

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL  
COMMITTEE, ODISHA HELD ON 1<sup>ST</sup> SEPTEMBER 2023**

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The SEAC met on 1<sup>st</sup> September 2023 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri Sashi Paul. The following members were present in the meeting.

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

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

**ITEM NO. 01**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S MISRILALL MINES PRIVATE LIMITED FOR ESTABLISHMENT OF 30 TPH CAPACITY CHROME ORE BENEFICIATION PLANT HAVING THROUGHPUT OF 198000 TPA AND ANNUAL CHROME CONCENTRATE PRODUCTION OF 97000TPA BASED ON AVERAGE GRADE 30% CR<sub>2</sub>O<sub>3</sub>, AT: PANKAPAL, VILLAGE: NIMAPALI, TAHASIL: SUKINDA, DISTRICT: JAJPUR OF SRI UJJWAL KUMAR SINHA - EC**

1. This proposal is for Environmental Clearance of M/s Misrilall Mines Private Limited for establishment of 30 TPH capacity Chrome Ore Beneficiation Plant having throughput of 198000 TPA and annual Chrome Concentrate production of 97000TPA based on average grade 30% Cr<sub>2</sub>O<sub>3</sub>, At : Pankapal, Village : Nimapali , Tahasil: Sukinda , District: Jajpur of Sri Ujjwal Kumar Sinha.
2. **Category:** The project falls under category "B" or activity 2 (b) - Mineral Beneficiation projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. **TOR details:** Terms of Reference Letter issued by SEIAA, Odisha vide letter no:- 5081/SEIAA with File no.- SIA/OR/MIN/72028/2022 dated 02.08.2022.
4. **Public hearing details:** The Public hearing was held on the scheduled date i.e. 28th Feb 2023 near JCDL Campus near JCD-NIMZ, Pankapal, Kalinga Nagar under Sukinda Tahasil of Jajpur District, Odisha. Issues raised during the public hearing area employment, peripheral development, plantation, ground water depletion and environmental pollution. Total budget incurred for the action plan of public hearing is 13.15 lakhs.

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5. List of Statutory Clearances obtained earlier -

- a) Total Land of 2.22 Acres already acquired with patta.
- b) NOC from CGWA: CGWA/NOC/IND/ORIG/2022/16552 on dated 26/09/2022
- c) Obtained Non availability of surface water certified by state public Health Department.
- d) Obtained Letter from DFO to PCCF for diversion of forest area about 0.9 Ha. for proposed COB Plant vide letter no. 3767/5F on dated 06.05.2023.
- e) Obtained letter from Forest Range Officer (Tomka Range) vide letter no: 761 on dated 02/06/2023 regarding absence of schedule-1 species of wild animal in and around the lease hold area.

6. **Location and Connectivity** – The proposed project will be established near the Ferro Chrome Plant of M/s. Misrilal Mines Pvt. Ltd. at village Pankapal, PS- Kalinga Nagar, Tehsil - Sukinda in Jajpur district of Odisha State. The geo coordinates of the project are Latitude 20° 55'10.88" N and Longitude 86° 00' 45.90" E. The contour varies from 35.8 to 42.4 m MSL and the project falls under Survey of India bearing Topo sheet no. 73L/1, H/13,G/16 & K/4. The requirement of land for the proposed project is 0.9 Ha. It is owned by the Project proponent having Sabik Plot No. 1498/3243. It is a patta land having kissam as non-forest (Pathara Khani) as per HAL and as per Sabik comparison, the proposed plot no. 1498/3243 is comes under jungle kisam. Nearest Railway Station is Jajpur Road Railway Station at a distance of 12 Kms from the Project site. Nearest Airport is Biju Pattnaik International Airport at 150kms. Nearest Major Habitation is Jhakhapura village. Nearest NH/ Highway is NH – 53. Nearest RF/PF is Dangadi Protected Forest (Open Mixed Jungle) at 8.27 Km, Sunajhara PF – Badasila (Open Mixed Jungle) at 5.31 Km and Barhagaria (Open Jungle) at 7.53Km. Nearest rivers are - Brahmani River at 3.39 km, Pandara Nadi at 5.53 km and Ganda Nadi at 8.30 km. The area falls in Seismic Zone – III which is under Moderate Damage Risk Zone.

