

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL
COMMITTEE, ODISHA HELD ON 02ND DECEMBER 2023**

The SEAC met on 2nd December 2023 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri Shashi Paul. The following members were present in the meeting.

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

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

ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. GENERAL ADMINISTRATION & PUBLIC GRIEVANCE DEPARTMENT FOR PROPOSED RESIDENTIAL BUILDING OVER AN BUILT-UP AREA 1,11,602 SQM LOCATED AT PLOT NO. 480/479, KHATA NO- 69, IN MOUZA-BHOUMA NAGAR, BHUBANESWAR, DIST – KHORDHA OF SRI PRASANTA MISHRA - EC

1. This is proposal for Environmental Clearance of M/s. General Administration & Public Grievance Department for proposed Residential building over a built-up area 1,11,602 sqm. located at Plot No. 480/479, Khata No- 69, in mouza- Bhouma Nagar, Bhubaneswar, Dist – Khordha of Sri Prasanta Mishra.
2. **Category:** The project falls under category “B” or activity 8 (a)- Building and construction projects, as per the EIA Notification 2006 and amendments thereafter.
3. **Location and connectivity:** The proposed project is located at Plot no- 480/479, Khata no.-69, in Mouza- Bhouma nagar, Bhubaneswar, Khordha. Nearest Highway is NH-16 -2.27km and SH 60 -12.88 km. Nearest Railway Station is Bhubaneswar junction railway station at 1.84km. Nearest Airport is Biju Patnaik International Airport at 3.06km. Nearest Habitation is Samantarapur at 4.66km and Gajapati Nagar at 3.37km. Nearest Water Bodies Canal at 3.43km and Khukhai River at 6.49km. Nearest forest is Chudang Garh forest at 14.36 and Chandaka Forest at 10km.

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

4. The total plot area of the project site is 71467.48 sq.m (7.14 ha/ 17.65 acres) and total Built-up area of the project will be 1,11,602 Sq.m.

5. **Area details of the project:**

S. NO.	DESCRIPTION	AREA(SQ M)
A.	Plot Area	71467.48
B.	Proposed Ground Coverage (20.26 % of total plot area)	14484.14
C.	FAR area (@1.58)	111602
D.	NON FAR area	32817.56
E.	Built-up Area	1,11,602
F.	Green Area (42.5 % of plot area)	30,404.91
G.	Open Parking area (@ 5.04 % of plot Area)	3,607.8
H.	Paved Area	8988.61
I.	Road Area	21807.62
J.	Open Area	52934.1
K.	Building Height (till Terrace Floor)	Type VII - BLOCK 1 - 31.2m Type VII - BLOCK 2 - 31.2m Type VI - BLOCK 1 - 30.6m Type VI - BLOCK 2 - 30.6m Type VI - BLOCK 3 - 27.3m Type VI - BLOCK 4 - 27.3m
L.	No of Dwelling Units	300

6. **Water requirement and wastewater details:** Fresh Water Requirement- 277 KLD, Source- Municipal supply supplemented with ground water, Waste water generation and management – 378 KLD and 340 KLD treated water will be reused for flushing 156 KLD, landscaping 182 KLD, DG cooling 2 KLD for non-monsoon season and during monsoon season treated water will be reused for flushing 156 KLD, landscaping 150 KLD, DG cooling 2 KLD and 32 KLD used for other purposes. STP Capacity- 391 KLD. The PP has proposed zero liquid discharge in Non Monsoon period and 32 KLD of treated water will be discharge in Monsoon period to nearest drain.

Category	Total Quantity (KLD)
Domestic water Req. (Fresh Water Requirement)	277 (171+97+9)
Flushing water Req.	156 (90+58+8)
Sewage generation (@80% of the Domestic + @100% Flushing water requirement)	378
Capacity of STP (KLD)	391
Recovered water from STP (90% of Waste water)	340
1. Flushing	156
2. Landscaping	182
3. DG cooling	2

7. **Power requirement:** - Maximum power demand for the project during operation phase is estimated to be 4244 kW respectively. Proposed to use 3 Nos. of 1250KVA 33/0.433KV OR 11/0.433KV, 50Hz, 0.95 PF oil type outdoor transformer with OLTC. Source of power will be Orissa State Electricity board. DG sets of total 1229 KVA will be provided as power back-up during power failure. Solar power provided in the project is of 136KVA.
8. **Rainwater Harvesting:** - Total Runoff 1930 cum/ day and 70 no. of pits.
9. **Parking requirement:** - Total parking area is 34,368.38 sq.m. Adequate number of parking will be provided to accommodate the expected vehicles during operation phase of the project in line with the requirement of Local Building by Laws. Type VII & VI - Parking area provided (as per ODA By-laws) in Surface, Upper & Lower Basement Floor (30% of Total Built-up area towards FAR) - 32118.38 sqm and Clubhouse - Parking area provided in Surface (50% of Total Built-up area towards FAR) - 2250 sq.m.
10. **Firefighting installation:** - The fire protection system for the building is to be designed as per the provisions of National Building Code - 2016 and the directions of local fire service authority.
11. **Green Belt Development:** - Green area will be provided in 30,404.91 sqm. (42.5 % of plot area) Out of which Green belt area is 19430.6 sq.m i.e. 27.18 % of the plot area and landscape area is 10974.31 sq.m i.e. 15.35 % of the plot area. Total no. of trees proposed in the project is 855 trees.
12. **Solid Waste Management:** - During operation phase, waste comprise of municipal waste. It is estimated that approx.1523 kg per day of Total waste. The solid waste will be segregated at source & collected.
 1. Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site.
 2. Bio-degradable (will be composted through organic waste converter).
 3. Recyclable wastes will be disposed to govt. or SPCB approved third party vendors.
 4. Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer.
 5. The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Tran's boundary Movement) Rules, 2016.
 6. Horticultural Waste is composted and used for gardening purposes.
13. **Project cost :** The estimated project cost is INR 437.41Crores and cost for EMP is INR 234 lacs.

