PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 13TH NOVEMBER, 2023

The SEAC met on 13th November, 2023 at 03:30 PM by Virtual mode (VC) through video conferencing in Google Meet under the Chairmanship of Sri Sashi Paul. The following members were present in the meeting.

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

CONSIDERATION OF OLD PROPOSALS (COMPLIANCE RECEIVED):

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

ITEM NO. 01

PROPOSAL FOR AMENDMENT OF ENVIRONMENTAL CLEARANCE OF M/S TRIDENT PROPERTIES PRIVATE LIMITED FOR RESIDENTIAL APARTMENT BUILDING OVER AN BUILTUP AREA 70174.61 SQM AT PAIKARAPUR, BHUBANESWAR, DIST- KHURDA OF MV SHASHI KUMAR – MOD EC.

1. This proposal is for amendment of Environmental Clearance of M/s Trident Properties Private Limited for Residential Apartment Building over a built-up area 70174.61 sqm at Paikarapur, Bhubaneswar, Dist- Khurda of MV Shashi Kumar.
2. **Category**: As per EIA Notification,2006 and its subsequent amendments, the proposed project falls in category B under Schedule in activity 8 (a)- Building & Construction Project.
3. Earlier, Environment Clearance from SEIAA, Odisha was obtained vide letter no. 6361/SEIAA & File No. 27973/14-NCP-V/06-2018, dated 30.11.2018 for Proposed Construction of Residential Apartment Building located at Mouza - Paikarapur, Bhubaneswar, Dist- Khurda, Odisha.
4. Consent to Establish (CTE) has been obtained from OSPCB vide letter no. 13094/IND-II-CTE-6533, dated 28.07.2022.

5. BDA has approved the building plan vide letter no. 3446/BDA, Bhubaneswar, dated 06.02.2020. Revised BMC approval vide letter no. 20376/BMC, dated 27.04.2023.
6. Certified EC Compliance report of existing EC has been obtained from IRO Bhubaneswar vide letter no. 109-71/EPE/573, dated 09.06.2023.
7. The total FAR area of the project is 70,174.61 sqm.
8. **Justification of amendment:** The proponent proposes to amend the existing Environment Clearance because of decrease in the number of dwelling units by converting some blocks with 1 BHK & 2 BHK units to 3 BHK units, thus reducing the building footprint and built-up area. The proponent is converting 1 large block consisting 166 (EWS 1 BHK) units into 2 smaller blocks consisting of 16 (3 BHK) units each total 32 units reduction in built-up area.Further they seek an amendment in the built-up area from 70,174.61 sqm to 84,228.65 sqm because in the previous Environment Clearance Stilt parking area of 18638.85 sqm that was not added to the FAR area of 70174.61 sqm total built up area being 88813.36 sqm.
9. **Location and connectivity:** The proposed site is located at Paikarapur, Bhubaneswar, Odisha. The Geographical coordinate of the project site is bounded by Latitude - 20^0 15' 40.20" N & Longitude - 85^0 44' 53.19" E. National Highway (NH-16) connecting Howrah-Chennai is about 3 Km away from the project site. The East Coast railway line runs at a distance of about 15 km from the project site. The Biju Patnaik Airport, Bhubaneswar is at a distance of about 13 Km from the project site.
10. **Comparative statement ofarea details of the project:**

Particular	As per Existing EC	Amendment of EC
Plot Area	42711.57 sqm	42095.4 sqm
Ground Coverage	17230.68 sqm (40.34%)	17230.68 sqm (40.34%)
Total FAR Area	70174.61 sqm	66824.76 sqm
Stilt Parking	18638.85 sqm	18749.30 sqm
Road Area	12013.56 sqm	19857.92 sqm
Open Parking	1310.34 sqm	2219.84 sqm
Total Parking Area	19949.19 sqm	20969.14 sqm
Green Belt Area	9715.93 sqm (22.74%)	9877.63 sqm (23.5%)
No. of Unit	500 + 166 EWS = 666 Nos.	580 Nos.
Total Builtup Area	FAR Area- 70174.61 sqm Stilt Parking- 18638.85 sqm Total Builtup Area- 88813.46 sqm	85574.06 sqm

11. **Power requirement:** The daily power requirement for the Residential apartment building is preliminarily assessed as 4607 KW (to be revise after ADS submission) source from TPCODL. To meet emergency power requirements during the grid failure, there is provision of DG set having 1x125 KVA + 1x15 KVA + 1x200KVA + 1x40 KVA + 1 x45 KVA capacity for power back up in the project.
12. **Water requirement:** Fresh make up of 304.1 KLD will be required for the project which will be sourced from Ground Water. Fresh Water consumption for the Residential People 3270 @ 90 lpcd = 294.3 m^3 /day, Flushing for Residential People 3270 @ 45 = 147.15 m^3 /day, Fresh Water Consumption for Floating People will be 327 nos @ 30 = 9.8 m^3 /day, Flushing for Floating People

will be 327 @ 15 LPCD = 4.9 m^3 /day, for dust suppression and landscaping the required water will be 22.3 m^3 /day and 15.5 m^3 /day respectively.

Sl. No	Description	Total Population	Per Capita Consumption (ltr/day)	Total Water Requirement (KLD)
1.	Residential Population	3270 nos	90	294.3
2.	Floating Population	327 nos	30	9.8
TOTAL				304.1

13. **Wastewater management:** It is expected that the project will generate approx. 364.92 m^3/day of wastewater. The wastewater will be treated in the STP of capacity of 400 m^3/day provided within the complex. Out of which 214.85 m^3/day (to be revise after ADS submission) will be recycled within the project for flushing (152.05 m^3/day), landscaping (38.8 m^3/day), Dust Suppression (24.0 m^3/day), STP loss (20.0 m^3/day) & 130.07 m^3/day will be discharged to drain in case of non-monsoon period.

14. **Rainwater harvesting details:** Total runoff load from the project site will be 2056.21 m^3/hr. Volume of each Recharge pit = 4m x 4m x 6m = 96.0 cum (approx.). So, No. of pits required= 2056.21 /96 = 21.4 say 22 nos. Total no. of Rain Water Harvesting pit provided for the proposed project is 22.0 Nos.

15. **Green belt development:** Green belt will be developed over an area of 9877.63 sqm (23.5 %) of the plot area; by using the local species like Radhachuda, Nageswar, Akash, Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.

16. **Solid waste management:** From the hotel complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.4 kg/person/day, which will be about 1308.0 kg/day. The generated solid waste from the hotel complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate-colored bins. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid waste and construction and demolition waste.Solid waste from sweeping and Dry Garbage containing non-biodegradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored in separate garbage bin and send to approved recyclers.

S. No.	Category	Counts (heads)	Waste generated (kg/day)
1.	Residents	3270 @ 0.4 kg/day	1308.0
2.	Road sweeping	3270 @ 0.1 kg/day	327.0
3.	STP Sludge	--	183.0
	Total		**1818.65**

17. **Parking Details:**

Parking Area Provided			
Stilt parking			18749.3 sqm
Open parking			2219.84 sqm
Total Parking			20969.14 sqm
Equivalent car space Provided			
	Area(sqm)	Area/ECS	
Stilt Parking	18749.3	28	670.0
Open Parking	2219.84	25	89.0
Total Parking Provided			759 ECS

18. **Project cost:** Total cost estimated for the proposed project is Rs 125.0 Crores. EMP cost includes Capital Cost of Rs. 110 Lakhs and recurring cost of 11 lakhs.

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

20. The SEAC in its meeting held on dated 05-07-2023 recommended the following:

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

i) Land documents of deleted and added up land for the proposed modification along with the ownership details and Kisam with its documentation.

ii) Clarification on width of the road (EWS) and its percentage in terms of land used in the total project area.

iii) Comparative statements of all the physical and environmental parameters in tabular form of both previous project for which EC obtained and proposed modification for which EC applied.

iv) Ensure the difference between the reduced level of bottom of rain water harvesting pit and ground water and submit the report. It should the ensured that a proper gap/difference in level is maintained.

v) Power requirement - 800 KW mentioned in presentation and 4607 KW in Form-I. Which one is correct shall be clarified.

vi) Waste water generation - 344.92 m^3/day mentioned in Brief summary and 214.85 m^3/day in presentation. Which one is correct shall be clarified.

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

i) Environmental settings of the project site.

ii) To ensure how much construction activities has been completed.

iii) Road connectivity to the project site.

iv) Drainage network at the site.

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

vi) Any other issues including local issues.

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

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Land documents of deleted and added up land for the proposed modification along with the ownership details and kisam with its documentation.	Land documents of deleted & added up land is attached in **Annexure-1.**	ROR submitted
2.	Clarification on width of the road (EWS) and its percentage in terms of land used in the total project area.	EWS block was provided with 6-meter wide road all around percentage groundcoverage 3.6%. Revised to 2 Blocks 1.44% groundcoverage respectively both together 2.88%, provided with 6-meter-wide road all around each block.	-
3.	Comparative statements of all the physical and environmental parameters in tabular form of both previous project for which EC obtained and proposed modification for which EC applied.	Comparative Statement of the building is attached in **Annexure-2.**	complied
4.	Ensure the difference between the reduced level of bottom of rain water harvesting pit and ground water and submit the report. It should the ensured that a proper gap/difference in level is maintained.		The query raised has not complied by PP.
5.	Power requirement – 800 KW mentioned in presentation and 4607 KW in Form-I. Which one is correct shall be clarified.	The Power requirement of the project is 800.0 KW. The comparative statement isattached in **Annexure-2.**	-
6.	Waste water generation - 344.92 m^3/day mentioned in Brief summary and 214.85 m^3/day in presentation. Which one is correct shall be clarified.	Total waste water generation of the project is 381.8 KLD & the capacity of STPis 400 KLD. The comparative statement is attached in **Annexure-2.**	-

22. The proposed site was visited by the sub-committee of SEAC on 21.08.2023. Following are the observations of the sub-committee:

a) The PP and the team explained the Layout of the site in presence of the Consultant.

b) It was informed that due to the TP plan of the Govt, the PP had to surrender a block and relocate at another place with the same plan as per approval. Similarly, the buildings marked for EWS has been cancelled and in its place 2 blocks with new design have been proposed.

c) It was observed that minor construction activity has been started in the block of EWS (Soil Excavation Foundation) and the new shifted block. PP may be asked to clarify why this cannot be considered as a Violation case? All other units are being constructed as per plan (S+4) as informed by PP.

d) The PP informed that above are as per the revised plan obtained from BDA/BMC. The PP was informed to submit the copy of revised plan vetted by the authority and revised layout marking the changes and also land record (power etc) for the new relocated block.

e) The site has approach road and the PP explained that they have to construct the drain till the Nallah as per the permission they have and is a part of EID. The PP was asked to submit the layout and permission letter in support of the drain beyond their land till the Nallah.

f) Green belt is partly developed and they need to comply the norm including all conditions stipulated in EC earlier given.

g) Since there will be 4 DG set and each will have stack separately, a lay out with calculation of stack height as per norm to be provided.

h) The land was near low lying area. The PP needs to develop the project in a manner so that there will be no water logging.

i) All other points asked during presentation to be submitted.

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

a) Ensure the difference between the reduced level of bottom of rain water harvesting pit and ground water and submit the report. It should the ensured that a proper gap/difference in level is maintained.

b) It was observed that minor construction activity has been started in the block of EWS (Soil Excavation Foundation) and the new shifted block. PP shall clarify why this cannot be considered as a Violation case? All other units are being constructed as per plan (S+4) as informed by PP.

c) The PP informed that above are as per the revised plan obtained from BDA/BMC. The PP needs to submit the copy of revised plan vetted by the authority and revised layout marking the changes and also land record (power etc.) for the new relocated block.

d) The site has approach road and the PP explained that they have to construct the drain till the Nallah as per the permission they have and is a part of EID. The PP needs to submit the layout and permission letter in support of the drain beyond their land till the Nallah.

e) Since there will be 4 DG sets and each will have stack separately, a lay out with calculation of stack height as per norm to be provided.

