged to the public drain and the re-use of the same (details with estimated calculation) be submitted.	The treated water from ETP will be given to a private water tanker agency for use in other industrial sites / construction activities. An undertaking for the same is attached as **Annexure-V**.
iii)	Since discharge of treated waste water from STP is too high in the range of 229 KLD to 355 KLD is a different season, the permission of the outside public drain authority to take this additional load be submitted including storm	The drain is falling under jurisdiction of Bargarh Panhayat and we have received the permission from the Bargarh Panchayat to discharge the excess treated water from STP. Copy of the permission and details of drain capacity are attached as **Annexure-VI**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	water (if any).	
iv)	'ROW' of the land connecting the internal drain to the external land in favour of PP be submitted.	The land connecting the internal drain to the external land is in possession of Vikash Hospital. An undertaking for the same is attached as **Annexure-V**.
v)	273 ECS is stated to have been provision for parking against projected population between about 3000 to 4800 users which is too inadequate and no provision has been made for two wheelers & bicycles. Therefore, parking provision need to be re-visited and re-worked out for which the following suggestions are made: a) Provision of parking of two wheelers adjacent to hospital wings. b) Identifying & demarcating open parking.	Earlier, we had proposed the following parking details: Basement parking = 10,071/32m^2 = **315 ECS** Stilt parking = 6,211/28m^2 = **222 ECS** Surface Parking = 16,918/23m^2 = **736 ECS** **Total Parking proposed earlier** **= 33,200m^2** = 315+222+736 = **1273 ECS** As per SEAC suggestion, we have revised the parking as follows: Basement parking = 10,071/ m^2 = **315 ECS** Stilt parking = 6,211 /28m^2 = **222 ECS** Surface Parking = 19,409/23 m^2 = **844 ECS** **Total revised Parking proposed** **= 35,691 m^2** = 315+222+844 = 1381 ECS Two Wheeler parking = 70 nos. will be provided near hospital wings. Open parking has been increased from 736 ECS to 844 ECS. Site plan showing the parking is attached as **Annexure – VII**.
vi)	Provision of incinerator has not been made / proposed. It is desirable to have incinerator of adequate capacity & suitable design and the same be confirmed & submitted.	As per SEAC suggestion, we will provide incineration facility in hospital complying with CPCB norms. An undertaking stating the same is attached as **Annexure- VIII**.
vii)	No of DG sets with capacity at present & their stack height be confirmed. Since it has been proposed 7 nos. of DG sets of total cumulative capacity of 3365 KVA (6x500 KVA + 1x365 KVA), their location with reference to predominate wind direction and location of the hospital / academic wings,	The Sets location is as per predominant wind direction and there is no sensitive receptor in downwind direction, therefore, incremental GLC will not cause any significant impact. Master plan showing DG location is attached as **Annexure-VII**. Details of DG stack height and Isopleths are attached as **Annexure – VII(a)**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	hospital & residential blocks be submitted along with the stack height(s) and installation drawing of the exhaust pipe(s). Besides, emission analysis the stack be submitted including the carbon balance with carbon neutrality (Net Zone) calculation be submitted including the measures.	
viii)	The report does not contain about the residential block of doctors. The same be submitted.	The residence facility has been provided for the doctors. Master plan showing residence facility for doctors is attached as **Annexure – VII**.
ix)	Fire Tender Corridor with dimension be indicated & shown in the layout map. Fire safety Certificate for existing hospital setup & Fire safety Recommendations for the proposed expansion be submitted before consideration of EC.	The fire-fighting facilities including road width for movement of Fire tender will be as per NBC 2016 and the same has been shown in the Master plan. Master plan showing the width of road is attached as **Annexure-VII**. We have recived Fire safety certificate from Fire Officer, Northern Range, Sambalpur, Odisha for existing Hospital. Copy of the same is attached as **Annexure-IX**. We also have applied for NOC to the fire department. We will submit the NOC copy to SEAC/SEIAA Odisha in due course of time. Copy of the application is attached as **Annexure-X**.
x)	Existing & proposed green belt details with stretch / dimension / trees of plantation & the species shall be submitted.	Total green area = 27,986.5 m^2 i.e (34% of the plot area) • Plantation area = 18,108.87 m^2 (22%) • Lawn area = 9,877.56 m^2 (12%) Green belt width will vary from 3 m to 5 m. No. of trees required = 1 tree /80sq.m of plot area = 82,313.06/80 = 1028.9 say 1029 Nos. **Total no. of trees proposed = 1035 no's** The trees species proposed are Azadirachta indica, Cassis fistula, Terminalia arjuna, Butea monosperma etc.
xi)	Provision of continuous layer of green belt along the boundary inner side with dimensions shall be submitted.	Landscape plan with continuous green belt along the boundary inner side is attached as **Annexure – VII**.
xii)	Kisam (Sabik & Hal) of plots of land for the project be submitted prior to EC.	The kissam of land is Gharabari. The letter vide no. 3652 dated 16/05/2018 from Tehsildar, Bargarh is attached as **Annexure –**