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

Considering the information furnished and the presentation made by the consultant, **M/s P & M Solution, Noida** along with the project proponent, the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) **Before implementation of the project, the Proponent shall convert the land to Gharabari kism and shall take the ownership of the land if not already taken.**
- ii) **The Proponent shall obtain permission/NOC from concerned Divisional Officer (PHD) and / or from the appropriate authority for disposal of excess treated effluent from STP during monsoon period to the nearest drain without which the Proponent shall 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) Revisit the water balance to reduce the waste water generation to maintain ZLD during non monsoon period.
- iv) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.
- v) The proponent shall obtain building plan approval, Fire NOC, CRZ and AAI clearance if applicable.
- vi) The project proponent shall include the provision to increase the visitor parking area for both 2-wheeler and 4 wheelers.
- vii) Traffic study report shall be vetted by a reputed institute.
- viii) Structural stability certificate vetted by institute of repute.
- ix) The total rainwater harvested shall be revisited considering highest rainfall of the area.
- x) The proponent has proposed for supply of ground water for use occupants. The ground water shall be tested and treated if required before supply to occupants.
- xi) **All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.**

ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. XIM UNIVERSITY FOR CONSTRUCTION OF NEW HOSTEL BLOCK BUILDING OF XIM UNIVERSITY BHUBANESWAR OVER AN BUILT UP AREA OF EXISTING CAMPUS IS 144160.0 SQM AT NO. 12(A), NIJIGADA KURKI, HARIRAJPUR, DIST- PURI OF SRI BASANT KUMAR MOHANTY – VIOLATION EC

1. This proposal is for Environmental Clearance of M/s. XIM University for Construction of New Hostel Block Building of XIM University Bhubaneswar over an built up area of existing campus is 144160.0 sqm at No. 12(A), Nijigada Kurki, Harirajpur, Dist- Puri of Sri Basant Kumar Mohanty.
2. **Category:** The project falls under category "B" or activity 8(b): Township & Area Development Projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. **Project details:** Earlier, the project proponent had applied for Environment Clearance to SEIAA on 15.09.2014 for 1,44,160.0 sqm Built up Area and the SEAC presentation was held on 29.11.2014. But as per the Gazette of India, Notification dt. 22nd Dec., 2014; Educational Institutes having less than 1,50,000 sq. mtrs. of buildup area are exempted from obtaining Environmental Clearance. So other project are exempt from obtaining Environment Clearance. Now, they have planned to increase the built up area from 1,44,160.0 sqm to 1,68,237.0 sqm due to Construction of a New Hostel Block. Hence, they are applying herewith for Environment Clearance.
4. **Statutory clearances: Terms of Reference (TOR) under violation category** has been granted by SEIAA, Odisha vide proposal no. SIA/OR/MIS/76437/2022, dated 15.09.2023. BDA has approved the building plan for Hostel Block vide letter no. 4308/BDA, Bhubaneswar, dated 06.02.2023. BDA has approved the building plan for existing project vide letter no. 15450/BDA, Bhubaneswar, dated 30.04.2022.NOC From IDCO for Water Supply vide letter no. IDCO/BCD-II/900, Dated 18.07.2012.
5. **Location and Connectivity** – The campus is located in the Village- Kurki, Mouza- Nijigarh under Pipli Block, Puri District of Odisha. The Geographical coordinate of the project site is: Latitude - 20° 09' 22.18" N & Longitude - 85° 45' 59.36" E. The site falls in the Survey of India toposheet no. 73H/12 & 73H/16.The site is located about 13.8 kms away from the Baramunda Bus Stand and 11.5 kms from the Biju Patnaik International Airport, Bhubaneswar. Bhubaneswar railway station is approximately 14.7 kms from the campus. Sundarapada-Jatani road is passing near by the project site.
6. The site is coming under Bhubaneswar Development Authority (BDA).
7. The total plot area = 2,22,575.40 sqm/55 Acre (Existing- 35 Acre and Additional- 20).Total Built up Area = 1,68,237.0 sqm (Existing- 1,44,160.0 sqm and Additional- 24,077.0 sqm)
8. The Building Area Details of the Project in tabulated form

Particular	Existing	Proposed	Total
Plot Area	1,41,169.0 sqm (35 Acre)	81,406.4 sqm (20 Acre)	2,22,575.40 sqm (55 acre)
Ground Coverage	31,389.0 sqm (14.10%)	2,781.0 sqm (1.25%)	34,165.3 sqm (15.35%)
Total Built up Area	1,44,160.0 sqm	24,077.0 sqm	1,68,237.0 sqm
FAR	0.63	0.11	0.74
Maximum Height	--	--	28.35 m
Road & Paved Area	--	--	47,187.1 sqm
Basement Parking	1,050.0 sqm	--	1,050.0 sqm
Stilt Parking	1,538.0 sqm	--	1,538.0 sqm
Surface Parking	55,438.0 sqm	11,862.0 sqm	67,300.0 sqm

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

Total Parking Area	58,026.0 sqm	11,862.0 sqm	69,888.0 sqm
Green Belt Area	29,075.0 sqm	44,848.0 sqm	73,923 sqm (33.2% of the plot area)
Power/Electricity Requirement & Sources	3420.0 KW Source: TPCODL	---	3420.0 KW Source: TPCODL
No. of DG sets	4x250 KVA, 2x500 KVA, 2x1010 KVA, 1x125 KVA, 1x62.5 KVA	--	4x250 KVA, 2x500 KVA, 2x1010 KVA, 1x125 KVA, 1x62.5 KVA
Fresh Water requirement & Sources	192.0 KLD Source: IDCO Supply	81.0 KLD Source: IDCO Supply	273.0 KLD Source: IDCO Supply
Sewage Treatment Plant	STP – 300 KLD	STP – 250 KLD	STP – 550 KLD

9. **Water requirement:** Fresh make up of 273.0 m³/day will be required for the project which will be sourced from IDCO Water Supply. Total waste water generated from the institutional building is 353.4 KLD which is treated in STP of Capacity 550 KLD. Rain Water harvested through 82 nos. of Rain Water recharging pits & also rain water is harvested through Rain Water Harvesting Pond.

Sl. No.	Description	Total Population	Per Capita Consumption (ltr/day)		Water Requirement (KLD)		
			Fresh	Flushing	Domestic	Flushing	Total
1.	Institutional	3000 nos.	Fresh (90)	Flushing (45)	270.0	135.0	405.0
2.	Floating	600 nos.	Fresh (5)	Flushing (10)	3.0	6.0	9.0
TOTAL					273.0	141.0	414.0

Details	Water (KLD)
Water requirement for domestic purpose	273.0
Wastewater generated from domestic use (@ 80 % of domestic water requirement)	218.4
Water requirement for Flushing Purpose	135.0
Wastewater generated from Flushing (@ 100 % of flushing requirement)	135.0
Total Wastewater generated	218.4+135 = 353.4 KLD
Sewage Treatment Plant Capacity	550 KLD (0.55 MLD)
STP Loss (5 % of wastewater generation)	17.7
Recycled water form STP @ 95 % of wastewater generated	335.7

10. **Power requirement:** Total Power requirement of the building is 3420.0 KW, Source is TPCODL, 4x250 KVA, 2x500 KVA, 2x1010 KVA, 1x125 KVA, 1x 62.5 KVA DG Sets are provided. Total 620.0 KW Solar Power Generation which is 5% of total power required in project.

Power Requirement	3420.0 KW
Source	TPCODL of Odisha State Electricity Board
Backup Power	4x250 KVA, 2x500 KVA, 2x1010 KVA, 1x125 KVA, 1x62.5 KVA
Solar Power	620 KW Solar Panel installed at Campus

11. **Rain Water Harvesting:** Total 4584 cum Rain Water is harvested through 82 nos. of recharge pits & one 60,000 cum Rain Water Harvesting Pond.