ITEM NO. 02

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR SANTHAPADA SAND QUARRY – A (UNDER CLUSTER APPROACH) IS A SAND MINING PROJECT OVER AN AREA OF 36.00ACRES/ 14.56HA. LOCATED IN VILLAGE - SANTHAPADA, TAHASIL - TALCHER IN DISTRICT ANGUL BY SRI ABHIMANYU BEHERA- EC

1. This proposal is for environmental clearance for Santhapada Sand Quarry – A (under cluster approach) is a sand mining project over an area of 36.00acres/ 14.56 Ha. located in village - Santhapada, Tahasil - Talcher in District – Angul of Sri Abhimanyu Behera.
2. **Category:** The project is categorized in Category-B item 1(a) - Mining of Minerals in the EIA notification, 2006 and its subsequent amendments.
3. The Mining plan has been approved by the Joint Director of Geology, Zonal Survey, Dhenkanal.. Vide letter no – 662, on dated 01.06. 2020 for a period of five years.
4. Santhapada Sand Quarry – A mining lease is over an area of 18.00acres/ 7.28Ha granted by Tahasildar, Talcher, Angul and has been leased out to the successful bidder Sri Abhimanyu Behera (Managing Director) M/s Sheranwali Infrastructure Pvt. Ltd., At-Jagannath Colony, PO/PS-South Balanda, Dist – Angul.
5. There is another sand quarry in cluster i.e. Santhapada Sand Quarry – B, over an area of 18.00acres/ 7.28Ha. which is an operating mine (EC has been granted) and located within 500 meters of Santhapada Sand Quarry – A which had been granted to Sri. Gagan Mohanty, resident of Talcher, Dist – Angul, Odisha
6. **Public hearing details**: Public hearing was successfully executed on date 24.06.2022 at 11:00 AM, as per the guidelines given in EIA Notification 14th September' 2006 and its subsequent amendment. Issues raised in Public Hearing are water pollution, decrease in ground water table, traffic congestions due to sand transport, affecting fish cultivation, river bank/soil erosion and subsequent effect on plantation, air pollution, adequate plantation to be done, obstruction in river flow pattern, local employment and development activities, pollution control measure and assistance to nearby villages. Budget allocated for CER is 1,20,000/-
7. **TOR details**:TOR has been granted by SEIAA- Odisha prescribed the Reference No: 1796/SEIAA dated 26th July, 2021
8. **Location and connectivity:**The mine lease area is located in village – Santhapada, Tehasil– Talcher, District – Angul, Odisha is on Khata no- 480, Khasra no. 4198 of Kisam 'Nadi' covered in the Survey of India Topo Sheet No – 73I/5 and is bounded between the Latitude - 20° 54'45.1" N to 20° 54' 53.7" N & Longitude – 85° 14' 02.8" E to 85° 14' 20.6" E. Nearest Railway Station is Talcher Thermal Railway Station, approx. 4.2 km, SW direction. Nearest Airport is Bijju Patnaik International Airport, approx 96 km towards SE direction. Nearest Highway is NH-200, approx 0.5 km in North direction. NH-23 is approx 1.5 km in West direction. Nearest Road bridge is Approx. 0.51km from mining lease.
9. **Topography and drainage:** Topographically the district can be divided in to three natural tracks. First is a chain of hills running along the northeastern boundary of the district covering Pallahara. Another chain of hills runs along with south-west boundary covering Athamallik and Angul. The third natural division is a valley of river Brahmani running along with boundary of Talcher through

Kaniha touching Pallahara. The agriculture in the district is primarily rain fed because of inadequate irrigation facility. Area irrigated through all sources is only 31% during kharif season and 21% during rabi season as per the available data. The district has 216403 Ha of cultivable land.

10. **Replenishment report:** Based on the replenishment study, both the sections (pre-monsoon and post-monsoon) volumes had been calculated and found that estimated amount of sand deposited is 86400 cum in addition to the previous minable reserve is 124416 + 86400 = 210816 cum of this year. During the operation the mRL level has increased from 60.00 to 61.25 at the 1st replenishment study. However, Replenishment depends upon the above-mentioned natural parameters, which may vary time to time. However, Approved Annual Production Capacity = 24882 m3 as per approved mining plan.

11. **Reserves and production:** The average production is proposed to be 24,882 cum/year (34,834.8 TPA) and 1,24,410 cum is the total production during the 5 years plan period. The total geological reserve of the proposed quarry is 218400 cum and extractable mineable reserve is 124416 cum.

12. **Mining method:** Mining will be done by semi mechanized method without adoption of drilling & blasting. Since the depth of sand deposit is 1m, excavator, handpicks, spade, hand shovel will be used by labourers for extracting & loading of sand. The proposed mined out areas will gradually get filled up by river sands transported with water from upstream direction. Quarry floor level (RL) of Santhapada Sand Quarry – A at present is 67m and at the end of the lease period will be 65.5m RL and & 53.0m RL of Santhapada Sand Quarry –B.

13. **Water requirement:** The total water requirement will be around 3 KLD. This water will be supplied from the nearby area.

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10 LPCD per labor 10*31/1000= 0.31KLD	0.31
Dust Suppression	Total approach road to be water sprinkled = 150 m 150 m*6m*0.5 *2 times/1000 = 0.90 KLD	0.90
Plantation	750 plants @ 2 L/per plant= 750*2 Lts= 1500/1000= 1.50 KLD	1.50
Total		2.71 ~ 3.0

14. **Baseline study:**24 hr hourly monitoring was carried out for SO_2, NOx, $PM_{2.5}$& PM_{10}. Summarized project site meteorological data for post-monsoon twice a week at each station for a study period of 3 months (December-2020 to Feb - 2021) was taken. The Ambient Air Quality Monitoring reveals that of monitoring stations with minimum Concentrations of PM_{10} were 58.60µg/m^3 and maximum 90.25µg/m^3.

    a) The result of $PM_{2.5}$ reveals that the minimum concentration of 23.97µg/m^3 while maximum concentration of 55.5µg/m^3. The gaseous pollutants SO_2 and NO_x were within the prescribed

CPCB limit of 80µg/m^3. For residential and rural areas at all stations. The minimum & maximum concentrations of SO_2 were found to be 5.91µg/m^3&15.03µg/m^3 respectively. The minimum & maximum concentrations of NOx were found to be 10.62µg/m^3 at AQ2 & 24.51µg/m^3 at AQ4.

b) Ground water pH varies from 7.19 at GW1 to 7.62 at GW6. Total Hardness varies from 263.3 mg/l at GW1 to 317.37 mg/l at GW5. Total Dissolved Solids vary from 335 mg/l at GW5 to 364 mg/l at GW3.

c) Surface water analysis results indicate that the pH ranges from 7.92 to 8.19. Dissolved Oxygen (DO) was observed in the range of 226 to 294 mg/l, BOD values were observed to be in the range of 3.8 to 4.1 mg/l. COD values were observed to be in the range of 14 to 16.72 mg/l.

d) Samples collected from identified locations indicate the soil is sandy type and the pH value ranging from 6.71 to 7.52, which shows that the soil is alkaline in nature. Potassium is found to be from 68.85 mg/kg to 81.13 mg/kg. The water holding capacity is found in between 28.82 % to 32.90 %.

e) Noise monitoring reveals that the minimum & maximum noise levels at daytime were recorded as 48.26 Leq. dB (A) at NQ7 & 64.15 Leq. dB (A) at NQ1, respectively. The minimum &maximum noise levels at night-time were found to be 37.55 dB (A) at NQ5 & 52.44 dB (A) at NQ1.

15. **Greenbelt**: 150 number of saplings proposed during plan period will be planted. Plantation shall be done with suitable local species like Teak, Mango, Neem, Jammu, Jhaun etc. per year. Plantation can also be done along the approach road during the plan period.

Year	No. of Plants	Species
1st	150	Teak, Mango, jammu, jhaun, neem etc
2nd	150	
3rd	150	
4th	150	
5th	150	
Total	**750**	

16. **Manpower requirement:** A total of 38 nos. of manpower are to be employed in the lease area for mining 24,882 cum/year of sand. Indirect employment through creation of shops/ stalls, hired vehicles, etc. also can be generated to full fill the day-to-day requirements of the mining personnel.

17. **Project cost:** The estimated project cost for Santhapada Sand Quarry A is Rs 60 Lakhs. Capital cost of EMP is Rs. 187500 Lakhs and recurring cost is Rs. 429000. Budget allocated for CER is Rs.1,20,000/-, Budget for onsite shelter and Facilities for Mine Workers – Rs.140000 as capital cost and Rs.50000 as recurring cost. Budget for Occupational Health is Rs. 2,00,000.

Budget for Environment Protection for Santhapada Sand Quarry – A & B (For Cluster)

Sl. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	3,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	56,000 (8 samples) 32,000 (4 GW & 4 SW) 16,000 (2 samples) 14,000 (2 samples)
3.	Green belt development	3,00,000	2,00,000
4.	Maintenance of haul road	1,12,500	2,40,000
Total		**4,12,500**	**8,58,000**

Budget for Environment Protection for Santhapada Sand Quarry – A

Sl. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,50,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	28,000 (8 samples) 16,000 (4 GW & 4 SW) 8,000 (2 samples) 7,000 (2 samples)
3.	Green belt development	1,50,000	1,00,000
4.	Maintenance of haul road	37,500	1,20,000
Total		**1,87,500**	**4,29,000**

Budget for Environment Protection for Santhapada Sand Quarry – B

Sl. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,50,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	28,000 (8 samples) 16,000 (4 GW & 4 SW) 8,000 (2 samples) 7,000 (2 samples)
3.	Green belt development	1,50,000	1,00,000
4.	Maintenance of haul road	75,000	1,20,000
Total		**2,25,000**	**4,29,000**

18. **Environment Consultant**: The Environment consultant **M/s P and M Solution, Noida** along with the proponent made a presentation on the proposal before the Committee on 03.03.2023.

19. The SEAC in its meeting held on dated 03-03-2023 recommended the following;

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

i) KML file shows small quantity of sand deposit surrounded by water & most part of the quarry is inside the water; this has to be clarified.

ii) No transportation road from the lease area as per KML file, road connectivity to the site with Map.

iii) KML file and Mining Plan mis-matching, this has to be clarified.

iv) Mineable area is very less comparing to Lease sanction area, this has to be clarified.

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

i) Actual sand deposit in the lease area & water deposit surrounding the lease area as shown in KML file.

ii) Environmental settings of the lease area.

iii) Mining activity, if any carried out in the lease area.

iv) Road connectivity to the lease area.

v) Distance of the bridge from the boundary of the lease area.

20. The proposed site was visited by the sub-committee of SEAC on 21.08. 2023. Following are the observations of the sub-committee:

a. A new bridge across Brahmani River, adjacent to the existing one is under construction. It was observed that the construction agency has diverted the water channel to the western bank of the river, for the convenience of construction of the bridge; and the sand deposit is currently under water. As a result, it is estimated that some amount of sand must have been washed out due to the high velocity of water flow.

b. It is learnt that the mining in the lease is in operation since 2007 and is currently in a cluster since another quarry viz. Santhpada Quarry – B, within 500m distance of Quarry –A is also operation. The distance of the bridge from Quarry – A is 510m.

c. In due course, the river channel will be normalized by the bridge construction authority. It is recommended that the project proponent be permitted to mine the replenished amount of sand ascertained after monsoon and after restoration of the water channel. The connecting road should also be restored by the proponent for sand transportation.

d. It is also recommended that the transport vehicles will be covered with tarpaulin to minimize dust/ sand particle emissions.

e. No natural water course shall be obstructed or diverted for the purposes of sand mining.

f. The location of the village being close to the quarry, the project proponent shall ensure that the biological clock of the villagers is not disturbed. The floodlights should be oriented away from the villages and the noise levels should be kept within the prescribed limits for day light/night hours.

g. The project proponent shall take adequate measures for protection of the river bank from soil erosion.

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

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	KML file shows small quantity of sand deposit surrounded by water & most part of the quarry is inside the water; this has to be clarified.	As the construction work of nearest bridge has going on, the work contractor has forcefully diverted the water channel in one side. That's why due to water force the deposited sand has washed out from the lease area and most of the quarry showing inside water in KML file.	
2.	No transportation road from the lease area as per KML file, road connectivity to the site with Map.	Transportation route map certified by Tahasildar, Talcher has attached for your reference as **Annexure – 1.**	Transportation route is shown in lease map.
3.	KML file and Mining Plan mis-matching, this has to be clarified.	As per the Geo reference co-ordinates the mining plan has prepared and accordingly the KML file has also done. Copy has been attached you're reference as **Annexure-2.**	Google map along with mining plan maps has been submitted for reference.
4.	Mineable area is very less comparing to Lease sanction area; this has to be clarified.	The total lease area is 72,800m^2 whereas after leaving the safety zone and river flow area the mineable part has taken as 69,120m^2.	-

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P & M Solution, Noida** on behalf of the proponent, the SEAC approved the EIA/EMP report in cluster approach and recommended the following:

a) The SEIAA, Odisha may consider to grant Environmental Clearance to individual lease for Santhapada Sand Quarry – A (under cluster approach) without referring to SEAC with stipulated conditions as per **Annexure – A** after receipt of individual applications from the lessee in cluster along with following documents.

i) Filled in form-I of individual lease

ii) Prefeasibility report of individual lease

iii) EMP of individual lease.

iv) Approved Mining Plan of individual lease.

v) Previous production details of individual lease duly certified by Tahasildar.

vi) Replenishment Study Report of individual lease.

b) Following specific conditions may be stipulated in individual Environmental Clearance.

i) Amended EIA Notification dated 25th July, 2018, Guidelines for sustainable sand mining, 2016 and Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India shall be adhered to in execution of Mining as per **Annexure – B.**

ii) Sand extraction shall be limited to quantity and depth as per replenishment study report. Regular replenishment study as per guidelines to be conducted and report to be submitted.

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

iv) Avenue plantation and plantation on both sides of the haulage road in consultation with/ on the advice of concerned Forest Department, Government of Odisha & W.R. Department Government of Odisha as well.

v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.