7. **Baseline study conducted:** Baseline study was conducted within the period of March to May 2022.

**Summary of Ambient Air monitoring: -**

- a) **Particulate matter (PM<sub>10</sub>):** The maximum value for PM was 91.8 µg/m<sup>3</sup> observed at AAQ-8. The reason for high value may be due to presence of Bus stop and industrial area. The minimum value was 41.6 µg/m<sup>3</sup> observed at AAQ-5 as there is no major activity nearby. The average value ranged from 80.7 µg/m<sup>3</sup> to 43.7 µg /m<sup>3</sup>. 98<sup>th</sup> Percentile value ranged from 45.6 µg/m<sup>3</sup> to 91.8 µg/m<sup>3</sup>.
- b) **Particulate Matter (PM<sub>2.5</sub>):** The maximum value observed was 55.1µg/m<sup>3</sup> at AAQ-8. Reason for the high value may be due to presence of bus stop and commercial area. Minimum value observed was 25 µg/m<sup>3</sup> at AAQ-5. Average value ranged 26.2 µg/m<sup>3</sup> to 38.77 µg/m<sup>3</sup>. 98<sup>th</sup> percentile ranged from 27.4 µg/m<sup>3</sup> to 55.1 µg/m<sup>3</sup>.
- c) **Sulfur dioxide (SO<sub>2</sub>):** The maximum value observed was 15.6 µg/m<sup>3</sup> at AAQ- 6 whereas minimum value of 4.1 µg/m<sup>3</sup> was observed at AAQ-5. The limits were well within the NAAQs

standards. Average value ranged from 4.8  $\mu\text{g}/\text{m}^3$  to 8.11  $\mu\text{g}/\text{m}^3$ . 98<sup>th</sup> Percentile value ranged from 5.6  $\mu\text{g}/\text{m}^3$  to 15.6  $\mu\text{g}/\text{m}^3$ .