12. **Parking Requirement:** Total parking area provided is 69706.0 Sq.mt. and total 2780 nos. of ECS and location of parking area is Basement, Stilt & Open.

Parking Area Provided			
Basement Parking	--	--	1,050.0 sqm
Stilt Parking	--	--	1,538.0 sqm
Surface Parking	--	--	67,300.0 sqm
Total Parking	--	--	69,888.0 sqm
Equivalent car space Provided			
	Area (sqm)	Area/ECS	
Basement Parking	1,050	32	33 ECS
Stilt Parking	1,538	28	55 ECS
Surface Parking	67,300	25	2,692 ECS
Total Parking Provided			2,780 ECS

13. **Fire fighting Installations:** Fire Fighting will be provided as per NBC Norms.

14. **Green Belt Development:** Green belt is developed over an area of 73923 sqm which is 33.2% of the total plot area. Total 4440.0 nos. of plants to be planted and 3 tier plantation.

15. **Solid Waste Management:** Solid waste generated and its management.

Solid Waste Generation

Description of waste	Total no. of population	Per capita generation of waste in kg/day	Quantity of waste generate (in kg/day)
Institutional Building	3000	0.45	1350.0
Road Sweeping	600	0.15	90.0

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

STP sludge		--	40.0
TOTAL SOLID WASTE GENERATED			1480.0 kg/day

16. **Project cost:** The estimated project cost is 15.0 Crores and cost for EMP is 2.62 Crores.

17. **Violation penalty:** The Penalty Provisions as per Notification F. No. 22-21/2020-IA.III, dated 07.07.2021 is 1% of the total project cost. The cost assessment related to environmental degradation and its remediation as stated above would be: Rs. 7,20,000/-

Table: Total Budgetary Allocation

Sr. No.	Description	Estimated Cost (Rs.)
1.	Estimated cost of damage/remediation with respect to ecological aspects	7,20,000.00
2.	Community resource augmentation plan	1,50,000.00
	Net Expenditure:	8,70,000.00

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

19. The Committee observed the followings;

- a) Cost proposed for Remediation Plan, Community Resource Augmentation Plan for Damage Assessment is Rs. 8,70,000.00/- (Rupees eight lakhs seventy thousand only).
- b) Cost of assessment of Environmental / Ecological damage due to violation is Rs. 7,20,000.00/- (Rupees Seven lakhs and twenty thousand only).
- c) Total cost towards Remediation Plan, Natural Resource Augmentation Plan for Damage Assessment & assessment of Environmental / Ecological damage is Rs. 8,70,000.00/- (Rupees eight lakhs seventy thousand only) for which the proponent has to submit Bank guarantee with the State Pollution Control Board, Odisha prior to the grant of Environmental Clearance.
- d) Total cost of the project is Rs. 15.01 Crores as certified by Chartered Accountant and 1% of the project cost is Rs.15,01,758.
- e) Total penalty to be paid by the proponent as per SoP of MoEF & CC, Govt. of India dtd. 07.07.2021 for violation is (1% of the project cost) = Rs.15,01,758.
- f) This is an educational institution and they have not started any activity from which they will gain profit. Hence the annual turnover in this case is zero.
- g) There is no information available with the SEAC, if the State Govt. has initiated legal action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986,

Considering the information furnished and the presentation made by the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd, Bhubaneswar** along with the project proponent, the SEAC recommended for grant of Environmental Clearance for the project valid for a period of 10 years with the following specific conditions in terms of the provisions of the MoEF&CC, Govt. of India notification dated 14th March, 2017 in addition to the conditions stipulated as per **Annexure – B. However, EC to be issued to the proponent after State Government file legal case against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986.**

- (i) The Project Proponent shall submit a Bank Guarantee (BG) of an amount of Rs. 8,70,000.00/- (Rupees eight lakhs seventy thousand only) towards Remediation Plan, Natural Resource Augmentation Plan & Community Augmentation Plan for Damage Assessment & assessment of Environmental / Ecological damage with the State Pollution Control Board, Odisha prior to the grant of Environmental Clearance.
- (ii) The proponent shall deposit separately (other than BG) an amount of Rs.15,01,758 towards the penalty for violation as per SoP of MoEF & CC, Govt. of India dtd. 07.07.2021.
- (iii) The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC, Odisha and approval of the regulatory authority (i.e. SEIAA, Odisha).
- (iv) The project proponent shall make adequate arrangement for environmental monitoring post construction phase.

ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. ARCHID BUILDERS PRIVATE LIMITED FOR RESIDENTIAL CUM COMMERCIAL PROJECT TOTAL LAND AREA IS 4,977.6 M2 (1.23 ACRES) AND THE TOTAL PROPOSED BUILT-UP AREA IS 32,367.0 M2 LOCATED AT MOUZA- SHANKARPUR AND AIGANIA, TEHSIL- BHUBANESWAR, DISTRICT- KHURDA OF SRI BANDAN MOHANTY - EC

1. This proposal is for Environmental Clearance of M/s. Archid Builders Private Limited for Residential cum Commercial Project total land area is 4,977.6 m² (1.23 acres) and the total proposed built-up area is 32,367.0 m² located at Mouza- Shankarpur and Aigania, Tehsil- Bhubaneswar, District- Khurda of Sri Bandan Mohanty.
2. **Category:** The project falls under category "B" or activity 8 (a)-Building and Construction project under EIA Notification dated 14th September 2006 as amended from time to time.
3. **Location and connectivity:** The project site is located at Mouza- Shankarpur and Aigania, Tehsil- Bhubaneswar, District- Khurda, Odisha bounded by Latitude: 20°14'52.53"N Longitude: 85°46'20.31"E. Total land area is 4,977.6 m² (1.23 acres) and the total proposed built-up area is 32,367.0m². The connecting road is Shreekhetra Residency Road towards West side of the project site. The Nearest Highway is NH-16 which is 0.2 km in South direction from the project site, NH-316 which is 9.4 km in East direction from the project site. The nearest Railway Station is Sarkantra Railway Station is about 3.5 km (SE) away from the project site. Biju Patnaik International Airport is at 3.5 km (E) from project site.

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

4. **Project Area details:** The total plot area is 4,977.6 sqm. Total Built up area for the project will be 32,367.0 sqm. The total population of project after proposed will be 1,444 persons.

S. No.	Particulars	Area (m ²)
1.	Total Plot Area	4977.6
2.	Permissible Ground Coverage (@ 40% of the plot area)	1991.04
3.	Proposed Ground Coverage (@34.19 % of the plot area)	1701.84
4.	Permissible FAR (@5.0)	24,888
5.	Total Proposed FAR (@4.9486)	24,632
	Commercial FAR (@4.09% of total FAR)	1008
	Residential FAR (@95.91% of total FAR)	23,624
6.	Non-FAR Area	7735
	Fire Tower	1152
	Parking (Basement Parking = 5456.0 m ² + Stilt parking = 1127.0 m ²)	6583
7.	Built-up Area (5 + 6)	32,367
8.	Landscape Area (@ 20%)	995.52
9.	Maximum Height of the Building (m)	62.4 m

5. **Water Requirement:** The total water requirement for the project will be approx. 138 KLD out of which domestic water demand is 133 KLD. The freshwater requirement will be 87 KLD. It is expected that the project will generate approx. 116 KLD of wastewater. The wastewater will be treated in onsite STP of 140 KLD capacity. The treated effluent will be reused for flushing & horticulture. Surplus treated effluent will be discharged to external sewer.