ITEM NO. 03

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR PROPOSED EXPANSION OF RESIDENTIAL COMPLEX "MANI TRIBHUVAN" (FORMERLY KNOWN AS "MANI TIRUMALA") OVER A BUILT-UP AREA 76050.80SQM AT MOUZA: KALARAHANGA, P.S: CHANDRASEKHARPUR, NANDAN KANAN ROAD, DIST. KHURDA OF SRI PRITHIWIRAJ MUKHERJEE – EC

i) This proposal is for environmental clearance for proposed expansion of residential complex "Mani Tribhuvan" (Formerly Known as "Mani Tirumala") over built-up area of 76050.80 sqm at Mouza: Kalarahanga, P.S: Chandrasekharpur, Nandan Kanan Road, Dist. Khurda of Sri Prithiwiraj Mukherjee.

ii) **Category**: The project requires prior Environmental Clearance under the provisions of EIA Notification, 2006 and subsequent amendment and falls under Category B of activity 8(a)-Building & Construction projects.

iii) **Project details**: Mani Tirumala Projects Pvt. Ltd., the project proponent has completed the construction of the residential complex "MANI TRIBHUBAN" (Formerly known as "MANI TIRUMALA") at Plot Nos. 13,15,21 to 31, 33, 36, 37,38,28/2573, 40 to 49, 58, 59 & 125 (Part), Mouza- Kalarahanga, P.S.- Infocity, Nandan Kannan Road, District- Khurda, Odisha. The Project Proponent under the Existing part of the project has constructed 11 Blocks of buildings of G+14 configuration comprising of 603 dwelling units. 22 additional flats have been constructed in the existing 11 Towers. Out of these 22 flats, 16 (sixteen) flats have been built by rearranging the ground floor and 6(six) flats are constructed as upper floors in the 11 existing towers. The current configurations of dwelling units stand at 625 nos.

iv) Additionally, as a part of earlier proposal, minor civil constructions of few blocks of G+5 & G+6 configurations have been carried out up to different stages. The proposal had been later dropped and the proponent has decided that these structures will be all demolished. This matter has been already recorded and documented in Page 53 of 68 of the Proceedings of the SEAC meeting held on 19.03.2021.

v) Terms of Reference (TOR) has been granted by SEIAA, Odisha vide letter no. 3345/SEIAA, dated 12.10.2021 under Violation Category.

vi) Existing Environment Clearance was granted by SEIAA vide letter no. SEIAA/200/ENV dated 02.04.2011.

vii) BDA has approved the building plan vide letter no. 3537/BDA/Bhubaneswar, dated 13.02.2017.

viii) **Location and Connectivity**: The proposed site is located at Kalarahanga, Bhubaneswar, Odisha. The geographical co-ordinate of the project site is Latitude - 20°22'9.08"N & Longitude - 85°50'3.35"E. The project site is well connected with Nandan Kanan road which take towards

National Highway-16 (Kolkata-Chennai Road). Nandan Kanan road is 0.1 Km from proposed site. The nearest railway station is Mancheswar Railway station at a distance of approx 5.0 Km in South direction. The nearest airport is Biju Patnaik Airport at a distance of approx. 13.0 Km in South direction from project site. The site is easily accessible from Nandan Kanan Road.

ix) **Comparative Land details**: The total plot area of the existing & proposed project will be41,075.20sqm and built up area of existing project is 76,050.80sqm & built up area of proposed project (22 Flats) is 1906.66 sqm, so total built up area of the existing & proposed project is 77957,46 sqm.

Table: Comparative statement

Sl. No.	Features	Phase-1 As PerEnvironmental Clearance Vide Ref. No. SEIAA/200/Env Dated02.04.2011	Additional Construction 22 Flats In 11 Towers	Current Scenario
i)	Land Area	41075.20 SQM	0.00 SQM	41075.20 SQM
ii)	Configuration	11 blocks of G+14 storied comprising of 603 flats with a Club house	22 Flats have been added in the existing 11 blocks. Out of these 22 Flats, 16 No. Flats have been built by rearranging the ground floors and 6 No. Flats are constructed as upper floor(s) in the 11 existing towers	11 Blocks of G+14 storied comprising of 625 Flats with a Club House
iii)	No. of flats	603 Nos	22 Nos	625 Nos
iv)	Built-up area	76050.80 SQM	1906.66 SQM	77957.46 SQM
v)	Population	3317 persons permanent residents, 302 persons for Club	110 persons	3427 persons permanent resident 302 persons for Club
vi)	Total water requirement	566.7 KLD	16.40 KLD	583.1 KLD
vii)	Wastewater generation	428.2 KLD	13.30 KLD	441.5 KLD
viii)	Treated wastewater from STP	415.3 KLD	12.97 KLD	428.27 KLD
ix)	Treated wastewater recycled	259.8 KLD	6.11 KLD	265.91 KLD
x)	Treated wastewater	168.9 KLD	6.86 KLD	175.76 KLD

Sl. No.	Features	Phase-1 As PerEnvironmental Clearance Vide Ref. No. SEIAA/200/Env Dated02.04.2011	Additional Construction 22 Flats In 11 Towers	Current Scenario
	discharged			
xi)	STP capacity	450 KLD (350KLD +100KLD)	Wastewater will be treated in the existing STPs	450 KLD (350KLD +100KLD)
xii)	Solid Waste generation	1.50 TPD	0.058 TPD	1.558 TPD
xiii)	Total Power Requirement	3938.00 KW	130.00 KW	4068.00 KW
xiv)	DG sets	4x250KVA, 2 x 380 KVA	Current configuration of DGs provided will suffice additional back-up power requirement	2 x 320KVA 1x125KVA (Not installed as thereis no occupancy)
xv)	Rainwater Recharge pits	06 Nos	No Change	06 Nos
xvi)	No. of Car Parking	653 Nos	22 Nos	675 Nos
xvii)	Green Area	5596.00 SQM	0.00 SQM	5596.00 SQM

x) **Water requirement:** Total water demand for the proposed expansion part of the residential complex project during operation stage will be around 16.40 KLD. Daily freshwater requirement to the tune of 10.29 KLD will be sourced from Ground Water Supply System. Relevant permission from the respective authorities has already been obtained. In addition, treated wastewater to the tune of 6.11 KLD will be utilized in toilet flushing, landscaping and car washing, etc.

Sl. No	Category	Population	Per capital Water demand (LPCD)	Water demand (KLD)			Type of water	
				Domestic (KLD)	Flushing (KLD)	Total (KLD)	Fresh (KLD)	Treated (KLD)
i)	Residential Population	110	135	9.90	4.95	14.85	9.90	4.95
ii)	Floating Population	11	15	0.06	0.11	0.17	0.06	0.11
iii)	O & M Population	11	45	0.33	0.17	0.50	0.33	0.17
iv)	Car wash (nos.)	22	-	-	-	0.88	-	0.88
	TOTAL			10.29	5.23	16.40	10.29	6.11
TOTAL WATER REQUIREMENT: 16.40 KLD								

xi) **Wastewater Treatment**: It is expected that the project generates approx. 428.2 m^3/day of wastewater. Wastewater generated in additional 22 nos. of flats is 13.3 KLD which is treated in existing STP of capacity 330 KLD & 100 KLD. STPs is based on SBR (Sequential Batch Reactor) Technology have been set up for the existing configuration of the 11 Towers.

xii) **Solid Waste Generation and Its Management**: From the residential complex, solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.4 kg/capita/day, which will be about 110 x 0.40 = 44.0 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate-colored beans. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste. Waste generated from Floating people will be @ 0.15 kg/capita/day, which will be about 3.3 kg/day. Waste generated from Street Sweeping will be 11.0 kg/day.

Sl. No.	Category	Population	Rate (in kg/day)	Total (in kg/day)
i)	Residential Population	110	0.4	44
ii)	Floating Population	11	0.15	1.65
iii)	O&M Population	11	0.15	1.65
iv)	Street Sweeping	110	0.1	11
Total - 58.30 kg/day				

xiii) **Rainwater harvesting:** Rainwater harvesting has been catered to and designed as per the guideline of CGWA. Peak hourly rainfall has been considered as 85 mm/hr. The recharge pit of 3.0 m length, 3.0 m breath and 2.5 m depth is constructed for recharging the water. At the bottom of the recharge well, a filter media is provided to avoid choking of the recharge bore. Total no. of rainwater harvesting pits provided will be 06 Nos.

xiv) **Power requirement**: The total consolidated electrical load estimate for project is about 4068 KW. Power will be supplied by 11 KV source of TPCODL. Also, in case of power cut, 100 % power backup generator will be provided for common uses only. For this purpose, diesel generator having 200 KVA 2 X 320 KVA, 1 X 125 KVA capacities will be provided. There are 10 kw of Solar Panel is installed at site.

xv) **Greenbelt:** Green belt is developed over an area of 5596 sqm; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.

xvi) The cost assessment related to environmental degradation and its remediation would be: Rs.28,20,891.00.

xvii) Total Budgetary Allocation as per the table:

Sr. No.	Description	Estimated Cost (Rs.)
i)	Estimated cost of damage / remediation with respect to ecological aspects	28,20,891
ii)	Community resource augmentation plan	50,000
	Net Expenditure:	**28,70,891**

New Ambulance has been provided to Sri Sri University, Odisha of cost Rs. 3,49,585.00.

xviii) The project have applied for grant of EC under the Violation Window on 12th Sept 2017, hence the project doesn't fall under the Penalty Provisions as per Notification F. No. 22-21/2020-IA.III, dated 07.07.2021. Hence the project proponent has requested for waived off towards penalty provision clause.

xix) **Project cost**: Estimated Project cost is around Rs. 80 Crores and environment management cost is Rs 3.6 Crores.

xx) **Environment Consultant**: The Environment consultant **M/s. Centre for Envotech& Management Consultancy Pvt. Ltd., Bhubaneswar**, along with the proponent made a presentation on the proposal before the Committee on dtd. 14.02.2023.

xxi) The SEAC in its meeting held on dated 14-02-2023 recommended the followings;

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

a) Undertaking by PP to carryout demolition of minor civil constructions of few blocks of G+5 & G+6 configurations as per ToR conditions, within a stipulated time frame and submit detail time scheduled for demolition.

b) NOC/permission from concerned authority for discharge of additional quantity of treated waste water to nearest drain.

c) Details of solar power generation along with calculation. Revised EMP budget incorporating cost of solar installation.

d) Provide photographs of rainwater harvesting structures. Provide the location of rain water harvesting structures along with photographs.

e) Certified compliance report to earlier EC conditions from MoEF&CC, Govt. of India.

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

a) Construction activity, if any started for the project at the site.

b) Progress of the demolition work as recommended in ToRs.

c) Any other issues.

xxii) The proposed site was visited by the sub-committee of SEAC on 29.03.2023. Following are the observations of the sub-committee:

a) Both PP and Consultant with other team members were present.

b) During visit, it was observed that, demolition of the unauthorized construction is going on. PP informed that the work of demolition will be done by a month maximum. No fresh construction done in this area.

c) Installation of solar PV panels were observed at the roof top

d) Green belt, drain and road facilities are available.

e) Other documents as asked during presentation to be submitted.

xxiii) The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Undertaking by PP to carryout demolition of minor civil constructions of few blocks of G+5 & G+6 configurations as per ToR conditions, within a stipulated time frame and submit detail time scheduled for demolition.	The demolition work is already in progress. During the site visit of sub-committee of SEAC, the demolition work was ongoing at its full swing. The demolition work shall be completed within 30th May 2023. The undertaking regarding the same along with demolition photographs is annexed hereto as **Annexure -1.**	Complied and Annexure -1 is attached.
2.	NOC/permission from concerned authority for discharge of additional quantity of treated water to nearest drain.	Drainage permission has been obtained from Bhubaneswar Development Authority vide letter no. 66/EM, dated 08.01.2015. During construction of additional 22 nos. of Flats minor waste water i.e 6.86 KLD is discharged to nearest drain. The drainage permission is attached in **Annexure-2.**	NOC not attached for discharge of additional quantity of treated water to nearest drain.
3.	Details of solar power generation along with calculation. Revised EMP budget incorporating cost of solar installation.	Please find attached a note on details of solar power generation of 106kw annexed hereto as **Annexure -3.**	Solar energy proposed is too less.
4.	Provide photographs of rainwater harvesting structures. Provide the location of rain water harvesting structures along with photographs.	Total 06 nos. of Rainwater Harvesting pits has been constructed at site. The rainwater harvesting structure is marked in Layout plan. Layout plan is annexed as **Annexure -4** and Rainwater Harvesting Photographs are annexed as **Annexure - 5.**	Annexure -4 and 5 is attached.
5.	Certified compliance report to earlier EC conditions from MoEF& CC, Govt. of India.	The Certified Compliance report of earlier EC has been obtained from IRO Bhubaneswar vide letter no. 109-34/2022-EPE, dated 04.11.2022. The certified compliance report is attached in **Annexure - 6.**	-

xxiv) The project proponent has intimated that they have applied for grant of EC under the Violation Window on 12th Sept 2017, hence the project doesn't fall under the Penalty Provisions as per Notification F. No. 22-21/2020-IA.III, dated 07.07.2021. Hence the project proponent requested that penalty provision clause may kindly be waived out.

xxv) The SEAC in its meeting held on dated 13-07-2023 decided to take decision the proposal after receipt of the following from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	NOC for discharge of additional quantity of treated	Dear Sir, please note that the NOC in this regard was accorded by the Panchayat. Furthermore, the BDA had also directed the project Proponent to use	The PP has submitted No Objection certificate from Panchayat and