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		XI.
xiii)	To ensure energy conservation, list of Electrical Equipment, instruments, appliances, devices & fixtures with star rating as per BEE under Energy Conservation Act, 2003 shall be submitted.	The Electrical Equipment, instruments, appliances, devices & fixtures with starrating as per BEE under Energy Conservation Act, 2003 will be used. An undertaking for the same is attached as **Annexure-V**.
xiv)	Submission of revised calculations RWH pits considering highest hourly rainfall during last 30 years, run off co-efficiency & retention time.	Earlier, we had proposed 28 RWH pits which has been revised to 33. Revised rain water harvesting calculation is attached as **Annexure-XII**.
xv)	Solar power generation with locations & it's utilization shall be submitted.	More than 5% of electrical load will be met through solar energy. Solar panels will be installed on terrace. Details are attached as **Annexure-XIII**. An undertaking for solar energy use is attached as **Annexure-XIV**.
xvi)	Permission of State Government for establishment of 1050 bedded hospital with medical college be submitted.	We have received permission from Health & Family Welfare Department, Govt. Odisha for 800 beds. Copy of the same is attached as **Annexure- XV**. We are under process to obtain the permission from State Government for establishment of 105 bedded hospital. We will submit to SEAC/SEIAA, Odisha in due course of time. An undertaking for the same is attached as **Annexure-V**.

18. The SEAC in its meeting held on dated 15.03.2022 decided to take decision on the proposal after the site visit by the sub-committee of SEAC.

19. The proposed site was visited by the sub-committee of SEAC on 21.03.2022. Observations of the Sub-Committee of SEAC are as follows:

(i) As per the documents submitted to SEAC Sub-Committee, the Health and Family Welfare Deptt, Govt of Odisha vide their Letter No.18722 dated 02.07.2021 has granted approval in the name of "Vikash Institute of Medical Sciences and Hospital (VIMSH)", Bargarh with 150 MBBS intake capacity and 650 bedded teaching hospital subject to approval of NMC and will be regulated by MCI Act -1956.

State Pollution Control Board, Odisha vide their letter No.13449 Dt-2/9/21 has issued CTE for addition of 900 beds is existing 150 bedded hospital (total bed strength will be 1050) with total built-up area 76,181m^2 (i, e. additional 65,033m^2 for addition of 900 beds) in favour of M/s Vikash Multi Specialty Hospital, Bargarh.

With the above fact/background mentioned above, it may be decided as to whether EC will be considered for 650 beds or 800 (150+650) beds or 1050 beds (150+900) under the applicable low /rules.

(ii) **Source of Water**

With respect to use of river water, as an alternative source instead of ground water for a quantity of 687KLD, the sub-Committee visited the nearest water source viz. “Danta river flowing at a distance of about 1 to 1.5 km from the project site. It was observed that getting water from Danta river is possible through intake point in the river and pipe line till the project site. As such, the PP need to obtain necessary permission from appropriate authority for drawl of water as from the river, installation of intake pump house on the river and laying of pipelines.