S. No.	Description	Occupancy	Rate of water demand (lpcd)		Total Water Requirement (KLD)		
			Fresh	Flushing	Fresh	Flushing	Total
A.	Domestic Water						
	• Residents	899	90	45	80.91	40.46	121.37
	• Staff (Maintenance, Commercial Stores)	127	25	20	3.18	2.54	5.72
	• Visitors	418	5	10	2.09	4.18	6.27
	Total	1444			86 KLD	47 KLD	133 KLD
Total Domestic Water = 133 KLD							
B.	Swimming Pool	--					1 KLD
C.	Horticulture	995.52 m ²		4 l/sqm			4 KLD
Grand Total (A + B + C) = 138 KLD							

Domestic Water Requirement	133 KLD
• Fresh	86 KLD
• Flushing	47 KLD
Wastewater [@80% fresh + 100% flushing]	68.8 + 47 = 116 KLD
STP Capacity (20% higher than waste water)	140 KLD

6. **Rainwater harvesting details:** 1 Rainwater tank will be provided considering peak hourly rainfall has been considered as 160 mm/hr.
7. **Parking Proposed:** Total parking proposed for the project is 212 ECS.
8. **Power Requirement and solar details:** The power supply will be supplied by TPCODL. The load requirement for the project will be 1400 kVA. There is provision of 3 nos. of DG sets of 300 kVA capacity for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

S. No.	DESCRIPTION	SAVINGS (kVA)
1.	Solar based Lighting will be done in the common areas, stair cases, landscape areas, signage, entry gates and boundary walls etc. (5% from total power load) Norms for Rooftop PV systems Installation: Solar power back of a minimum generation capacity of 5% of the connected load (OR) 20 Watts/sq.feet on available roof space, whichever is less.	70 kVA
2.	LEDs will be used in all dwelling units (@4%).	56 kVA
3.	Outdoor and common are lighting shall be LED (@1%).	14 kVA
Total Energy Saved		140 kVA
Total Power load = 1,400kVA Energy saved through various provisions = 140 kVA TOTAL ENERGY SAVING = 10%		

9. **Solid waste generation:** The total solid waste generation will be 560 kg/day.

S. No.	Description	Occupancy	Waste Generated (kg/capita/day)	Waste Generated (kg/day)
1.	Domestic Solid Waste			
	• Residents	899	0.5	449.5
	• Staff (Maintenance, Commercial Stores)	127	0.25	31.75
	• Visitors	418	0.15	62.7
2.	Horticultural Waste (0.25 acre)		@ 0.2 kg/acre/day	0.05
3.	STP Sludge		Wastewater x 0.35 x B.O.D difference/1000	15.83

Total Solid Waste Generation = 560 kg/day

10. **Greenbelt:** Total green area measures 995.52 m² (20% of Net plot area). Evergreen tall and ornamental trees have been proposed to be planted inside the premises. No. of trees required = 1 tree/80 sq.m. of plot area = 4977.6/80 = 62 Nos . Total no. of trees proposed = 65.
11. **Project cost:** Estimated cost of the project is INR 100 Cr. including land and development cost. EMP cost includes a capital cost of 162.5 lakhs and recurring cost of 26.5 lakhs.

COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Sewage Treatment Plant	754.70	10
Rain Water Harvesting System	20	4
Solid Waste Management	7.5	0.50
Environmental Monitoring	0	9.0
Green Area/ Landscape Area	20	0.5
Others (Energy saving devices, miscellaneous)	40	2.5
Total	162.5	26.5

12. **Environment Consultant:** The environment consultant **M/s Grass Roots Research & Creation India (P) Ltd., Noida** along with the proponent made a presentation on the proposal before the Committee.

13. The SEAC recommended the following:

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

- i) Copy of permission for discharge of treated waste water to the nearby drain.
- ii) Permission from Water Resource department, Govt. of Odisha for usage of ground water.
- iii) The project proponent shall increase the number of Rainwater harvesting tanks.
- iv) The project proponent shall furnish an undertaking that commercial unit shall only be used for residents purpose.
- v) Structural stability certificate vetted by institute of repute.
- vi) Traffic Study report to be vetted by institute of repute.

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

- i) Environmental settings of the project site.
- ii) Extent of construction activity.
- iii) Road connectivity to the project site.
- iv) Drainage network at the site.
- v) Discharge point for discharge of treated water and distance of the discharge point from the project site.
- vi) Greenbelt area.

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

vii) Any other issues including local issues

ITEM NO. 04

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. ARCHID BUILDERS PRIVATE LIMITED FOR COMMERCIAL CUM HOTEL BUILDING PROJECT. TOTAL LAND AREA IS 5,301.381 SQ.M (1.31 ACRES) AND THE TOTAL PROPOSED BUILT-UP AREA IS 30,390.0 SQ.M AT MOUZA- PAHAL, TEHSIL- BHUBANESWAR, DISTRICT- KHURDA OF SRI BANDAN MOHANTY - EC

1. This proposal is for Environmental Clearance of M/s. Archid Builders Private Limited for Commercial cum Hotel Building project. The total land area is 5,301.381 sq.m (1.31 acres) and the total proposed built-up area is 30,390.0 sq.m at Mouza- Pahal, Tehsil- Bhubaneswar, District- Khurda of Sri Bandan Mohanty.
2. **Category:** The project falls under category "B" or activity 8 (a)-Building & Construction Project under EIA Notification dated 14th September 2006 as amended from time to time.
3. **Location and connectivity:** M/s Archid Builders Pvt. Ltd. proposes a Commercial cum Hotel Project (2B + G + 14). The project site is located at Rev. Plot No - 284, Khata No - 209 and Rev. Plot No- 286, Khata No - 352/1438, Mouza - Pahal, Tehsil- Bhubaneswar, District- Khurda, Odisha on a land measuring 1.31 acres or 5,301.381 m² bounded by Latitude 20°20'24.94"N and Longitude 85°53'02.41"E. The connecting road is N. H. Sub Road towards front side of the project site. The Nearest Highway is SH-16 which is approx. 20 m in west direction from the project site, NH 316A/SH 60 is approx. 1.9 km (NE) away, NH-316 is approx. 3.7 km (S) away from the project site. The nearest Railway Station is Patia P. H. Railway Station is about 4.4 km (W) away from the project site. Biju Patnaik International Airport is at 11.3 km (SW) from project site.
4. **Project Area statement:** The total plot area is 5,301.381 sqm. Total Built up area for the project will be 630,390.0 sqm. The total population of project after proposed will be 2,723 persons.