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	water to nearest drain is not attached.	the nearest drain (Budhi-Nala) for discharge of additional quantity of treated water. Please find the NOC of the Panchayat, letter of BDA and Building Permit by the BDA attached herewith marked with Annexures "A", "B" & "C" respectively.	BDA since there is no facility for public drain, and PP have to construct their own drainage system to nearest drain for the proposed building.
2.	The project proponent to indicate the system of storm water drainage, rainwater harvesting system and recharge well.	Dear Sir, please find a plan attached herewith marked with Annexure "D" which indicates the system of storm water drainage and rainwater harvesting. The said plan also provides sections of the storm water collection sump and the recharge wells constructed at the Project.	Layout submitted showing the details.
3.	Total cost of the project & total turnover cost.	Dear Sir, the total cost of the Project was estimated at Rs. 70 crores, which finally came to Rs 100.34 crores. The total Turnover of the Project has come to Rs. 180.48 crores. Please find attached as Annexure "E" as certificate from as Chartered Accountant certifying the same.	As certified by JKK & Company LLP, Kolkata Chartered Accounts.
4.	The OM F No. 22-21/2020/IA. III, dtd. 07.07.2021 of MoEF& CC, Govt. of India regarding SoP for violation cases stipulates that the percentage rates of penalty shall be halved if the project proponent suo-moto reports such violations without such violations coming to the knowledge of the Government either on inquiry or complaint. In this case, the violation has been identified at the time of appraisal of the proposal for grant of Environmental Clearance.	Dear Sir, the above Clarification has been in two parts. Firstly. Please draw your attention towards a portion of the above clarification set out hereunder- "The OM F No.22-21/2020/IA.III dtd.07.07.2021 of MoEF& CC, Govt of India regarding SoP for violation cases stipulates that the percentage rates of penalty shall be halved if the project proponent suo-moto reports such violations without such violations coming to the knowledge of the Government either on inquiry or complaint. In this case, the violation has been identified at the time of appraisal of the proposal for grant of Environmental Clearance". Please draw your attention towards the second paragraph of the Notification bearing OM F No. 22-21/2020/IA.III dtd. 07.07.2021 of MoEF& CC, Govt. of India. Please note here that the Notification first came into existence on 14.03.2017 and was applicable for a period of six months from the date of publication. Now in our case, we had made as application to SEAC, Odisha before the notification came to existence. Thereafter, once we learnt about the abovementioned Notification, we applied under the Violation Window vide letter dated 11.09.2017 (Annexure "F"). Please find set out below the first two paragraphs of the letter dated 11.09.2017- " Recently we learnt from the Gazette of India MoEF	To be decided by SEAC

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	Further, the OM on dtd. 07.07.2021 is applicable for the violation cases which has not been disposed off after date of notification of the OM i.e., 07.07.2021. Hence, the claim of the proponent that they have applied for grant of EC under the Violation Window on 12th Sept 2017, hence the project doesn't fall under the Penalty Provisions as per Notification F.No. 22-21/2020-IA.III, dated 07.07.2021 is not acceptable. The proponent has to deposit the penalty as per percentage given in the OM dtd. 07.07.2021 and detailed calculation to this effect shall be submitted.	Notification dated 14.03.2017 that we have to apply to EAC Delhi under violation case for the Environmental Clearance of our above mentioned project. In accordance with the above we are enclosing documents as required for your kind perusal". Sir, the project proponent humbly submits that there was no complaint made against the project proponent and there was no inquiry initiated by SEAC, Odisha because of which, violation came to the notice to the Department. Hence, we pray that such facts be given due consideration. Secondly, please draw your attention to the other part of the same clarification here in below – The OM on dtd. 07.07.2021 is applicable for the violation cases which has not been disposed of after date of notification of the OM i.e. 07.07.2021, Hence, the claim of the proponent that they have applied for grant of EC under the violation Window on 12th Sept 2017, hence the project doesn't fall under the Penalty Provisions as per Notification F No. 22-21/2020-IA.III, dated 07.07.2021 is not acceptable. The proponent has to deposit the penalty as per percentage given in the OM dtd. 07.07.2021 and detailed calculation to this effect shall be submitted. Please draw your attention towards paragraph Nos. 5 & 6 of the Notification bearing OM F No. 22-21/2020/IA.III dated 07.07.2021 of MoEF& CC, Government of India which reads as under – " 5. Therefore, in compliance to the directions of the Hon'ble NGT a standard Operation Procedure (SoP) for dealing with violation cases is required to be drawn. The Ministry is also seized of different categories of 'Violation' cases which have been pending for want of an approval structural / procedural framework based on 'polluter pays principal' and 'Principal of Proportionality'. It is undoubtedly important that action under statutory provisions is taken against the defaulters / violators and a decision on the closure of the project or activity or otherwise is taken expeditiously. 6. In the light of the above directions of the Hon'ble Tribunal and the issues involved, the matter has accordingly been examined in detail in the Ministry. A detailed SoP has accordingly been examined in detail in the Ministry. A detailed SoP has accordingly been framed and is outlined herein. The SoP is also guided by the observations / decisions of the	

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		Hon'ble Courts wherein principles of proportionality and polluters pay have been outlines. The 'polluter pays principal' is a principal whereby those who commit violation should bear the cost of managing it in order to prevent harm to human health and environment. The 'principal of proportionality' is a general principal in law which is used as a criterion of fairness & justice in statutory interpretation processes, especially in constitutional law, as a logical method intended to assist in discerning the correct balance between the restriction imposed by a corrective measure and the severity of the nature of the prohibited act. In other words, an administrative action should not be more drastic than it ought to be. Thus, the punishment imposed by an administrative body must be reasonable and not excessive. Now please draw your attention towards point No. 12 of the abovementioned Notification having the title "Penalty provisions for Violation cases and applications", Sub-Clause 12(b)(ii) states as below – "Where operation / production with expand capacity have commenced: 1% of the project cost (attributable to the expansion activity) incurred upto the date of filing of applicable along with EIA/EMP report PLUS 0.25% of the total turnover (attributable to the expanded activity / capacity) involved during the period of violation." Now Sir having brought to your attention the relevant provisions of the Notification mentioned here in a above, please draw your attention towards the Application made under the Violation Window dated 11.09.2017 (Annexure "E"). "" We had made a application to SEIAA, Odisha on 12.02.2017 for Phase-2 of our project where we had proposed to expand our project and consequently presentation was made before SEAC, Odisha on 27.03.2017. The SEAC members had certain queries and issued us a clarifications letter having Memo No. 258(3)/ SEAC-Misc-28 dated 03.04.2017. Sir, hereby inform humble submission of the project proponent that penalty should be imposed under Point No. 12(b)(ii) and NOT undr Point No.12(a)(ii) of the Notification. Sir, please also consider certain facts in the instant case listed out below – • Although the member of flats have in the increased from 603 to 625, but the project area has not increased proportionately as some of the additional flats have been carved out by re-arranging car parks and/or	

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th><th>Views of SEAC</th></tr>
<tr><td></td><td></td><td>flats within the sanctioned area. Thus, the impact of this violation is negligible, if not none. Please draw your attention towards a table below which was also a part presentation to the respected committee members.
<table>
<tr><th>Features</th><th>Phase-1 As per Environmental Clearance Vide Ref No.SEIAA/200/ Env Dated 02.04.2011</th><th>Additional Construction 22 Flats In 11 Towers</th><th>Current Scenario</th></tr>
<tr><td>No. of flats</td><td>603 Nos</td><td>22 Nos</td><td>625 Nos</td></tr>
<tr><td>Built-up area</td><td>76050.80 SQM</td><td>1906.66 SQM</td><td>77957.46 SQM</td></tr>
<tr><td>Population</td><td>3317 persons permanent residents, 302 persons for Club</td><td>110 persons</td><td>3427 persons permanent resident 302 persons for Club</td></tr>
</table>

In the instant case, Units have been increased from 603 to 625 which is approximately 4% increase. Now please imagine, if in another case the number of Units were increased from 603 to 900 which is approximately 50% increase. It is our assertion that both the cases would attract the same penalty under point No. 12(a)(ii) of the Notification which goes against the principal of proportionality upon which the entire Notification which goes against the principal of proportionality upon which the entire Notification is based. Thus, Point No. 12(b)(ii) should apply in the instant case.
</td><td></td></tr>
</table>

xxvi) The Committee observed the following:

a) Justification given by the proponent for exemption of penalty is not acceptable as it is not co-related to the illegal construction comparing to the construction work has already carried out as per the Environmental Clearance and demolition work has already done towards the illegal construction.

b) PP as mentioned above in the table in last part want penalty as per 12 b ii which applies to the expansion cases. It is also an expansion case. So PP has to clarify if they are asking for exemption or want to be covered under category 12 b ii and not 12 a ii (which is for new projects).

c) It is stated that the PP has to construct its own drain or facilitating discharge of excess treated sewage water as well as rainwater to Budhi nala. The PP needs to submit land documents evidencing its unhindered access to Budhi nala for the proposed drain.

After detailed discussion, the SEAC decided to take decision on the proposal after the proponent submit detailed information / documents as pointed out at para xxvi above.

ITEM NO. 04

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR MANTRAJHOLLA STONE QUARRIES CLUSTER OVER AN AREA OF 11.936 HECTARES IN MANTRAJHOLLA VILLAGE OF RAYAGADA TAHASIL, DISTRICT- RAYAGADA OF TAHASILDAR RAYAGADA – EC (SUBMITTED UNDER CLUSTER APPROACH WITH TOTAL CLUSTER AREA 11.936 HECTARES WITH CONSISTING OF 8 STONE QUARRIES)

1. This proposal is for Environmental Clearance for Mantrajholla Stone Quarries Cluster over an area of 11.936 hectares in Mantrajholla village of RayagadaTahasil, District- Rayagada of Tahasildar Rayagada.
2. **Category:** As per the EIA notification 2006 and its subsequent amendment, Proposed Project falls in Category B1 under schedule of activity 1(a)-Mining of minerals.
3. The proposed project is in Cluster Situation as other leases are within 500 m radius of lease & total lease area becomes greater than 5 ha. The proposed project is not comes under
4. DLC land present at the site.
5. There are Four other quarries lies within 500m of the lease area i.e. Mantrajholla Stone Quarry & Mantrajholla Stone Quarry (I, II, III), is granted by Tahasildar, Rayagada situated over a cluster area of 11.936 ha which is greater than 5 ha.
6. **Details of mine lease:**

Table: **DETAILS OF MINE LEASE AREA (Proposed Quarries)**

S. No.	Name of Quarry	TOR Details	Lease area (Ha.)	Land Schedule	Kissam
1	Mantrajholla Stone Quarry IV	Letter no 5181 dated 19.08.2022	1.214	Khata No- 20 Plot No - 118	Pahad
2	Mantrajholla Stone Quarry V	Letter no 5346 dated 02.09.2022	1.214	Khata No- 20 Plot No - 122	Pahad
3	Mantrajholla Stone Quarry VI	Letter no 5177 dated 19.08.2022	2.023	Khata No- 20 Plot No - 102	Pahad
4	Mantrajholla Stone Quarry VII	Letter no 5183 dated 19.08.2022	1.214	Khata No- 20 Plot No - 102	Pahad
Total			5.665		

Table: DETAILS OF MINE LEASE AREA (Existing Quarries)

S. No.	Name of Quarry	Lease area (Ha.)	Land Schedule	Kissam
1	Mantrajholla Stone Quarry	2.023	Khata No- 20 Plot No - 118	Pahad
2	Mantrajholla Stone	2.023	Khata No- 20	Pahad

S. No.	Name of Quarry	Lease area (Ha.)	Land Schedule	Kissam
	Quarry I		Plot No - 118	
3	Mantrajholla Stone Quarry II	1.011	Khata No- 20 Plot No - 118	Pahad
4	Mantrajholla Stone Quarry III	1.214	Khata No- 20 Plot No - 122/1	Pahad
Total		6.271		

7. **Public hearing details**:Public hearing was successfully executed on date 04.03.2023 in Mantrajholla village of Kuli Gram Panchayat of Maligam R.I Circle under Rayagada tahasil of Rayagada district, Odisha. Issues raised during the public hearing are vibrational impact due to drilling and blasting,noise impacts, agricultural impacts, dust pollution, environment protection,protection of water bodies,peripheral development ,plantation and employment.

8. **Location and connectivity**: The Mantrajholla Stone Quarry (IV, V, VI, VII) located at village-Mantrajholla, Tehsil - Rayagada, District- Rayagada, Odisha. Geo graphically the ML area lies from Latitude 19°12'46.49" to 19°13'10.86" N and Longitude from 83°27'56.07" to 83° 28'07.11" E with an elevation of about 279 mRL to 331 mRL. The area falls in Survey of India topo sheet No. E44F8.The area represents almost flat land.