(iii) Discharge from ETP & STP: (Existing and proposed):

(a) As per the PP, the output discharge from existing ETP is being completely used their Nursery located in their premises. Treated output discharge from the existing STP is being channelized for use in their own agricultural fields located at about 05 to 1.0 km from the site and the excess water is discharged to a ‘Nala’ via the agricultural lands which eventually ends up in Danta river.

(b) Due to the expansion , the proposal of PP to use/give treated output discharge from ETP to private water Tanker Agency for use in other industrial site /construction activities was not agreed/rejected by the sub-committee .The sub-committee recommended to follow “Zero discharge” policy and suggested that the ETP output discharge should be completely reused inside the project. Premises to which the PP agreed.

As such, the PP shall submit the estimate with calculation for re-use of ETP output discharge inside their premises.

(c) Regarding discharge of excess waste water from STP on expansion, the PP needs to take permission from the authority of Nala as stated above to take the existing discharge as well as additional discharge due to expansion and explore maximum use inside the premises with increased plantation.

(d) The NOC Submitted to SEAC sub-committee has been issued by the “Sarpanch” for construction of hospital and discharge of excess treated effluent.

(e) In case the authority of Nala is Panchayat, then ‘NOC’ is required to be submitted from the concerned BDO.

(f) The ETP and STP should not be located under the same housing and must be kept separate from each other. STP & ETP shall be standalone system and shall not be inter-connected or integrated.

(iv) Parking

The parking site adjacent of the playground was shown by the PP which appeared to be insufficient /inadequate for the projected population of 3000-4800 users. As such, the sub-committee advised the following:

(a) To increase the parking space identified near the playground and to have multi-storeyed parking provision at the same place to which the PP agreed.

(b) To have ground floor dedicated for parking in hospital and academic blocks and increase the building height by one or more floors besides opark9ing near hospital wings, provided the building bye-laws permits the same.

(c) The PP agreed to re-work on (a) and (b) above as submit with layout, drawing and detail calculation thereof for the purpose.

(v) Incinerator

The PP stated that that will have and incinerator but it will be located outside the premises in their land such that the emission from the incinerator will not ingress into the hospital and academic blocks and residential buildings.

The PP shall decide and submit the details with location with respect to the hospital site including the route for transportation of hospital waste from the source to the incinerator.

(vi) DG sects

Since it has been proposed for 07 Nos of DG sects of cumulative capacity of 3365KVA, it was by the sub-committee to explore technical feasibility to inter-connect the stacks/exhaust pipes and reduce the number from 7 to which the PP agreed.

The PP shall submit the location and installation drawing of exhaust pipes of all the DG sets with respect to predominant wind direction and location of hospital wings/OPDs/residential quarters.

(vii) Rainwater Harvesting Structures

There is no Rainwater harvesting pits (RWHP) in the existing hospital. However, the PP committed to have 33 RWHPs on expansion.

(viii) Entry and Exit Gates

The PP will have provision for Entry and Exit gates with pedestrian pathways and shall submit the layout map with appropriate dimensions.

The above observations/views are based on the basis of visit of site condition on physical environmental features and does not cover information/documents sought by SEAC following the presentation made before it.

20. The proponent needs to submit the following as desired by the Sub-Committee of SEAC:

a) Whether EC will be considered for 650 beds or 800 (150+650) beds or 1050 beds (150+900) under the applicable low /rules.

b) PP shall submit the estimate with calculation for re-use of ETP output discharge inside their premises

c) The parking site adjacent of the playground was shown by the PP which appeared to be insufficient /inadequate for the projected population of 3000-4800 users. The PP should increase the parking space identified near the playground and to have multi-storeyed parking provision at the same place to which the PP agreed. The PP should have ground floor dedicated for parking in hospital and academic blocks and increase the building height by one or more floors besides the parking near hospital wings, provided the building bye-

laws permits the same. Accordingly, the PP should re-work on above and submit detailed layout, drawing and detailed calculation thereof for the purpose.