S. No.	Particulars	Area (m²)
1.	Total Plot Area	5301.381
	Area affected by NH widening	121.18
	Net Plot Area	5180.201
2.	Permissible Ground Coverage (@40 % of the net plot area)	2072.08
3.	Proposed Ground Coverage (@34.95 % of the plot area)	1810.48
4.	Permissible FAR (@7.0 of the net plot area)	36,261.407
5.	Proposed FAR (@3.745 of the net plot area)	19,402.0
6.	Non FAR Area (Fire Tower, Basements, Services/AHU)	10,988.0
7.	Built-up Area (5+6)	30,390.0
8.	Landscape Area (@10.7% of the net plot area)	556.7
9.	Maximum Height of the Building (m)	65.05

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

5. **Water Requirement and Wastewater details:** The total water requirement for the project will be approx. 437.5 KLD out of which domestic water demand is 234 KLD. The freshwater requirement will be 201.5 KLD including make-up water for water bodies & swimming pool, boiler feed, air washer and water for WTP backwash. It is expected that the project will generate approx. 201 KLD of wastewater. The wastewater will be treated in onsite STP of 245 KLD capacity. The treated effluent will be reused for flushing, horticulture and HVAC which leads to Zero liquid discharge.

S. No.	Description	Occupancy	Rate of water demand (lpcd)		Total Water Requirement (KLD)		
			Fresh	Flushing	Fresh	Flushing	Total
A.	Domestic Water	--	Fresh	Flushing	Fresh	Flushing	Total
FIXED POPULATION							
	Hotel Guest Rooms	188	260	60	48.88	11.28	60.16
	Hotel Staff	141	25	20	3.53	2.82	6.35
RETAIL AREA							
	Staff	233	25	20	5.83	4.66	10.49
	Visitors	933	5	10	4.66	9.33	13.99
FLOATING POPULATION							
	Staff (Restaurant + Banquet)	246	5	10	1.23	2.46	3.69
	Visitors (Restaurant + Banquet)	982	55	15	54.01	14.73	68.74
	Laundry	---			40		40
	Kitchen	---			30		30
					188 KLD	46 KLD	234 KLD
Total Domestic Water = 234 KLD							
B.	Horticulture	556.7 m ²	6 l/sq. m.		4 KLD		
C.	Swimming Pool and water bodies (Turn over period = 6 hrs; based on 1.5% losses and 30 min backwash/day)	160 sq. m.			5 KLD		
D.	HVAC Make up water	1000 TR			186 KLD		
E.	Air washer make up water				2 KLD		
F.	Boiler feed				1.5 KLD		

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

G.	WTP Backwash			5 KLD
Grand Total (A + B + C + D + E + F + G) = 437.5 KLD				

Table: Waste Water Calculation

Domestic Water Requirement	234 KLD
Fresh	188 KLD
Flushing	46 KLD
Backwash water from WTP	5 KLD
Wastewater [@80% fresh + 100% flushing + Backwash]	150.4 + 46 + 5 = 201 KLD
STP Capacity (20% higher than wastewater)	245KLD

6. **Rainwater harvesting details:** 1 Rain Water tank is proposed for rainwater collection from roof top area will be provided considering peak hourly rainfall has been considered as 160 mm/hr. Capacity of RWH tank = $l \times b \times d = 8.1 \times 6.5 \times 5 = 263.25 \text{ m}^3$. Roof-top area = Ground Coverage = $1,810.48 \text{ m}^2$. Runoff Load: Roof-top Area = $1,810.48 \times 0.16 \times 0.90 = 260.7 \text{ m}^3/\text{hr}$. Capacity of RWH tank = $l \times b \times d = 8.1 \times 6.5 \times 5 = 263.25 \text{ m}^3$.
7. **Parking details:** For Commercial Area (50% of Proposed F.A.R) = $11,129 \times 50/100 = 5,564.5 \text{ m}^2$ and for Hotel Area (30% of Proposed F.A.R) = $8,273 \times 30/100 = 2481.9 \text{ m}^2$. Thus, total Parking required Area = $5,564.5 + 2481.9 = 8,046.4 \text{ m}^2$. Total parking proposed is $8,360.0 \text{ m}^2$.
8. **Power Requirement and solar details:** The power supply will be supplied by TP Central Odisha Distribution Limited (TPCODL). The requirement load for the project will be 1500 kVA.

S. No.	DESCRIPTION	SAVINGS (kVA)
1.	Solar based Lighting will be done in the common areas, stair cases, landscape areas, signage, entry gates and boundary walls etc. (5% from total power load) Norms for Rooftop PV systems Installation: Solar power back of a minimum generation capacity of 5% of the connected load (OR) 20 Watts/sq.feet on available roof space, whichever is less.	75 kVA
2.	LEDs will be used in all dwelling units (@4%).	60 kVA
3.	Outdoor and common are lighting shall be LED (@1%).	15 kVA
Total Energy Saved		150 kVA
Total Power load = 1500 kVA Energy saved through various provisions = 150 kVA TOTAL ENERGY SAVING = 10%		

Power Backup: There is provision of 3 nos. of DG sets of total 750 kVA (250 kVA each) capacity
Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

9. **Solid Waste Generation** - The total solid waste generation will be 564 kg/day.

S. No.	Description	Occupancy	Norms (kg/capita/day)	Waste Generated (kg/day)
1.	Domestic Solid Waste:			
	Hotel Guest Rooms	188	0.5	94
	Hotel Staff	141	0.25	35.25
	Visitors (Restaurant & Banquet Hall)	1,915	0.15	287.25
	Staff (Restaurant & Banquet Hall)	479	0.25	119.75
2.	Horticultural Waste (0.14 acre)		@ 0.2 kg/acre/day	0.028
3.	STP Sludge		Sludge generated x 0.35 x B.O.D difference/1000	27.44
Total Solid Waste Generation= 564 kg/day				

10. **Greenbelt:** Total green area measures 556.7 m² i.e. 10.7 % of the net plot area. Evergreen tall and ornamental trees have been proposed to be planted inside the premises. No. of trees required = 1 tree/80 sq.m. of plot area = 5301.381/80 = 66 Nos. **Total no. of trees proposed = 70 trees.**

11. **Project cost:** Total Project cost is INR 87.50 Cr. Including land and development cost. EMP cost includes capital cost of Rs.38.39 lakhs and recurring cost of 18.72 lakhs.

COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Sewage Treatment Plant	24.5	6
Rain Water Harvesting System	3	1
Solid Waste Management	0.56	0.14
Environmental Monitoring	-	9
Green Area/ Landscape Area	0.33	0.08
Others (Energy saving devices, miscellaneous)	10	2.5
Total	38.39	18.72

12. **Environment Consultant:** The environment consultant **M/s Grass Roots Research & Creation India (P) Ltd. Noida** along with the proponent made a presentation on the proposal before the Committee.