9. **Baseline study details:** Meteorological data at the site was monitored during March 2022 to May 2022 representing pre monsoon season.

   a) **Ambient Air Quality** Monitoring (AAQM) has been carried out at eight locations. The minimum and maximum level of PM2.5 recorded within the study area was in the range of 19.21µg/m^3 to 54.78µg/m^3 with the 98th percentile ranging between 24.61µg/m^3 to 54.69µg/m^3.The minimum and maximum level of PM_{10} recorded within the study area was in the range of 53.28µg/m^3 to 87.30µg/m^3 with the 98th percentile ranging between 65.38µg/m^3 to 85.85µg/m^3.The minimum and maximum concentration of SO_2 recorded within the study area was 5.44µg/m^3 to 18.56µg/m^3 with the 98th percentile ranging between 8.49µg/m^3 to 17.74µg/m^3. The minimum and maximum level of NO2 recorded within the study area was in the range of was 9.45µg/m^3 to 20.31µg/m^3 with the 98th percentile ranging between 13.32µg/m^3 to 20.17µg/m^3.

   b) **Water quality:** To assess the physical and chemical properties of water in the region, ground water samples from six locations& surface water from two locations were collected from various water sources around the mine lease area. The pH of the ground water samples in the region varied from 6.78 to 7.51.The results indicate groundwater is generally in conformity with the drinking water standards (IS: 10500) and surface water is in conformity with IS-2296 standards.

   c) **Noise Levels:** The values of noise observed in some of the areas are primarily owing to vehicular traffic. Assessment of hourly night time Leq (Ln) varies from 38.5 to 43.4 dB (A) and the hourly daytime Leq (Ld) varies from 49.7 to 56.1 dB (A) within the study area. The status of noise quality within the 10 km zone of the study area is, therefore, within the MoEF&CC standards.

   d) **Soil quality:** 07 soil samples were collected in and around the mine lease area to assess the present soil quality of the region. The pH of the soil indicates that the soil is slightly alkaline in nature. Based on the results, it is evident that the soils are not contaminated by any polluting sources.

10. **Production and Reserves:** Mantrajholla Stone Quarry (IV, V, VI, VII) over an Cluster area of 5.665 ha/14.0 Acre for Proposed production of 15,929 cum/year of stone.

Table: Geological and Mineable Reserves: - (Proposed Quarries)

S No.	Name of the Quarry	Geological Reserves	Mineable Reserves
1	Mantrajholla Stone Quarry IV	118858	59595
2	Mantrajholla Stone Quarry V	135312	60502
3	Mantrajholla Stone Quarry VI	207359	110988
4	Mantrajholla Stone Quarry VII	284832	114710
Total		746361	345795

Table: Geological and Mineable Reserves: - (Existing Quarries)

S No.	Name of the Quarry	Geological Reserves	Mineable Reserves
1	Mantrajholla Stone Quarry	520129	189447
2	Mantrajholla Stone Quarry I	334757	157109
3	Mantrajholla Stone Quarry II	-	-
4	Mantrajholla Stone Quarry III	362799	112976
Total		-	-

Table: Production Details: - (Proposed Quarries)

S No.	Name of the Quarry	Production (cum/year)
1	Mantrajholla Stone Quarry IV	4162
2	Mantrajholla Stone Quarry V	3037
3	Mantrajholla Stone Quarry VI	4698
4	Mantrajholla Stone Quarry VII	4032
Total		15929

Table: Production Details: - (Existing Quarries)

S No.	Name of the Quarry	Production (cum/year)
1	Mantrajholla Stone Quarry	4162
2	Mantrajholla Stone Quarry I	4037
3	Mantrajholla Stone Quarry II	2850
4	Mantrajholla Stone Quarry III	4162
Total		15211

11. **Mining method:** Mining will be done by opencast semi-mechanized method with adoption of drilling & blasting. Mining will be done by deploying machines like jackhammer, drill compressor, rock breaker, excavator and tractors/trucks. Tipper trucks will be used for transporting stone and waste. Drilling& blasting will be carried out as & when required. Lessee will take all necessary permission and do accordingly DGMS norms. Blasting will be carried out by an employed blaster. Short hole blasting will be practiced.The blasting will be carried out by delay detonators using slurry explosive to achieve fragmentation & less throw.The storage of explosive not proposed, Blasting should be done by only Govt. authorized agency after permission taken by authority.

12. **Waste generation and management:** No top soil is proposed to be generated. No storage is proposed. The Overburden generated from the cluster is expected to be 8850 cum.

S No.	Name of the Quarry	Waste (cum)
1	Mantrajholla Stone Quarry IV	2310

Proceedings of the SEAC meeting held on 13.11.2023 (Old proposals – compliance received)

JNayak
Environmental Scientist, SEAC

2	Mantrajholla Stone Quarry V	1690
3	Mantrajholla Stone Quarry VI	2610
4	Mantrajholla Stone Quarry VII	2240
Total		**8850**

13. **Water requirement:** The water requirement for workers for drinking purpose will be around 1.50 KLD & the total water requirement will be around 18.30 KLD. This water will be supplied from the nearby area.

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10 lpcd per labor 10*150/1000= 1.50 KLD	1.50
Dust Suppression	**Total approach road to be water sprinkled** = 2400 m 2400 m*6m*0.5 *2 times/1000= 14.40 KLD	14.40
Plantation	1196 plants (during plan period) @ 2 L/per plant= 1196*2lts= 2392/1000= 2.392 KLD	2.392
Total		**18.292 ~ 18.30**

14. **Greenbelt:**

S. No.	Quarry	No. of Plants in Safety zone, along approach road and at other places in village after consulting local authorities
1	Mantrajholla Stone Quarry IV	122
2	Mantrajholla Stone Quarry V	122
3	Mantrajholla Stone Quarry VI	202
4	Mantrajholla Stone Quarry VII	122
5	Mantrajholla Stone Quarry	202
6	Mantrajholla Stone Quarry I	202
7	Mantrajholla Stone Quarry II	102
8	Mantrajholla Stone Quarry III	122
Total		**1196**

15. **Manpower requirement:** The number of working people required for the proposed project is 150.

Table: Employment generation In cluster

S. No.	Quarry	Manpower
1	Mantrajholla Stone Quarry	20
2	Mantrajholla Stone Quarry I	23
3	Mantrajholla Stone Quarry II	18
4	Mantrajholla Stone Quarry III	16
5	Mantrajholla Stone Quarry IV	20
6	Mantrajholla Stone Quarry V	16
7	Mantrajholla Stone Quarry VI	18
8	Mantrajholla Stone Quarry VII	19
Total		150

Table:Employment generation (for Proposed Quarries)

S. No.	Quarry	Manpower
1	Mantrajholla Stone Quarry IV	20
2	Mantrajholla Stone Quarry V	16
3	Mantrajholla Stone Quarry VI	18
4	Mantrajholla Stone Quarry VII	19
Total		73

16. **Project cost:**

Table: (Mantrajholla Stone Quarry IV)

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	24,400	10,000
4.	Maintenance of approach road	65,000	52,000
Total		89,400	2,72,000

Table: (Mantrajholla Stone Quarry V)

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	24,400	10,000
4.	Maintenance of approach road	1,10,000	52,000
Total		1,34,400	2,72,000

Table: (Mantrajholla Stone Quarry VI)

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	40,400	10,000

4.	Maintenance of approach road	4,250	52,000
Total		44,650	2,72,000

Table: (Mantrajholla Stone Quarry VII)

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	24,400	10,000
4.	Maintenance of approach road	1,72,500	52,000
Total		1,96,900	2,72,000

Table: BUDGET ALLOCATION FOR EMP IMPLEMENTATION (Cluster)

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	8,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	2,39,200	80,000
4.	Maintenance of approach road	6,00,000	4,16,000
Total		**8,39,200**	**14,06,000**

Table: CER budget- Cluster

S. No.	Activity	Capital Cost (in Rs.)/annum
1.	Financial aid for medical camp in Mantrajholla village. @ Rs. 10,000/ camp (8 camp in a year).	80,000
2.	Skill development program camps like computer learning, sewing etc. in Mantrajholla village. @Rs 10,000/trainer (8 trainer)	80,000
TOTAL		**1,60,000**

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

18. The SEAC in its meeting held on dated 07-07-2023 decided to take the decision on the proposal after receipt of the following from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	According to the concerned Tahasildar, 4 quarries out of the 8 quarries has obtained EC from DEIAA and now they are not in operating stage but might operate in near future. But as per the Notification of 28th April 2023, all proposals that were granted EC by DEIAA, they must be reappraised by SEAC. Clarification in writing as to why the proponent has not applied for all the 8 quarries in the cluster but has only applied for 4 quarries. The proponent has to submit revised EIA/EMP report including all stone quarries in cluster (8 quarries)	The revised EMP with 8 quarries in the cluster has been prepared and submitted herewith as **Annexure – I**.But since the size of the EIA/EMP Report is too large to be uploaded on the ADS reply so kindly grant the permission so that we can mail the Cluster EIA/EMP Report.	Cluster EMP to be submitted as couldn't upload in ADS.
2.	DEIAA had the power to grant EC for the lease area 0-5 ha. But, how DEIAA had granted EC for 4 quarries more than 5 ha. This has to be clarified.	Earlier the EC were granted individually by DEIAA hence the area was not exceeded 5 Hect. and all the EC copy were attached herewith along with compliance.	
3.	RL of water table in the mineral stone quarry zone comprising of all 8 quarries during summer and rainy season to be provided along with the RL of the surface post mining as per the approved mining plan of each of 8 leases in the cluster.	The ground water Table varies during the summer is varies between 18m to 22m from the surface level. During dry season the water table fails at 22m from surface whereas during rainy season the water table remains at 18m from surface. As the mining activities. Detail of RL is attached as **Annexure – II**.	Details of Quarry floor level at end of the period of all 8 leases has been submitted.
4.	Nos of proposed blasting per day as per the approved mining plan for all 8 leases under the cluster approach to be presented. The sequence of blasting of each of the leases under the cluster to be presented so that simultaneous blasting in adjacent leases in the cluster do not affect the area in between ML area boundaries.	The details are attached as **Annexure – III**.	Blasting plan for 8 quarries is submitted.
5.	Geo-coordinates of the mining lease area boundary of each of all 8 leases under the cluster approach superimposed on the cadastral map to be furnished.	The details are attached as **Annexure – IV**.	Revenue map and Google map showing all 8 leases under the cluster approachhas been submitted.
6.	Layout of the entire area of 5.665 ha/14.0 Acre of Mantrajholla Stone Quarry (Cluster Approach) indicating	The detail of all 8 stone quarries is attached as **Annexure – V**.	Individual layout of all 8 leases has been submitted.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	the location of all 8 mining leases to be considered under the cluster approach along with location of waste dump, product storage area, route of transportation of the mined mineral products to the market, system of rainwater drainage (Garland drain) etc. of each of the above-mentioned leases along with the location of the proposed STP as per the approved mining plan.		

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P & M Solution, C-88, Sector 65, Noida** on behalf of the proponent, the SEAC approved the EIA/EMP report in cluster approach and recommended the following:

a) The SEIAA, Odisha may consider to grant Environmental Clearance to individual lease for **Mantrajholla Stone Quarry** cluster without referring to SEAC with specific conditions as per **Annexure – C** after receipt of individual applications from the lessee in cluster along with following documents.

i) Filled in form-I of individual lease

ii) Prefeasibility report of individual lease

iii) EMP of individual lease.

iv) Approved Mining Plan of individual lease.

v) Report on vibration study.

vi) DLC status of the lease area from concerned DFO as certified by the concerned Tahasildar.

vii) An Undertaking by the lessee not to use wagon drilling blasting to be submitted. Accordingly, specific condition to be stipulated in EC of individual lease.

viii) No storage and usage of blasting materials/explosives inside the lease area without license/permission/authorization from competent Authority as per Indian Explosives Rules, 1983 shall be ensured by the lessee. An undertaking to this effect shall be submitted by the lessee. Accordingly, specific condition to be stipulated in EC of individual lease.

ix) An undertaking to obtain NOC from CGWA and permission from WR department, Govt. Of Odisha for use of ground water. Accordingly, specific condition to be stipulated in EC of individual lease.

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

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

xii) A condition on SOP for blasting and safety on management of flying rock to be implemented and detail risk and hazard management procedure shall be followed by the lessee as per the **Annexure – D.**

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

ITEM NO. 05

PROPOSAL FOR AMENDMENT ENVIRONMENTAL CLEARANCE OF M/S. GV MINES MINERALS AND METALS PRIVATE LIMITED FOR PROPOSED 4.0 MTPA CAPACITY IRON ORE BENEFICIATION PLANT OVER AN AREA 138.525 ACRES AT VILLAGE DENGULA & NUAGAON, TAHASIL - KOIDA, DISTRICT - SUNDARGARH OF SRI SMRUTI RANJAN DASH – MOD TOR.

1. This proposal is for amendment Terms of Reference for obtaining Environmental clearance for M/s. GV Mines Minerals and Metals Private Limited for proposed 4.0 MTPA Capacity Iron Ore Beneficiation Plant over an area 138.525 Acres at Village Dengula & Nuagaon, Tehsil Koida, District Sundargarh of Sri Smruti Ranjan Dash.
2. **Category:** As per EIA Notification,2006 and its subsequent amendments, the project proposed comes under Category -B of Schedule- 2(b), Mineral Beneficiation.
3. **TOR details:** Earlier Terms of Reference was issued by SEIAA vide online Proposal no. SIA/OR/IND1/405090/2022 dated 13.02.2023.
4. This proposal is for Modification of TOR for reduced land area.
5. **Previous Land details for which TOR was issued as follows:**

Total Land: 138.525 Acres (Revised) Forest Land: 3.73 Acres
Non-Forest Govt. Land: 87.77 Acres (Revised)
Private Land: 47.025 Acres.