d) Details with location with respect to the hospital site including the route for transportation of hospital waste from the source to the incinerator

e) The PP shall submit the location and installation drawing of exhaust pipes of all the DG sets with respect to predominant wind direction and location of hospital wings/OPDs/residential quarters.

f) The PP will have provision for Entry and Exit gates with pedestrian pathways and shall submit the layout map with appropriate dimensions.

g) Certified Compliance report to conditions of CTE, CTO, authorisation under Bio-Medical Waste from the State Pollution Control Board, Odisha.

h) Indicate the location of the Solar Panel fixing Building wise to match the requirement of 5% of the Electricity installed capacity and the matching utilization within the project area.

i) Calculation and location of RWHP in the layout plan.

j) Provision of a number of Over Head tanks for freshwater as per the head norms and provision of separate Over Head Tanks for treated wastewater to be used in a Dual Plumbing System for Toilet flushing.

k) Organogram of a permanent Environment Cell with professionals be submitted. On compliance, it is to be put as a specific condition if EC is recommended.

l) The PP shall undertake pollutant dispersion study with outcome at ground level concentration level for all DG sets proposed to be located at one place and the Incinerator & based on the findings of the study, mitigation measures including dense plantation as required shall be adopted.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as sought by the Sub-Committee of SEAC at para 20 above.

ITEM NO. 21

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR KALA BARRAGE PROJECT AT VILLAGE KALIAPAL, BLOCK-BARKOTE, TEHSIL-BARKOTE IN THE DISTRICT OF DEOGARH WITH CULTURABLE COMMAND AREA (CCA) – 4050 HA OF DEPARTMENT OF WATER RESOURCES, GOVT. OF ODISHA, (TOR).

1. Proposal of Kala Barrage Project at village Kaliapal, Block-Barkote, Tehsil-Barkote in the district of Deogarh with Culturable Command Area (CCA) – 4050 ha of Department of Water Resources, Govt. of Odisha was discussed in the SEAC meeting held on 29.09.2018. The SEAC had recommended for issue of ToRs for conducting detailed EIA study.
2. The proponent has requested to consider the project as category B2 as per MoEF&CC, Govt. of India notification vide S.O. (E) 3181, dated 14.08.2018.

Incinerator & based on the findings of the study, mitigation measures including dense plantation as required shall be adopted.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as sought by the Sub-Committee of SEAC at para 20 above.

ITEM NO. 21

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR KALA BARRAGE PROJECT AT VILLAGE KALIAPAL, BLOCK-BARKOTE, TEHSIL-BARKOTE IN THE DISTRICT OF DEOGARH WITH CULTURABLE COMMAND AREA (CCA) – 4050 HA OF DEPARTMENT OF WATER RESOURCES, GOVT. OF ODISHA, (TOR).

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2. The proponent has requested to consider the project as category B2 as per MoEF&CC, Govt. of India notification vide S.O. (E) 3181, dated 14.08.2018.
3. The SEAC in its meeting held on 10.10.2018, decided to take decision on the proposal after receipt of the following information/ documents from the proponent:
   (i) Detailed EMP as stipulated in MoEF&CC, Govt. of India notification vide S.O. (E) 3181, dated 14.08.2018.
   (ii) Status of Forest Clearance for forest land involved in the barrage project.
4. The proponent has uploaded the clarification letter issued by SEAC vide letter no: 937 (3), dated 16.11.2018 in online on 29.11.2019 as compliance.
5. The SEAC in its meeting held on 24.12.2019 decided to ask the proponent to submit the required information / documents as requested vide letter no. 937 (3), dated 16.11.2018.
6. The proponent has not yet complied to the letter as requested at para 4 above.
7. This project proposal was initially of 2018 i.e. during the previous SEAC and the queries raised by us have not yet been complied.