13. The SEAC recommended the following:

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

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

- i) The green area provided is 10.7%. The project proponent shall increase the greenbelt area up to 20% of the total area.
- ii) Structural stability certificate vetted by institute of repute.
- iii) Traffic Study report to be vetted by institute of repute.
- iv) NOC/Permission from the concerned authority for discharge of storm water into nearest NH drain.
- v) Detailed drainage plan supported by drainage layout to be submitted.
- vi) Permission from Water Resource department for usage of ground water.

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

- i) Environmental settings of the project site.
- ii) Extent of construction activity.
- iii) Road connectivity to the project site.
- iv) Drainage network at the site.
- v) Discharge point for discharge of treated water and distance of the discharge point from the project site.
- vi) Greenbelt area.
- vii) Any other issues including local issues

ITEM NO. 05

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. ACREPLEX REALTY PRIVATE LIMITED FOR RESIDENTIAL PROJECT OVER AN AREA 181539.58 SQ.M AT MOUZA UTTARMUNDAMUHAN, TEHSIL-JATANI, DISTRICT-KHURDHA OF SRI SHASHIKANT BARIK-EC

1. This proposal is for Environmental Clearance of M/s. Acreplex Realty Private Limited for Residential Project over an area 181539.58 sq.m at Mouza Uttarmundamuhan, Tehsil-Jatani, District-Khurdha of Sri Shashikant Barik.
2. **Category:** This project falls under Category "B", Project or Activity 8(b) - Townships and Area Development projects as per EIA Notification dated 14th Sept, 2006 as its amendments.
3. **TOR details:** Terms of Reference was issued by SEIAA, Odisha vide File No. SIA/OR/INFRA2/447018/2023 dated 06.11.2023 for the proposed project.
4. **Location and connectivity:** The proposed project is located at Plot No. 419,437/ 1078, 425, 440, 422, 423/2294, 421, 420, 414, 441, 426/4153, 430/4152, 426/3487; 426/4139, 426, 426/1203, Mouza - Uttarmundamuhan, Tahasil - Jatani, District - Khurdha, Odisha The geographical co-ordinates of project site are 20°13'17.87"N and 85°43'28.94"E and Kisam of land is Gharabari. The nearest highway is NH-57 is 10 km towards SW direction, NH-16 is 0.20 km towards N direction, NH-316 is 13 km towards E direction, & SH-13 is 7 km towards S direction. The nearest Railway Station being Bhubaneswar Railway Station & Retang Railway Station are about 13 km (ENE) & 5 km (ESE) away from the project site. Biju Patnaik

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

International Airport is at 10 km (ENE) from project site. Bhargavi River is 14Km (E) from project site. Daya River is 9.8 Km (SE) of project site. Daya canal is 7 Km (E) of project site. Eco sensitive Zone of Chandaka Dampara Wildlife Sanctuary is 5.90 km.

5. Total Plot area measures 23,318.25 m² and the proposed built-up area is 1,81,539.58m².
6. There will be a residential tower of 1008 dwelling units with swimming pool and other commercial facilities. The maximum height of residential tower will be 113.95 m.

7. Area Statement:

S. No.	PARTICULARS	AREA (sq.m.)
i)	Total plot area	23,318.25
ii)	Permissible Ground coverage (@40% of plot area)	9,327.3
iii)	Proposed Ground coverage (@30% of the plot area)	6993.16
iv)	Permissible FAR (@7.0 of the Net plot area)	1,63,227.96
v)	Proposed FAR (@ 5.43 of Net plot area)	1,26,672.59
vi)	Non-FAR area	54,866.99
vii)	Total Built-up Area	1,81,539.58

8. The total population of project after proposed will be 7711 persons.
9. **Water requirement:** The total water requirement will be met through Bore well which is approx. 919 KLD, out of which total domestic water requirement is 872 KLD. The total fresh water requirement is approx. 596 KLD.
10. **Wastewater details:** The project will generate approx. 757 KLD of wastewater. The wastewater will be treated in an onsite STP of 757 KLD capacity. The treated effluent will be reused for flushing and horticulture. Surplus treated effluent will be discharged to external sewer.
11. **Rainwater harvesting details:** Total 10 nos. of Rainwater harvesting pits of 12m³ capacity will be constructed at different locations for storage of rain water.
12. **Parking details:** Total parking area proposed for the project is 38,331 m².
13. **Power Requirement:** The requirement load for the project will be 4558 kVA. The power supply will be supplied by State Electricity Board. There is provision of 3 nos. of DG sets total 2375 kVA (1 x 1250 + 1 x 625 + 1x 500 kVA) capacity for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.
14. **Solid waste generation:** The total solid waste generation will be 3472kg/day for the proposed project.
15. **Greenbelt:** Total green area measures 5074.98m² i.e. 21.8% of the net plot area. No. of trees required = 1 tree/80 sqm of plot area 23,318.25/80 =291 nos. Total no. of trees proposed = 291 trees.
16. **Baseline Study** - The baseline environment study for the project has been done during Post monsoon season (March to May, 2023) by an NABL accredited and MoEFCC approved lab (GRC India Training & Analytical Laboratory).

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

17. **Project cost:** Total estimated cost of the proposed project is Rs. 500 Cr. including land and development cost.

18. **Environment Consultant:** The Environment consultant **M/s. Grass Roots Research & Creation India (P) Ltd., Noida** along with the proponent made a presentation on the proposal before the Committee.

19. The SEAC recommended the following:

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

- i) Since, the project site is a lowland area, the proponent has to take adequate steps for drainage discharge of storm water.
- ii) Revisit the calculation for Rainwater harvesting pits and design accordingly to store the total rain water.
- iii) In the standard TOR point no.16 the nearest railway station to the project site is mentioned as Bhubaneswar Railway Station. However, the nearest major railway station to the site is Khordha Road railway station.
- iv) Revisit the water balance w.r.t. consumption and waste water generation.
- v) Structural stability certificate vetted by institute of repute.
- vi) Traffic Study report to be vetted by institute of repute.

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

- i) Environmental settings of the project site.
- ii) Extent of construction activity.
- iii) Road connectivity to the project site.
- iv) Drainage network at the site.
- v) Discharge point for discharge of treated water and distance of the discharge point from the project site.
- vi) Greenbelt area.
- vii) Any other issues including local issues

ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S BIO-TECH SOLUTIONS FOR COMMON BIOMEDICAL WASTE TREATMENT FACILITY (CBWTF) AT PLOT NO. 155/1020 AND 15/1025, VILLAGE: JAMAPALLI, TEHSIL: BINIKA, DISTRICT: SUBARNAPUR OF SRI RAJENDRA KUMAR SAHU - EC

1. This proposal is for Environmental Clearance of M/s. Bio-Tech Solutions for Common Biomedical Waste Treatment Facility (CBWTF) at Plot no. 155/1020 and 15/1025, Village: Jamapalli, Tehsil: Binika, District: Subarnapur of Sri Rajendra Kumar Sahu.