Table: The land details as per the previous ToR

Sr. No.	Name of village	Land classification (in acre)			Total Land(inacre)
		Govt Non forest	Govt Forest	Private	
1.	Dengula	71.440	3.730	40.020	115.150
2.	Nuagaon	32.285	0.000	7.005	39.290
Total Land		103.725	3.730	47.025	154.480

Table: The Revised land details as per lease deed executed by sub-registrar

Sr. No.	Name of village	Land classification (in acre)			Total Land (in acre)
		Govt Non forest	Govt Forest	Private	
1.	Dengula	54.810	3.730	40.020	98.560
2.	Nuagaon	32.960	0.000	7.005	39.965
Total Land		**87.770**	**3.730**	**47.025**	**138.525**

Revised Land Use plan vis-à-vis old land use details

AREASUMMARYOFKOIRAIOBP-REVISED			
SL. NO	PROPOSED FACILITIES	AREA (ACRE) old	AREA (ACRE) New
i)	RMHS	20	7
ii)	Truck parking area	3	2.5
iii)	Grinding and beneficiation unit	4	3.5
iv)	Concentrate thickener & pump house	2.5	1.5
v)	Slurry tank	1.5	0.5
vi)	Slurry pump house	1.5	1
vii)	RWTP	2	0.5
viii)	Water reservoir	3	2
ix)	Tailing thickener& pump house	2	1
x)	Tailing filtration unit	1.5	0.8
xi)	Tailing filter cake dump	25	50
xii)	Concentrate filtration plant	1.5	0.8
xiii)	Concentrate filter cake dump	12	5
xiv)	MRSS & switchyard	2	2
xv)	Building & shed	9	8
xvi)	Road drain &building	12.98	6.7
xvii)	Plant area	103.48	92.8
xviii)	Green belt	51	45.725
xix)	Total area	154.48	138.525

6. Environment Consultant: The Environment consultant **M/s Pollution and Ecology Control Services,** along with the proponent made a presentation on the proposal before the Committee on 31.07.2023.

7. The SEAC in its meeting held on dated 31-07-2023 decided to take the decision on the proposal after receipt of the following from the proponent:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	DGPS of the boundary along with Cadastral map.	In this regard we would like to state that DGPA Survey for the said boundary was conducted by the ORSAC (Certified consultant) and the same has been submitted herewith for favor of your kind reference and perusal in **Annexure-I**.	Copy submitted.
2.	Engineering details behind optimization of lease area (by reducing the area allocated to different parts like Slurry Tank, Slurry Pump House, Tailing filtration unit, Tailing filter cake dump etc. without reducing capacity of the plant) under each proposed facility category along	We would like to state that for optimization of the lease area for the Iron Ore Beneficiation Plant (IOBP) while maintaining the same plant capacity, various engineering interventions have been implemented to reduce the allocated area for different facilities as submitted below: **AREA SUMMARY OF KOIRA IOBP -**	-

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th><th>Views of SEAC</th></tr>
<tr><td></td><td>with the justification (as it was stated that by engineering interventions area has been reduced for various facilities/category keeping the plant capacity at the same level).</td><td>
REVISED
<table>
<tr><th>SL. NO</th><th>PROPOSED FACILITES</th><th>AREA (Acre) Old</th><th>AREA (Acre) New</th></tr>
<tr><td>1.</td><td>RMHS</td><td>20.00</td><td>15.84</td></tr>
<tr><td>2.</td><td>Truck parking area</td><td>3.00</td><td>3.00</td></tr>
<tr><td>3.</td><td>Grinding and Benificiation unit</td><td>4.00</td><td>4.00</td></tr>
<tr><td>4.</td><td>Concentrate thickner& Pump house</td><td>2.50</td><td>2.50</td></tr>
<tr><td>5.</td><td>Slurry tank</td><td>1.50</td><td>1.50</td></tr>
<tr><td>6.</td><td>Slurry pump house</td><td>1.50</td><td>1.00</td></tr>
<tr><td>7.</td><td>RWTP</td><td>2.00</td><td>2.00</td></tr>
<tr><td>8.</td><td>Water reservoir</td><td>3.00</td><td>2.00</td></tr>
<tr><td>9.</td><td>Tailing thickner& pump House</td><td>2.00</td><td>1.50</td></tr>
<tr><td>10.</td><td>Tailing filtration unit</td><td>1.50</td><td>1.50</td></tr>
<tr><td>11.</td><td>Tailing filter cake dump</td><td>25.00</td><td>25.00</td></tr>
<tr><td>12.</td><td>Concentrate filtration Plant</td><td>1.50</td><td>1.00</td></tr>
<tr><td>13.</td><td>Concentrate filter cake Dump</td><td>12.00</td><td>9.00</td></tr>
<tr><td>14.</td><td>Mrss& switchyard</td><td>2.00</td><td>2.00</td></tr>
<tr><td>15.</td><td>Building & shed</td><td>9.00</td><td>8.00</td></tr>
<tr><td>16.</td><td>Road drain &building</td><td>12.98</td><td>12.97</td></tr>
<tr><td>17.</td><td>Plant area</td><td>103.48</td><td>92.81</td></tr>
<tr><td>18.</td><td>Green belt</td><td>51.00</td><td>45.71</td></tr>
<tr><td></td><td>TOTAL AREA</td><td>154.480</td><td>138.525</td></tr>
</table>
The engineering details behind the optimization of each proposed facility category and justifications for the changes are appended below for favour of your kind perusal.
The reduction in the area of Raw Material Handling System (RMHS) from 20 acres to 15.84 acres is justified by a series of engineering interventions and optimizations. These include the adoption of advanced material handling equipment, optimized layout design, improved bulk material storage efficiency, integrated control
</td><td></td></tr>
</table>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		systems, enhanced material tracking and inventory management, and adherence to environmental considerations and sustainability goals. These measures enable more efficient material handling, reduce the need for excessive storage space, enhance operational efficiency, and maintain the same plant capacity, contributing to resource conservation and cost savings while ensuring compliance with environmental standards. The reduction in the area of the Slurry Pump House is achieved by implementing more compact and efficient pump designs, enabling the same pumping capacity within a smaller footprint. Advanced pump technology and improved layout planning have allowed for this reduction without compromising performance. The reduction in the Water Reservoir area is achieved through better design and optimization of the reservoir's shape and depth. Enhanced water management systems, including improved water circulation and storage techniques, have been implemented to maintain the required water supply while reducing the footprint. This reduction is attained by utilizing advanced thickening technology, which allows for a higher concentration of solids in the tailings within the same area. Additionally, more efficient pump designs and optimized layout planning have contributed to the reduced area. Improved filtration technologies, including higher-capacity filters and improved automation, enable a smaller footprint for the Concentrate Filtration Plant. Enhanced process control and filtration efficiency contribute to this reduction. Overall, the reduction in area across these facilities is made possible by leveraging advancements in engineering and technology, such as more compact equipment, improved layout planning, higher efficiency processes, and better control systems. These optimizations not only save space but also contribute to improved resource utilization and sustainability while maintaining the same plant capacity.	

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		Additionally, careful consideration has been given to environmental and regulatory requirements, ensuring that the reduction in area does not compromise the plant's operational performance or compliance with safety and environmental standards	
3.	Details of Forest Clearance application and current status.	Ln this connection we would like to state that forest clearance proposal has already been created vide. Proposal No. **FP/OR/IND/4O540412022** and the same is under scrutiny.	-

After detailed discussion, the SEAC recommended for Modification of TOR for the proposal over the revised land area of 138.525 acres without changing Terms of References (ToRs) as issued earlier vide no. SIA/OR/IND1/405090/2022 dated 13.02.2023.

ITEM NO. 06

PROPOSAL FOR AMENDMENT OF ENVIRONMENTAL CLEARANCE OF M/S SWAMI RESORTS PVT. LTD FOR PROPOSED MULTI STORIED HOTEL BUILDING 2B+G+7 WITHIN A PLOT AREA OF 12140.55 SQM AND BUILT-UP AREA OF 22999.81 SQM AT MOUZA – JAYDEV VIHAR BHUBANESWAR, KHORDA OF SRI SHIVAM ASTHANA - MOD EC

1. This proposal is for Amendment of Environmental clearance of M/s Swami Resorts Pvt. Ltd. of M/s Swami Resorts Pvt. Ltd. for proposed Multistoried Hotel building 2B+G+7 within a plot area of 12140.55 sqm and built-up area of 22999.81 sqm at Mouza - Jaydev Vihar, Bhubaneswar, Khorda of Sri Shivam Asthana.
2. **Category**: This project falls under Category B of Schedule 8(a) - Building and Construction projects as per EIA Notification, 2006 and its subsequent amendments.
3. **Project details**: M/s Swami Resorts Pvt. Ltd. had earlier applied for Environmental Clearance (Letter No.- SRPL/ EC/02/13-14 dated 27.07.2013) for the proposed hotel building with 2B+G+11 storied with built up area of 55909.46 sqm. Environmental Clearance had been granted by SEIAA to the proposed hotel building through Ref No.- 623/ SEIAA on dated 19.04.2014 for a period of 5 (five) years. But due to financial constraints of the project proponent and Covid Pandemic situation, the project could not be started on time. Now, the built up area of the hotel building has been revised from 55909.46 sqm to 22999.81 sqm and the configuration of the proposed building has been changed from 2B+G+11 to 2B+G+7 storied.
4. Approval of the revised built up area and building plan has been approved by Bhubaneswar Development Authority through letter no. 25537/ BDA dated 30.06.2022.
5. As the built up area and the configuration of the proposed hotel building has been changed and the validity of previous EC was for a period of 5 (five) years, the proposal requires Amendment in EC from the State Environment Impact Assessment Authority (SEIAA).
6. **Location and connectivity:** The proposed hotel project site is located at Plot No- 55/4085, 56/4086, 57/4087, 63/4088, Khata No- 1426/1488 in Mouza- Jayadev Vihar of Khordha district, Odisha. The proposed project site covered in the Survey of India Topo sheet no. 74 H/11, 74 H/12, 74 H/15, 74 H/16. The geographical co-ordinates of project site are Latitude 20^0 18' 15.32"

N to 20^0 18' 21.68" N and Longitude 85^0 49' 11.73" N to 85^0 49' 17.92" E. The proposed site located in Mouza- Jayadev vihar is well connected with public roads and is at a prime location in the city of Bhubaneswar. The entry and exit gates of the proposed project will be connected with the 200 ft. wide Nandankanan - Jayadev Vihar road. An external 100 ft. wide pwd road is proposed on the North west side of the project site. Nearest NH is NH – 16 at 1.20km. Bhubaneswar Railway station is at 7.4km. Nearest airport is Biju Patnaik International Airport at 6.8km. Nearest reserve forest is Chandaka RF at 17km. Nearest river is Kuakhai river at 6km.The site is plain without any major vegetation or trees.

7. **Area Statement:** The proposed project is a multistoried hotel building comprising of 2B+G+7 floors. The total area of project site is 12140.55 m^2.

Parameters	Area details
Plot Area	12140.55 sqm
Ground Coverage	3183.0 sqm (26.21 %)
Total Built up Area	22999.81 sqm
Total FAR Area	11810.03 sqm
FAR	0.973
Maximum Height	31.80 mtr
Paved Area	4488.55 sqm
Parking Area	8611.65 sqm
Green Belt Area	4469.0 sqm (36.81%)
Estimated Population-Commercial	806nos.

Comparative area details of Previous EC granted and Proposed Amendment of EC

Sl.No.	Details of Hotel Building	Previous Configuration (EC granted by SEIAA)	Proposed Configuration
i)	No. of Floors	2B+G+11	2B+G+7
ii)	Built up Area	55909.46 sqm	22999.81 sqm
iii)	Built up Area (Excluding Basement)	33352.50 sqm	14388.16 sqm
iv)	Building Height	50.0 m	31.80 m
v)	Water Requirement	320.0 KLD	227.0 KLD
vi)	Fresh Water Requirement	250 KLD (PHED Supply)	117.0 KLD (Ground Water)

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vii)	STP Capacity	285 KLD	150 KLD
viii)	STP Technology	FAB/FMR	SBR
ix)	Treated Waste water	243 KLD	105 KLD
x)	Total Green Belt Area	2621.26 sqm (21.6%)	4469.0 sqm (36.81%)
xi)	Total Parking Area	20020 sqm	8611.65 sqm
xii)	Recharge pit dimension	6m x 3m x 3m	1.53m x 3.05m x 1.22m

8. **Water requirement**: The total water requirement is approx. 227 KLD, out of which total domestic water requirement is 139.0 KLD. The fresh water requirement is approx. 117.0 KLD. The hot water requirement proposed in the hotel building will be around 15.0 KLD.NOC from CGWB is obtained vide application no. CGWA/NOC/INF/ORIG/2022/16363 for 100KLD valid till 19.09.2027.