After detailed discussion, the SEAC decided to delist the proposal from online system and return the file to SEIAA, Odisha for further action.

Approved

07.05.2022

SECRETARY, SEAC

CHAIRMAN, SEAC

ANNEXURE- A

STANDARD ENVIRONMENTGAL 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 1stday of January, April, July, October of each calendar year, failing which EC is liable to be revoked.

Environmental Scientist, SEAC

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. Since NH200, Kuccha Road and temple are only at a distance of 800 mtr, 570 mtr and 500 mtr respectively, all traffic safety measures shall be taken to avoid any kind of accidents.

20. Bio - toilet provision shall be made.

21. As raised during public Hearing and committed by PP, Loknathpur Sasan village road shall not be used for transportation of sand.

22. 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.

23. Necessary sprinkling on Haulage Road and Avenue plantation shall be done.

24. 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.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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.

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31. 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.

32. 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.

33. 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.

34. 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.

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Annexure - B

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": 1/4the part of the river width (excluding 3/4the 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 : ≥2.5 km b) Area of mining lease area is a cluster: ≤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 : ≤ 3 meter (maximum 3 meter)	4.3 (Para - m) Page - 24
6.	Mining distance from river bank: 1/4th 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 : ≤60% of mine lease area	4.3 (Para - s) Page - 25
8.	Minable sand per ha. Available for actual mining : ≤60,000 MT/Annum	
9.	Regular replenishment study and replenishment rate	

ANNEXURE - C

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S SAPIGEN BIOLOGIX PRIVATE LIMITED FOR PROPOSED MANUFACTURING OF VACCINES AND BIO-THERAPEUTICS INCLUDING BIO-PROCESSING, BULK FORMULATION, FILLING, PACKAGING AND ALLIED R&D WORKS AT ODISHA BIOTECH PARK, VILLAGE-ANDHARUA, TAHASIL- CHANDAKA, DIST.-KHORDHA, ODISHA OF SRI A. ARUNACHALAM - EC

(I) Statutory Compliance:

1. This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project
2. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
3. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
4. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board.
5. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
6. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
7. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.
8. The buildings shall have adequate distance (as per local building bye laws) between them to allow movement of fresh air and passage of natural light, air and ventilation in accordance with guidelines of local authorities.
9. Biomedical waste shall be disposed to "SANI CLEAN PVT. LTD.", Khorda, Odisha.
10. The proponent shall not involve in the use of live animals for experiments and study purposes.
11. The proponent shall obtain permission from the concerned authority for disposal of treated effluents and submit the same to SEIAA, Odisha before commissioning of the plant.

(II) Air Quality Monitoring and Preservation

1. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and PM_{25} in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the Industrial area at least at four locations (one within and three outside the plant area at an angle of 12^0 each), covering upwind and downwind directions.
2. The D.G. sets to be used during development/ construction phase shall be in conformity to Environment (Protection) Rules prescribed for air and noise emission standards. Storage of

diesel shall be made underground and necessary approvals/permissions from Chief control of explosives to be obtained.

3. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking, loading and unloading shall be fully internalized and no public space shall be utilized.
4. Vehicles hired for bringing construction material! to the site should have a Pollution Under Control (PUC) certificate and shall conform to applicable air and noise emission standards and shall be operated only during non-peak hours.