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

2. **Category:** This project falls under Category “B” of Project activity 7 (da) - Development of Common Bio Medical Waste Treatment Facility projects as per EIA Notification dated 14th Sept, 2006 as its amendments.
3. **TOR details:** Terms of Reference was issued by SEIAA, Odisha vide letter No. 4959/SEIAA dated 28.07.2022 for the proposed project.
4. **Location and connectivity:** The proposed project is located at Plot No. 155/1020 and 15/1025, Village: Jamapalli, Tehsil: Binika, District: Subarnapur, State: Odisha. The geographical co-ordinates of project site are 21° 5'20.87"N to 21° 5'21.12"N and 83°45'41.75"E to 83°45'45.60"E. it falls under Toposheet no.: 64O12, 64O16, 64P9 & 64P13. The nearest residential area is Village: Jamapalli at 600 m towards SW direction and nearest town is Binika town at 10 km towards SSE direction. The nearest highway is NH-126A at a distance of 1.18 Km in North Direction. The nearest Railway Station is DUNGRI PALLI Railway Station at a distance of 22.0 Km in West direction. The nearest Airport is Veer Surendra Sai Airport, Jharsuguda at 96 KM NNE direction & Biju Patnaik International Airport, Bhubaneswar at 232Km SE direction. The nearest water bodies are Jira River: 5.0 Km NE Direction, Mahanadi River: 7.5 Km SE Direction and Choki Nala: 7.5 Km S Direction. The nearest reserve forest is Singhijuba RF: 1.30 Km SW Direction, Ghatasan RF: 8.0 Km SE Direction and Bishalbari PF: 9.0 Km S Direction.
5. There are no National Park/Wildlife Sanctuary/ Eco-sensitive zone are within 10 km radius of the Project Site.
6. **List of Statutory Clearances:**
 - a. Consent to establish has been obtained vide consent no. 6053/IIICON (NOC)/164/2021-22 dated 18.11.2021.
 - b. Letter from DFO obtained vide office order no. 289/4F (Misc) dated 30.11.2021.
7. **Public hearing details:** The Public hearing was conducted successfully on 28.06.2023 at 10.00AM in the weekly market ground of Sanindpur village.
8. **Baseline study conducted:** Baseline study was conducted during Pre-Monsoon season of 2022 i.e. from 1st March 2022 to 31st May 2022.
 - a) **Ambient Air monitoring:** - PM₁₀ is within range of 50 µg/m³ to 70.4 µg/m³, PM_{2.5} is within range of 30.5 µg/m³ to 44.5 µg/m³, SO₂ is within range of 11.2 µg/m³ to 23.7 µg/m³ and NO_x is within range of 12 µg/m³ to 27.3 µg/m³.
 - b) **Water quality monitoring:** The result of surface water samples collected shows that the pH varies from 7.53 to 7.79, Total Hardness varies from 197.26 to 716.82 mg/l, Total Dissolved Solids varies from 341 to 862 mg/l, BOD varies from 10.0 to 29.0 (mg/l), COD varies from 24.21 to 67.0 (mg/l). The result of ground water samples collected shows that the pH varies from 7.52 to 7.75, Total Hardness varies from 149.38 to 226.79 mg/l, Total Dissolved Solids varies from 270 to 381 mg/l and Flouride content varies from 0.2 mg/l. to 0.23 mg/l.
 - c) **Ambient Noise monitoring:** Minimum and maximum noise levels recorded during the day time were from 48.86 Leq Db and 53.18 Leq Db respectively and minimum and maximum level of noise during night time were 39.76 Leq Db and 43.72 Leq Db.

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

d) Soil monitoring: The pH of the samples ranged from 7.25 to 7.41, which is slightly to moderately alkaline, Organic matter ranges from 0.29% to 0.45%, the concentration of Nitrogen ranges from 143.56 Kg/ha to 190.84 Kg/ha, Phosphorus ranges from 11.67 Kg/ha to 27.11 Kg/ha and Potassium ranges from 176.11 Kg/ha to 201.94 Kg/ha

9. **Water requirement:** The total water requirement for the proposed project will be 9 KLD (Fresh water 5.5 KLD + Treated water 3.5 KLD). Water will be sourced from Ground Water. Out of the total water requirement 3.5 KLD will be used for washing purpose i.e. vehicle washing & area washing, 2.0 KLD will be used for the scrubber, 1.5 KLD will be used for the Domestic consumption and 2.0 KLD will be used for the Greenbelt development.
10. **Wastewater details:** Total effluent generation would be 5.0 KLD which will be treated with the help of ETP and the treated water will be used for Greenbelt development, Scrubber and Washing. Domestic waste water will be treated with the help of the Septic tank followed by Soak pit.

Sl. No.	Particulars	Water Requirement (KLD)	Fresh Water	Treated Water	Effluent Generated	Treatment
1.	Vehicle Washing	3.0	2.0	1.0	3.0	6 KLD of ETP with ZLD Concept is Proposed for Wastewater treatment
2.	Scrubber	2.0	2.0	-	2.0	
3.	Greenbelt	2.0	-	2.0	-	
4	Area Washings	0.5	-	0.5	-	
5	Domestic	1.5	1.5	-	-	Septic Tank followed By Soak pit
Total		9.0	5.5	3.5	5.0	

11. **Power requirement and solar power details:** Total power requirement for the proposed project would be approx. 150 kVA which will be sourced from TP western Odisha Distribution Limited (TPWODL). Additionally 1 No. of DG set will be provided of capacity 75kVA to be used in case of power supply failure/emergency.
12. **Solar Power generation:** About 3000 sq. ft. roof top area will be there, which will be used for installation of solar panels for generation of 15 kVA electricity generation which will be 0.1% of the total power consumption.
13. **Rainwater harvesting details:** As the proposed facility is for management of infectious biomedical waste, there are possibilities rainwater getting contaminated at site hence rain water recharge pits shall not be installed. Proper storm water drainage system shall be laid to ensure and prevent any contamination before disposal into natural drain or collection tank for its use for washing or maintaining green areas.
14. **Solid waste generation:** Municipal Solid waste of quantity approx. 3.75 kg/day will be generated (considering 0.125 kg /person). Hazardous waste like Used oil (0.5 TPA), Incineration waste (15-20 kg/hr) and ETP sludge (80-100 kg/month) of hazardous waste will be generated.

Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

15. **Mitigation of solid waste produced:** Municipal solid waste will be segregated into organic and inorganic waste. Organic waste will be managed by composting whereas inorganic waste will be sent to authorize waste management agency.