9. **Waste water generation and management**: It is expected that the project will generate approx. 117 KLD of wastewater. The wastewater will be treated in onsite STP of 150 KLD capacity. The treated effluent will be reused for flushing, greenbelt, fire fighting, HVAC and miscellaneous uses like car washing, road washing. Surplus treated effluent during rainy season will be discharged to external sewer.

10. **Rain water harvesting**: Rain water harvesting has been catered to and designed as per the guideline of CGWA. Peak hourly rainfall has been considered as 140 mm/hr. The de silting pits of dimensions 1.5mx3.05mx1.22m and the recharge pit of diameter 1.20 m and depth of 3.0 m is constructed for recharging the water. 33nos. of rainwater harvesting pits at selected locations is proposed, which will catch the maximum run-off from the site and volume of rainwater to be harvested will be 230.69 Cum.

11. **Solid waste generation**: During the operation phase, estimated quantity of the waste shall be approx. 340.0 kg per day (@ 0.5 kg per capita per day for total occupancy and landscape waste @ 0.2 kg/acre/day) which will besegregated into biodegradable and non-biodegradable dustbins. Proper waste management practices will be adopted during collection, storage and disposal of the generated solid waste, construction and demolition waste

12. **Fire Fighting**: Fire fighting system will be installed as per recommendation of Odisha Fire Service Department and as per the guideline of NBC (part-4). The height of the building is upto 31.80 mts. Internal roads of 7.5 mt width has been demarcated for movement of fire vehicle.

13. **Power requirements**: Electricity requirement for the hotel building will be 1096.37 KW which will be supplied from State Electricity Board, Bhubaneswar, Odisha. Out of the total electricity requirement, 240.64 KW will be required for common area and street lighting. There will be electrical distribution transformers within the project site. DG Set rating of 2 no. 500 KVA and 1 no. 380 KVA has been proposed for the hotel building to provide supply considering the critical loads for each application.

14. **Solar power**: The solar power provided is for 33.66 KW of the total demand load which comes around 3.0% of the total demand. The required number of solar panels is 157 nos. The solar load will be augmented as per demand during the operational phase of the project.

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Environmental Scientist, SEAC

15. **Parking details**: The hotel building has proposed ample provision for car/ vehicle parking at the proposed project site and as approved by Bhubaneswar Development Authority. Provisions for scooter parking is also taken into account in addition to covered parking & open parking. Total Parking area proposed is 8611.65 sqm/270 ECS i.e. 40% of Proposed F.A.R.

16. **Greenbelt**: Total green area measures 4469.0 m^2 which is 36.81 % of the total plot area. Total no. of trees proposed in the project is 152 nos. Evergreen tall and ornamental trees have been proposed to be planted of the local species like Cadamba, Cassia, Jacranda, Bauhina, inside the premises.

17. **Project cost**: Total cost estimate for the proposed project is Rs. 121 crores and Environmental management cost will be 82 Lakhs.

18. **Environment Consultant:** The proponent along with the consultant **M/s P and M Solution, Noida,** made a detailed presentation before the SEAC on 13.01.2023.

19. The SEAC in its meeting held on dated 13-01-2023 decided to take decision on the proposal after receipt of the following from the proponent followed by site visit by the sub-committee of SEAC:

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

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
1.	Certificate from concerned DFO that project land does not fall within Eco-Sensitive Zone of Chandaka - Dampara and Nandankanan Sanctuary.	The NOC letter from DFO, Chandaka – Damapara and Nandankanan has attached for your reference as **Annexure – I.**
2.	Copy of letter of GA Department about clarification that no involvement of forest land in the project area.	Copy of letter of GA department has attached for your reference as **Annexure – II.**
3.	Traffic study report vetted by a reputed institution.	Traffic study report vetted by KIIT university has attached for your reference as **Annexure –III.**
4.	Copy of lease deed/land ownership.	Lease deed copy has attached for your reference as **Annexure – IV.**
5.	Detailed calculation for parking area.	Detailed calculation regarding parking area has attached for your reference as **Annexure – V.**
6.	Status of amendment of all statutory clearances from concerned departments, as per the revised built-up area.	We have intimated to the concerned authorities about amendment of revised built-up area and the same will submit near you after getting NOC from the departments.
7.	Justification with supporting documents that EC granted earlier is valid now.	Application regarding validity of EC has attached for your reference as **Annexure - VI**
8.	Status of permission from BMC for discharge of treated water to drain.	Permission from BMC for discharging of treated water to drain has applied near the authority. We will submit near you after getting the same. Kindly consider it.

21. The proposed site was visited by the sub-committee of SEAC on **24.03.2023.** Following are the observations of the sub-committee

a) PP and Consultant were present. No construction initiated at the project site but dip soil excavation was done to which the PP explained that it was done on getting previous EC.

b) Drain is available in front of the land at road side. But permission needs to be obtained.

c) No trees planted; thus, green belt development is necessary as per norm.

d) **The important point is, the layout of land physically shown and the layout presented are completely different. There is no boundary at one side, so demarcation is yet to be done. PP said the there is some encroachment by slum people. In view of this, it was informed to PP to submit the following two documents:**

i)Land layout with dimensions and area certified by GA department with allotment document.

ii)BDA letter that the building plan is approved on the same layout certified by GA department.

e) All documents asked during presentation to be submitted.

22. The SEAC in its meeting held on dated **18-08-2023** decided to take decision on the proposal after receipt of the following information / documents from the proponent as desired by the Sub-Committee of SEAC during site visit. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Land layout with dimensions and area certified by GA department with allotment document.	The GA department allotment document for the proposed land layout with dimension has been attached for your reference as **Annexure-I.**	Copy submitted
2.	BDA letter that the building plan is approved on the same layout certified by GA department.	Copy of Clarification letter regarding the approval of Building plan has been attached for your reference as **Annexure –II.**	Copy submitted

Considering the information furnished and the presentation made by the consultant, **M/s P and M Solution, Noida,** along with the project proponent, the SEAC recommended for grant of modified Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – E** in addition to the following specific conditions for proposed 2B + G +7 Multistoried Hotel building over a built-up area 22999.81 sqm.

i) "Khatian" (Patta after Mutation) for the entire land from the appropriate Revenue Authority with 'Kisam' as Gharabari shall be obtained along with ownership before which construction work shall not start. **The Proponent before implementation of the project shall convert the land to Gharabari and shall take the ownership of the land if not already taken.**

ii) **The Proponent shall obtain permission from the appropriate authority for discharge of excess treated water if any to the nearest existing drain. 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. For construction of drain, the land shall be made encroachment free by the appropriate authority and drain shall be constructed thereafter with required permission including permission to discharge treated water.

iii) The proponent shall use solar energy of 5% as proposed with installation of PV cell of required capacity.

iv) To reduce discharge of treated water to open drain, the proponent shall use more water for increased number of trees proposed to be planted in the green belt area & shall also utilize this treated water for car washing, floor washing to minimize the surplus discharge to drain.

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

vi) From the ADS the ownership of 2 names (Kirti Ch Mohanty and Shivam Asthani) are appearing in different documents (GA and BDA). Thus, BDA before final approval to ensure the ownership of the land and its physical dimensions.

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

ITEM NO. 07

PROPOSAL FOR AMENDMENT OF ENVIRONMENTAL CLEARANCE OF M/S ASTROZ CREATORS PVT. LTD. FOR RESIDENTIAL BUILDING PROJECT (S+5) STORIED AT MOUZA-SATYABHAMAPUR, TAHASIL- BALIANTA, DIST- KHORDHA, ODISHA OF SRI SANJAY KUMAR MOHARANA – MOD EC.

1. This proposal is for amendment of Environmental Clearance of M/s Astroz Creators Pvt. Ltd. for Residential Building Project (S+5) storied at Mouza- Satyabhamapur, Tahasil- Balianta, Dist- Khordha, Odisha of Sri Sanjay Kumar Moharana.
2. **Category**: This project falls under Category "B", Project or Activity 8(a) Building and Construction projects as per EIA Notification dated 14th Sep, 2006 as its amendments.
3. **Project details**: M/s Astroz Creators Pvt. Ltd. had earlier applied for Environmental Clearance (File No.- 213302/38-MIS/05-2021) for the proposed residential building with B+G+4 storied with built up area of 22250.248 sqm. Environmental Clearance had been granted by SEIAA to the proposed residential building then through EC Identification No.-EC22B038OR127553 dated 06.04.2022 for a period of 7 (Seven) years. Now, the commercial area of the proposed project is being changed for residential purpose. The built-up area of the residential building has been revised from 22250.248 sqm to 24390.045 sqm and the configuration of the proposed building has been changed to S+5 storied (2 blocks).
4. Approval from BDA has been taken vide Letter No- BNB/NOC/2023/010,Dt. 20/04/2023
5. **Location and Connectivity:** The proposed project is located at Plot No-612, 557, 556, Khata No - 277/94 & 277/191 in Mouza- Satyabhamapur, Tahasil- Balianta District – Khordha, Odisha bounded by Latitude 20°14' 45.08" N and Longitude 85° 53' 30.17" E. The Project Site is a part of the Survey of India Toposheet No. F45T15. The geographical co-ordinates of project site are

Latitude 20° 14' 43.28" N to 20° 14' 46.84" N and Longitude 85° 53' 29.11" E to 85° 53' 32.24" E. The project site is located at a distance of 0.04 km from mouza Satyabhamapur and 7.1 km from tahasil Balianta. Khordha District is at a distance of 29.0 Km. NH-316 is at a distance of 3.5 km. Baichuan Road is at a distance of 0.07 km. Bhubaneswar town is located at a distance of 9.0 km. Biju Patnaik Airport is at a distance of 7.8 km. Bhubaneswar Railway station is at a distance of 5.6 km. Bhubaneswar Fire Station is located at a distance of 5.5 km and Bhubaneswar govt. hospital is located at a distance of 7.4 km from the project site.

6. **Project Area Details:**

S. No	Details of Land Use	Area in Sqm
a)	Plot Area	8052.12
b)	Net Site Area	7765.33
c)	Total Proposed FAR Area	18650.31
d)	Total Proposed Non-FAR Area	5739.735
e)	Total Built-up Area	24390.045
f)	Total Green Area	1553.06
g)	Height of the Building	14.75

7. **Environmental Clearance Amendment details:**

S.No.	Details of Residential Building	Previous Configuration (EC granted by SEIAA)	Proposed Configuration
a)	No. of Floors	B+G+4 (Blocks A & B)	S+5 (Blocks A & B)
b)	Built up Area	22250.248 sqm	24390.045 sqm
c)	Building Height	14.75 m	14.75 m
d)	Total Water Requirement	92.0 KLD	137.0 KLD
e)	Fresh Water Requirement	58.0 KLD	81.0 KLD
f)	STP Capacity	85 KLD	130 KLD
g)	STP Technology	MBBR	MBBR
h)	Treated Waste water	65 KLD	96 KLD
i)	Total Green Belt Area	805.0 sqm (10.0%)	1553.06 sqm (20.0%)
j)	Total Parking Area	6007.458 sqm	5724.39 sqm
k)	Recharge pits	23 Nos.	23 nos.

8. **Parking Area:** Parking Required as per BDA is (30% of Proposed F.A.R) 5595.09 sqm. The total parking required for the project is 5595.09 sqm and the total parking area provided is 5724.39 sqm. Visitor's parking provided is 559.50 sqm. Total ECS provided is 181 nos.

9. **Water Requirement/STP:** Total water of 123 KLD will be required for the residential building which will be sourced from Ground Water. Fresh water required is 81 KLD. NOC from CGWA is obtained vide NOC No. CGWA/NOC/INF/ORIG/2021/10631 for 63.0 KLD and NOC for additional water is applied to CGWA. It is expected that the project will generate approx. 107.0 KLD of wastewater. The wastewater will be treated in the STP with MBBR Technology of capacity of 130.0 KLD provided within the plot boundary.

S.NO	REQUIREMENT	QUANTITY (KLD)

1	Domestic Water	81
2	Flushing Water	42
	Total	123

10. **Solid Waste Management:** Total solid waste generation will be 482 Kg/Day. Garbage will be 467.35 Kg/Day in which Biodegradable Waste 280.41 Kg/Day @ 60% will be treated in In-house Organic Waste Convertor and Non-Biodegradable waste 186.94 Kg/Day @ 40% will be Sent to Authorized Vendors as per SWM Rules 2016. Landscape waste will be 0.077 Kg/Day. STP Sludge generation will be 14.98 Kg/day

WASTE SOURCE	DISPOSAL
Garbage – 467.35 Kg/day	▪ Segregation at Source & Disposed properly as per SWM Rules 2016 ▪ Bio-Degradable – 280.41 Kgs/day – Organic Waste Convertor ▪ Non-Bio-Degradable – 186.94 Kgs/day – (Authorized Re-cyclers/vendors)
STP Sludge – 14.98 Kg/day	▪ Which is used as manure
Landscape waste - 0.077	▪ Which is used as manure

11. **Rainwater Harvesting:** Rain Water will be harvested through 7 nos. of Rain Water recharging pits.