(III) Water Quality Monitoring and Preservation

1. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986.
2. Construction of storm water drains for collection, storage and its re-use as per guidelines of Central Ground Water Authority (CGWA).
3. The project proponent shall report to the State Pollution Control Board about the compliance of the prescribed standards for all discharges from the Industrial Area.
4. Fixtures for showers, toilet flushing and drinking shall be of low flow either by use of aerators or pressure reducing devices or sensor based control.
5. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured/recorded to ensure the water balance as projected by the project proponent. The record shall be submitted to the concerned Regional Office of the MoEF&CC, Govt. of India as well as to SEIAA, Odisha along with six monthly monitoring reports.
6. Water demand during development/construction shall be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
7. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
8. The project proponent shall make efforts to minimize water consumption in the industrial complex by segregation of used water, practicing cascade use and by recycling treated water.
9. The proponent shall treat the effluent to meet the prescribed CETP inlet norms before discharge to CETP for treatment.
10. The proponent shall treat the waste water generated from the unit in the Common Effluent Treatment Plant (CETP) of capacity 200 KLD (4x50 KLD) to be provided by the developer of Biotech Park. In case, the Park does not set up the CETP & CSTP units, Sapigen Biologix shall set up its own ETP and STP catering to its individual need.
11. The proponent shall provide RCC tanks for storage of effluent for monitoring the characteristics of effluent before taking into the Common Effluent Treatment Plant (CETP) for further treatment.
12. Proper flow meters along with online monitoring facilities shall be provided to monitor the effluent quality and quantity to be sent to CETP and from CETP to the final disposal/re-use on a continuous basis.

13. Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.

14. To achieve the Zero Liquid Discharge, waste water generated from different industrial operations shall be properly collected, treated to the prescribed standards and then recycled or reused for the identified uses.

15. The domestic wastewater generated from the industry shall be treated in Sewage Treatment Plant of capacity 100 KLD (2x50 KLD) to meet the following standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017. The treated effluent from Sewage Treatment Plant shall be used for landscaping, flushing and DG set cooling, Road washing etc. Under no circumstances there shall be any discharge of treated waste water to outside the factory premises.

Sl. No.	Parameters	Standards
1.	pH	6.5-9.0
2.	BOD (mg/l)	20
3.	TSS (mg/l)	<50
4.	Fecal Coliform (MPN/100ml)	< 1000

16. The project should not amend or alter the pathways of the natural streams or creeks/nallah flowing, if any without permission from concerned authority.

17. Rain water harvesting for roof run-off and surface run- off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging shall be kept at least 4 m above the highest ground water table.

(IV) Noise monitoring and prevention

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

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

(V) Energy Conservation measures

1. Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

2. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly. Use of renewable energy including solar (atleast 5%) shall be done for the project.

3. Provide LED lights in their offices and residential areas.

(VI) Waste management

1. Disposal of muck during development/construction phase should not create any adverse effect on the neighboring 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. The ground water quality of the adjacent to dumping area should be

monitored and report should be submitted to the Regional Office, MoEF&CC, Govt. of India as well as to SEIAA, Odisha.

2. Fly ash bricks should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016 and Fly ash Notification, 2021.

3. All hazardous waste generated during development/ construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the Central Pollution Control Board / State Pollution Control Board.

4. Used LEDs shall be properly collected and disposed off / sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible. Energy conservation measures should be as per Bureau of Energy Efficiency (BEE) standards.

5. Air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.

6. The solid waste generated shall be properly collected and segregated in accordance with the Solid Waste Management Rules, 2016. Wet garbage shall be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material. No municipal waste shall be disposed off outside the premises

(VII) Green Belt

1. The green belt of the adequate width and density preferably with local species along the periphery of the unit shall be raised so as to provide protection against particulates and noise. The developer shall ensure plantation (greenbelt) in the minimum area of **33%** in the unit. The time bound action plan for green belt/plantation be submitted to the Regional Office, MoEF&CC, Govt. of India as well as to SEIAA, Odisha within three months of issue of this letter.

2. Cutting of plants/trees are to be totally avoided by the construction labours. The contractor has to maintain log book for the purchase and distribution of fuel wood.

3. All the topsoil excavated during development/construction activities should be stored for use in horticulture/landscape development within the project site. Report should be submitted to the Regional Office, MoEF&CC, Govt. of India as well as to SEIAA, Odisha.

4. For monitoring of land use pattern, a time series of land use maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to the Regional Office, MoEF&CC, Govt. of India as well as to SEIAA, Odisha.