Schedule	Type of the Hazardous waste	Quantity	Mode of Disposal
5.1	Used Oil	0.5 TPA	Reused as lubricant in plant and machinery/ send to authorized recyclers.
36.2	Incineration Ash	15-20 Kg/hr	Send to TSDF site for land filling.
34.3	ETP Sludge	80-100 Kg/Month	Send to TSDF site for land filling.

16. **Greenbelt development:** Green belt will be developed over 33.36% area of the total plant area. Out of the 1.058 acre of the plant area, 0.353 acre will be developed for plantation. Considering 2500 nos of trees per ha, this CBWTF area will require 358 trees for raising greeneries around the unit. Hence, we are proposing total 360 trees. A budget of approx. Rs. 1.05 Lakh has been kept for green belt development.

17. **Total Employment:** Total 30 persons are proposed to hire for plant operations including officers, skilled and unskilled workers.

18. **Project cost:** The estimated project cost is 1.90 Crores and capital cost for EMP is 34.05 lakhs and recurring cost is 5.85lakhs.

Details of CER activities

Sr. No.	Activities	Budgetary Details (in lakhs)
1.	Providing infrastructure facilities such as beds, medical instruments etc. to the medical centres in Adampur government hospital	1.0
2.	Distributions of Dust Bins and arrangement of Garbage disposal to local authorities.	0.20
3.	Solar light installation at village	1.0
Total		2.20

Details of EMP activities

Sr. No.	Particulars	Capital Cost (In Lakhs)	Recurring Cost (In Lakhs)
1	Solid & Hazardous Waste management	5.0	1.5
2	Water and Waste water management	10.0	2.0
3	Air Pollution Control & Monitoring System	15.0	1.5
4	Greenbelt Development	1.05	0.35
5	Occupational Health & safety, Fire Protection measures	3.0	0.50
Total		34.05	5.85

19. **Environment Consultant:** The Environment consultant **M/s. Gaurang Environmental Solutions Pvt. Ltd, Jaipur** along with the proponent made a presentation on the proposal before the Committee.

Considering the information furnished and the presentation made by the consultant **M/s Gaurang Environmental Solutions Pvt. Ltd, Jaipur** along with the project proponent, the SEAC decided to take the decision on the proposal after receipt of the following from the proponent:

- i) Permission from local authority for settling up of the proposed project.
- ii) Submit a detailed layout of the proposed project showing all process, materials storage, and handling units.
- iii) Regarding disposal of the incinerator ash it is mentioned as landfill in the online documents. However, during the presentation it was mentioned for disposal at M/s. Re-Sustainability limited site (TSDF). The proponent needs to submit clarification in this regard.
- iv) Precautionary measures shall be undertaken for protection of adjacent agricultural lands and nearby school located at 400m. distance.
- v) A buffer zone of 500m needs to be demarcated around the project site as per CPCB guidelines.
- vi) Details of the wastewater treatment system/technology adopted with inlet and outlet water parameters.
- vii) Precautionary measures to be undertaken during transportation of the biomedical waste as well as their storage and handling from their source of generation.
- viii) Specific measures to be followed by the M/s. Re-Sustainability limited for handling the incinerator waste for disposal.
- ix) Precautionary measures followed for storing the diesel at the project site.
- x) The proposed site is located within 75 K.M. from another existing CBWTF at Balangir. A petition has been received from the proponent of CBWTF at Balangir not to allow this proposed CBWTF at Binika, Dist. Subarnapur as same is not confirmed to the siting criteria as per CPCB guidelines. The PP has to clarify as to why this proposal shall not be rejected due to non-confirm to the siting criteria. A detailed writeup in this regard shall be submitted.

ITEM NO. 07

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BABUPALI STONE QUARRY OVER AN AREA OF 20.63 ACRES OR 8.35 HECTARES BEARING KHATA NO. 44 & 45 PLOT NO. 41,199,214, 216, 274 IN THE VILLAGE BABUPALI, TAHASIL JUJOMURA, DISTRICT SAMBALPUR OF SRI MURARILAL AGRAWAL – EC

The proposed Babupali Stone Quarry lease area consists of 4 nos. patches away from each other at significant distance. The distance between these 4 patches is more than 500meters as observed in kml file. The SEAC opined that the 4 nos. of patches having significant distance from each other can not be considered as a single lease. Hence, it is decided to defer the proposal and consider the proposal for presentation after submission of clarification from concerned authority i.e. Tahasildar Jujomura/ Dept. of Steel and Mines regarding why these 4 small patches shall be considered as one single lease and not in cluster, as the distance between the 4 small quarries is more than 500meters.


Proceedings of the SEAC meeting held on 02.12.2023

Environmental Scientist, SEAC

ITEM NO. 08

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR TUMKELA SAND BED OVER AN AREA OF 16.00 ACRES OR 6.475 HECTARES IN VILLAGE TUMKELA, TAHASIL ROORKLEA, DISTRICT SUNDARGARH OF SMT. RAJASHREE BEHERA - EC

The Project Proponent of the proposed quarry M/s Tumkela Sand Bed Smt. Rajashree Behera was absent during presentation. The SEAC decided to defer the proposal and consider the proposal for presentation in presence of Project Proponent or Authorized person on behalf of Project Proponent.


MEMBER SECRETARY, SEAC

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF M/S. GENERAL ADMINISTRATION & PUBLIC GRIEVANCE DEPARTMENT FOR PROPOSED RESIDENTIAL BUILDING OVER AN BUILT UP AREA 1,11,602 SQM LOCATED AT PLOT NO. 480/479, KHATA NO- 69, IN MOUZA- BHOUMA NAGAR, BHUBANESWAR, DIST – KHORDHA OF SRI PRASANTA MISHRA – 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 277 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 70 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 391 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
39. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
40. **Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.**
41. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

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

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m² 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. 30,404.91 sqm (42.5%) of plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

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

TRANSPORT

46. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - Traffic calming measures
 - Proper design of entry and exit points.
 - Parking norms as per local regulation
47. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project.
48. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
49. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

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

ENVIRONMENT MANAGEMENT PLAN

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

OTHERS

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

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

PART B – GENERAL CONDITIONS

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

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

11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, 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.

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF M/S. XIM UNIVERSITY FOR CONSTRUCTION OF NEW HOSTEL BLOCK BUILDING OF XIM UNIVERSITY BHUBANESWAR OVER AN BUILT UP AREA OF EXISTING CAMPUS IS 144160.0 SQM AT NO. 12(A), NIJIGADA KURKI, HARIRAJPUR, DIST- PURI OF SRI BASANT KUMAR MOHANTY – EC (VIOLATION CASE)

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 273 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 82 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 550 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
39. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
40. **Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.**
41. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

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

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m² 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. 73923 sqm (33.2%) of plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

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

TRANSPORT

46. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - Traffic calming measures
 - Proper design of entry and exit points.
 - Parking norms as per local regulation
47. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project.
48. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
49. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

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

ENVIRONMENT MANAGEMENT PLAN

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

OTHERS

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

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

PART B – GENERAL CONDITIONS

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

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

11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, 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.