Rainwater Harvesting				
Type of Area	Area (in m^2)	Coefficient of run-off	Peak rainfall intensity during one hour of rainfall (in m)	Rain water harvesting potential/hour (in m^3)
Roof-top area	5599.64	0.95	0.140	744.75
Green Area	1553.06	0.10	0.140	21.74
Paved area	899.42	0.80	0.140	100.73
Total storm water load on the site with per hour retention is				867.22
Considering 15 minutes retention time, total storm water load				41.8
Taking the radius as 1.5 m and effective depth as 3.0 m , volume of a RWH pit (π r2h)				216.80
Hence no. of pits required in approx = Total storm water load considering 15 minutes retention time / Volume of a RWH pit				23 nos

12. **Power Requirement:** The total consolidated electrical load estimate for proposed project is about 595.63 KW which will be sourced from TPCODL. Power backup in case of grid failure will be by 1 nos. of DG set of 250 KVA.

13. **Renewable energy / Solar Power Generation:** Solar power generation is 32 KW (5.4%) with PV solar panels. This will be utilized for solar assisted water heating system.

Description	Energy Required (KW)	Energy Saved (KW)	Energy Saved (KW) in %
Compact Fluorescent Lamp(CFL)	152	152	35.7
Light Emitting Diodes (LED)	78		
Conventional Street Lights	3.12	2.88	
Solar Street Light	2.88		
Electrical Water Heaters	198	58	
Solar Water Heaters	87		
Other Energy Requirements	74.63	-	
Total Energy Requirement in Project	595.63	212.88	

14. **Green Belt Development:** Green belt will be developed over an area of 1553.06 Sqm (20.00%) of the plot area; by planting 100 nos. of the local species like Eucalyptus, Mango, Neem, Daffodils, Night Blooming Jasmine.

15. **Firefighting Arrangements:** The height of the building is upto 14.75 mts. Firefighting system will be installed as per recommendation of Odisha Fire Service Department and as per the guideline of NBC. NOC for the same is applied to and is in process.

16. **Traffic Study:** Traffic Composition after development of the project will be very good. Traffic study report was prepared by School of Civil Engineering, KIIT Deemed to be University, Bhubaneswar.

17. **Project cost**: The project cost is estimated to be Rs. 48 crores and there is a budgetary provision of Rs.48 Lakhs as capital cost and Rs.10 Lakhs as recurring during operational phase towards environmental protection measures.

S.No	Activity	Capacity /Area/Nos.	Capital Cost (Lakhs)	Recurring Cost (Lakhs)
1	STP	130 KLD	30.0	5.0
2	Landscaping & Planting trees	100.0	3.0	1.0
3	Solid waste Management	482 Kg/Day	5.0	1.5
4	RWH Pit Installation	23.0	5.0	1.0
5	Environmental Monitoring*	Air, Water, Soil & Noise	5.0	2.0
	Total		48.0	10.0

18. The Environment consultant **M/s Right source Industrial Solutions Pvt. Ltd., Hyderabad** along with the proponent made a presentation on the proposal before the Committee.

19. The SEAC in its meeting held on dated 07-07-2023 recommended the following:

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

a) Previous EC conditions compliance certificate from Regional Office, MoEF&CC, Govt. of India.

b) NOC/permission from concerned authority for drainage to discharge treated water to public drain.

c) Ensure that the differences between the reduced level of bottom of rainwater harvesting pits and the reduced level of ground water during rainy season are adequate for effective discharge of collected rainwater and submit the report along with correct total no. of rainwater harvesting pits.

d) Comparative statements of all the physical and environmental parameters in tabular form of both previous project for which EC obtained and proposed modification for which EC applied.

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

i) Environmental settings of the project site.

ii) To ensure how much construction activities has been completed.

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) Any other issues including local issues.

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

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Previous EC conditions compliance certificate from Regional Office, MoEF&CC, Govt. of India.	Till now, we have not started any work or activity in the proposed area. The previous EC condition compliance has been attached for your reference as **Annexure-I**.	Previous EC conditions compliance certificate from Regional Office, MoEF&CC, Govt. of India has not submitted.
2.	NOC/permission from concerned authority for drainage to discharge treated water to public drain.	Permission for discharge of treated water to the drain has applied near the authority has been attached for your reference as **Annexure-II**.	Permission for discharge of treated water to the drain has been applied by PP copy of it has been submitted.
3.	Ensure that the differences between the reduced level of bottom of rainwater harvesting pits and the reduced level of ground water during rainy season are adequate for	The ground water level of RWH pit of rainy season and non-rainy season has been attached for your reference as **Annexure-III**.	The reduced level of bottom of rainwater harvesting pits is 2.4 meters and

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	effective discharge of collected rainwater and submit the report along with correct total no. of rainwater harvesting pits.		reduced level of groundwater table during rainy Season as 3.5 meter and summer season recorded as 5.0 meters. Capacity of Recharge pit is 12.97 Cubic Meters.
4.	Comparative statements of all the physical and environmental parameters in tabular form of both previous project for which EC obtained and proposed modification for which EC applied.	Comparative statements of all the physical and environmental parameters in tabular form of both previous project proposed modification has been attached for your reference as **Annexure-IV**.	Submitted

21. The proposed site was visited by the sub-committee of SEAC on **21.09.2023.** Following are the observations of the sub-committee

    a) PP was present along with other team members. It was observed that the site is adjacent to the road which is connected to Puri-Bhubaneswar bypass road.
    b) The site was clean excepting a small outhouse, which PP informed is temporary for worker and will be demolished once construction is over.
    c) The road side has no drain at present. The PP informed to connect the excess treated water to the nearest Nalla (about 500 mts away) for which they have to take necessary Permission from the concerned authority. PP has informed us they have already applied to Drainage wing of Water Resource Department to obtain the permission. Hence, PP is advised to submit the relevant documents.
    d) The party is advised to submit the detail lay out plan for internal drainage system and discharge of drainage point.
    e) No trees are there, so green belt of minimum 20% to be developed.
    f) The traffic study vetted by a reputed institute is to be submitted.
    g) Documents asked during presentation needs to be submitted.

22. The project proponent has furnished drainage map till 500meters has been submitted with due application by the PP, to Chief Engineer, Drainage, Cuttack.

Considering the information furnished and the presentation made by the consultant, **M/s Right source Industrial Solutions Pvt. Ltd., Hyderabad,** along with the project proponent, the SEAC recommended for grant of modified Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – F** in addition to the following specific conditions for Residential Building Project (S+5) storied over a built-up area 24390.045sqm.

a) "Khatian" (Patta after Mutation) for the entire land from the appropriate Revenue Authority with 'Kisam' as Gharabari shall be obtained along with ownership before which construction

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

b) **The Proponent shall obtain permission from the appropriate authority for discharge of excess treated water if any to the nearest existing drain. 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. For construction of drain, the land shall be made encroachment free by the appropriate authority and drain shall be constructed thereafter with required permission including permission to discharge treated water.**

c) **NOC/Permission for additional water requirement for 18KLD shall be taken from CGWA. Permission for ground water usage shall be taken from Water Resources Department, Odisha.**

d) The proponent shall use solar energy of 5% as proposed with installation of PV cell of required capacity.

e) To reduce discharge of treated water to open drain, the proponent shall use more water for increased number of trees proposed to be planted in the green belt area & shall also utilize this treated water for car washing, floor washing to minimize the surplus discharge to drain.

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

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

MEMBER SECRETARY, SEAC

ANNEXURE- A

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

Stipulated Conditions:

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

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of minerals through existing rural roads can be allowed only by the concerned Govt. Department/BDO and only after required strengthening, such that the carrying capacity of road is increased to handle the sand truck traffic. The project proponent shall bear the cost towards the widening and strengthening of existing public roads in case the same is proposed to be used for the project. No movement on any road is allowed on existing village road network without appropriately increasing the carrying capacity of such roads. Project proponent shall ensure that the road may not be damaged due to transportation of the mineral and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and traffic density. Plying of sand extraction trucks may be allowed on roads / path ways passing close to schools, temples, hospitals and such other public places only with prior written permission of competent authority.

10. Vehicles hired for transportation of sand from the site should be in good condition and should have pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

11. The vehicles shall not be overloaded and shall be covered with Tarpaulin. The Tahasildar may collect an appropriate road maintenance levy from the lessee as part of the lease conditions on the basis of quantum of sand transported, and utilize the proceeds of the levy for proper maintenance of the extraction paths and roads to prevent their degradation on account of plying of sand trucks.

12. The project proponent shall take all precautionary measures against causing damage to flora and fauna of the locality. The PP shall plant and nurse to full establishment a minimum of 50 number of saplings of native tree species along the approach roads, river banks and in community areas in consultation with the Gram Panchayat.

13. Water spray should be made on the road/extraction paths to control dust emission during transportation of sand.

14. The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.

15. Environmental Management Plan (EMP) shall be implemented by PP to ensure compliance with the environmental conditions specified above. The year wise funds earmarked for environmental protection measures shall be kept in separate account and shall be spent according to the plan proposed. Year wise progress of implementation of EMP shall be reported to the SEIAA, Odisha and OSPCB along with the compliance report.

16. The proponent shall take necessary measures to ensure that there is no adverse impact of the mining operations on the human habitation if any, existing nearby.

17. It shall be mandatory for the project management to submit quarterly compliance reports on the status of implementation of the above stipulated environmental safeguards to the SEIAA, Odisha / SPCB, Odisha/ Regional Office of the MoEF&CC, Bhubaneswar, in hard and soft copies on 1st day of January, April, July, October of each calendar year, failing which EC is liable to be revoked.

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18. River Bank stabilization shall be made through stone patching. Plantation of adequate number native species on river banks and both sides of haulage roads shall be made.

19. During transportation of sand, all traffic safety measures shall be taken to avoid any kind of accidents.

20. Bio - toilet provision shall be made.

21. Stone patching on river bank with plantation in-between and the ramp construction shall be done in consultation with and advice of concerned W.R.Deptt, Government of Odisha.

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

23. At the end of mine closure, the proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area before closure of the quarry.

24. The conditions stipulated in the environmental clearance will be closely monitored on the ground by the lease granting authority, i.e. the Tahasildar, who shall ensure compliance of the stipulated conditions and take corrective measures promptly in case of any non- compliance and also ensure that the project proponent submits quarterly compliance reports.

25. The concerned Regional Office of the MoEF&CC/ SPCB, Odisha shall periodically monitor compliance of the stipulated conditions as applicable for this project. The project authorities should extend full cooperation to the MoEF&CC officer(s)/SPCB officer(s) by furnishing the requisite data / information / monitoring reports.

26. A copy of the clearance letter shall be sent by the proponent to concerned Gram Panchayat /Panchayat Samiti /Zilla Parisad /Municipal Corporation / Urban Local Body as the case may be.

27. Project proponent shall obtain Consent to Operate from the OSPCB and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the State Pollution Control Board.

28. The SEIAA, Odisha may revoke or suspend this EC, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter /modify the above conditions or stipulate any further condition in the interest of environment protection.

29. The Project Proponent (lease holder) shall inform the SEIAA of any change in ownership of the mining lease. In case, there is any change in ownership or mining lease is transferred, then mining operation can be carried out only after transfer of EC as per provisions of the para 11 of EIA Notification, 2006, as amended from time to time.

30. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this environment clearance besides attracting penal provisions in the Environment (Protection) Act, 1986.

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31. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act,1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court and any other Court of Law relating to the subject matter.

32. This Environmental Clearance (EC) is subject to orders/judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.

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

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Annexure - B

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

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

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ANNEXURE -C

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

A. Specific conditions

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

B. Standard conditions

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

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

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

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

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

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

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

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

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

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

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parameters and allows only species adopted to that micro climate.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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5.5. HAZARDS AND RISK MANAGEMENT

5.5.1 Explosives

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

5.5.1.1. Storage and Handling

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

5.5.1.2. Blasting

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

5.5.1.3. Drilling

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

5.5.2. Loading

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

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

5.5.3. Transportation

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

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

5.5.4. Unstable face

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

5.5.5. General safety measures

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

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

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

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

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S SWAMI RESORTS PVT. LTD FOR PROPOSED MULTISTORIED HOTEL BUILDING 2B+G+7 WITHIN A PLOT AREA OF 12140.55 SQM AND BUILT-UP AREA OF 22999.81 SQM AT MOUZA – JAYDEV VIHAR, BHUBANESWAR, KHORDA OF SRI SHIVAM ASTHANA - MOD EC

PART A - SPECIFIC CONDITIONS:

1. Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of 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 117 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

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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 33 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

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

SEWAGE TREATMENT PLANT

24. Sewage shall be treated in STP of capacity 150 KLD. The treated effluent from STP shall be reused for flushing, 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.

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

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

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

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

AIR QUALITY AND NOISE

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

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

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

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

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

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

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed approx. 4469.0 m^2 (i.e. 36.81 % of the total plot area) shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

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

TRANSPORT

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

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

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

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

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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

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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

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

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

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

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CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF M/S ASTROZ CREATORS PVT. LTD. FOR RESIDENTIAL BUILDING PROJECT (S+5) STORIED AT MOUZA- SATYABHAMAPUR, TAHASIL- BALIANTA, DIST- KHORDHA, ODISHA OF SRI SANJAY KUMAR MOHARANA - MOD EC

PART A - SPECIFIC CONDITIONS:

1. Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of 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 81 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

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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 23 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

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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 130 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.

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

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

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

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

AIR QUALITY AND NOISE

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

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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.

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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.
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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

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

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