(VIII) Human Health Issues

1. 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.

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

(IX) Corporate Environment Responsibility

1. The project proponent shall comply with the provisions contained in the MoEF&CC, Govt. of India OM vide F.No. 22-65/2017-1 A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation / violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the SEIAA, Odisha as a part of six-monthly report.
3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Regional Office, MoEF&CC, Govt. of India as well as to SEIAA, Odisha along with the Six Monthly Compliance Report.
5. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
6. Special purpose vehicle shall be established for implementation, monitoring and compliance of the environmental safeguards.

(X) Miscellaneous

1. Green building concept may be explored in the construction.
2. The kisam of land area proposed for the unit shall be converted for industrial use before going for construction activity
3. Construction material has to be brought from approved / authorized places.
4. Internal Road widths within the industrial area shall be minimum 18 m ROW.
5. Parking space to accommodate trucks, cars, two wheelers and bicycles shall be provided as per the norms.
6. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
7. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
8. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

Environmental Scientist, SEAC

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

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

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

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

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

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

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

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

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

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

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

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

21. 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.

Environmental Scientist, SEAC

ANNEXURE - D

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR DECORATIVE STONE / GRANITE MINES

A. Specific conditions

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

B. Standard conditions

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

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

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

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

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

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

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

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

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

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

parameters and allows only species adopted to that micro climate.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Environmental Scientist, SEAC

ANNEXURE- E

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF M/S ADISH MINERALS PVT. LTD. FOR PROPOSED CHROME ORE BENEFICIATION PLANT OF CAPACITY 1,20,000 TPA THROUGHPUT OVER AN MINING LEASE AREA 13.43 ACRES AT MOUZA- BAUNSAMALI, PS- BADACHANA, DIST-JAJPUR, ODISHA OF SRI NRUSINGHA CHARAN PARIDA (DIRECTOR) – EC

I. Statutory compliance:

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

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

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

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

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

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

II. Air quality monitoring and preservation

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

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

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

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

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

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

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

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

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

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

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

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

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

III. Water quality monitoring and preservation

(i) The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

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

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

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

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

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

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

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

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

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

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

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

(xiii) Adhere to “Zero Liquid Discharge”.

(xiv) Regular monitoring of water quality for surface water sources as well as ground water sources shall be carried out. The groundwater shall be monitored downstream of beneficiation plant as well as tailing pond upto groundwater table and record of monitoring data should be maintained and submitted on six monthly basis to the

Ministry of Environment and Forests, its Regional Office, Bhubaneswar, the Central Ground Water Authority, the Regional Director Central Ground Water Board and the State Pollution Control Board.

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

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

IV. Noise monitoring and prevention

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

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

V. Energy Conservation measures

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

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

VI. Waste management

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

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

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

VII. Green Belt and EMP

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

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

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

VIII. Human Health Issues

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

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

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

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

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

IX. Corporate Environment Responsibility

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

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

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

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

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

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Environmental Scientist, SEAC

ANNEXURE - F

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S. CHHEND HERITAGE HOMES PVT. LTD FOR PROPOSED 2B+G+16 STORIED RESIDENTIAL APARTMENT BUILDING OVER AN AREA OF 1.75 ACRES ON KHATA NO. 9 & PLOT NO. 288 (P) & 289/432(P), MOUZA- CHHEND, R.T.U - 3, P.S. CHHEND, TAHASIL - ROURKELA, SUNDARGARH, ODISHA OF SRI ALOK SHARMA (TOTAL BUILT UP AREA - 7081.94 SQ.MT) - 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 firefighting 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 63 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 31 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 125 KLD. The treated effluent from STP shall be reused for flushing, horticulture & Filter backwash.
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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

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

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

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

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

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

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed approx. 1421 sqm (20% 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(ll) of the said O.M. appropriate funds shall be earmarked for the activities such as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire

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

PART B – GENERAL CONDITIONS

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

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

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

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

Environmental Scientist, SEAC