- d) **Oxides of Nitrogen (NO<sub>x</sub>):** The maximum value observed was at 25.8  $\mu\text{g}/\text{m}^3$  at AAQ-6 and the minimum value of 8.1  $\mu\text{g}/\text{m}^3$  was observed at AAQ-5. The limits were well within the NAAQs standards. Average value ranged from 9.2  $\mu\text{g}/\text{m}^3$  to 13.78  $\mu\text{g}/\text{m}^3$ . 98<sup>th</sup> percentile ranged from 10.8  $\mu\text{g}/\text{m}^3$  to 25.8  $\mu\text{g}/\text{m}^3$ .
- e) **Carbon Monoxide (CO):** The maximum value of 0.88  $\text{mg}/\text{m}^3$  observed at AAQ-6. The minimum value of 0.11  $\text{mg}/\text{m}^3$  was observed at AAQ-4. Average value ranged from 0.13  $\text{mg}/\text{m}^3$  to 0.32  $\text{mg}/\text{m}^3$ . 98<sup>th</sup> Percentile value ranged from 0.16  $\text{mg}/\text{m}^3$  to 0.88  $\text{mg}/\text{m}^3$ .
- f) **Ambient Noise:** The summary of the Ambient Noise Monitoring Result shows the Noise level within the permissible limits for all the locations. Ambient noise ranges from 43.6 dB(A) to 69.9 dB(A) during day time and 33.8 to 64.8 dB(A) during night time.
- g) **Surface Water:** The surface water quality parameters were analyzed at eight locations for three months i.e. from March 2022 to May 2022. The pH value ranged from 7.33 to 7.81, TDS value ranged from 144 to 612. Colour ranges < 5 Hazen to 10 Hazen. Electrical conductivity value is confined between 184  $\mu\text{S}/\text{cm}$  to 1511  $\mu\text{S}/\text{cm}$ . Dissolved oxygen ranging from 6.1 to 7.4  $\text{mg}/\text{l}$ . Highest turbidity value is 8.1 NTU and lowest is 4.1 NTU. Chloride content - Highest value is 408.8  $\text{mg}/\text{l}$  and lowest is 8.8  $\text{mg}/\text{l}$ . The TDS value 612.2  $\text{mg}/\text{l}$  to 144  $\text{mg}/\text{l}$ . Oil and grease levels 0.51  $\text{mg}/\text{l}$  to lowest 0.084  $\text{mg}/\text{l}$ . Biological Oxygen Demand (BOD) is within the permissible limits in and varies between 1.8  $\text{mg}/\text{l}$  (SW-1) to 2.6  $\text{mg}/\text{l}$  (SW-8). Chemical Oxygen Demand (COD) varies from 9.6  $\text{mg}/\text{l}$  to 16.4  $\text{mg}/\text{l}$ . All heavy metals like Arsenic, Lead, etc. are below detectable levels. Quality wise surface water is fit for regular use but for drinking purpose it needs to be treated.
- h) **Ground water:** The odour and taste at all the locations are agreeable. The maximum turbidity being 3.2 NTU and minimum turbidity is 1.2 NTU. The pH value varies from 6.68 to 7.6. The Iron content is high 0.295  $\text{mg}/\text{l}$  & minimum is 0.028  $\text{mg}/\text{l}$ . Total hardness ranges from 108  $\text{mg}/\text{l}$  to 130  $\text{mg}/\text{l}$ . Chloride content ranges from 10  $\text{mg}/\text{l}$  to 44  $\text{mg}/\text{l}$ . TDS ranges from 2269  $\text{mg}/\text{l}$  to 248  $\text{mg}/\text{l}$ . Heavy metals such as Lead, Arsenic etc. is below BDL at all the locations. These values shows that ground water is safe for domestic purpose in surroundings of the project area, but for safer side it is recommended to treat the water before drinking use.
- i) **Soil Environment:** The color of the soil in the study region is mainly of red and reddish brown with acidic type. The pH value ranges were from 6.24 to 6.84. The region has soil texture of sandy loamy type which indicated that sand content of the soil is higher and dominant of other components of the soil. Conductivity ranges from 132.9  $\mu\text{S}/\text{cm}$  to 192.6  $\mu\text{S}/\text{cm}$ . At the project location the soil is Sandy Loam and at all the other monitoring locations the soil is sandy loam. Porosity of the soil at all locations is observed to be in between 50%- 58%. Moisture content is found to be in between 5.2% to 8.6 %. Chloride ranges from 124  $\text{mg}/\text{kg}$  to 166  $\text{mg}/\text{kg}$ . Total potassium ranges from 416.2  $\text{mg}/\text{kg}$  to 489.2  $\text{mg}/\text{kg}$ . Nitrogen content varies from 124.8  $\text{mg}/\text{kg}$  to 274.8  $\text{mg}/\text{kg}$ . Organic carbon varies from 0.66 % to 0.91 %.
- j) **Ground Water Level in the Buffer Zone:** The pre-monsoon depth of water level in the study area varies from 4.46 mbgl at Jenapur to a maximum of 9.47 mbgl at Hatibari with the average

of around 6.59 mbgl. The post-monsoon depth of water level in the study area varies from 1.41 mbgl at Duburi to a maximum of 3.63 mbgl at Danagadi with the average of around 2.55 mbgl. The seasonal fluctuation of depth to water level ranges from 2.87 m at Jenapur to a maximum of 6.94 m at Ambasar with an average of around 4.04 m. The entire area shows a rising trend.

8. **Raw material requirement:** The basic raw material is Low grade Chrome Ore which will be sourced from Odisha Mining Corporation (for which we have obtained necessary registration from OMC) and also from other mining resources from India and abroad. The raw material required for the project is low grade chrome ore having chromium content ranging from 20 to 40 % Cr<sub>2</sub>O<sub>3</sub>.
9. **Process description:** The Plant is based on gravity separation process with a feeding capacity 30 TPH comprises of feed Hopper, Reciprocating feeder, Primary Jaw Crusher and Hammer Crusher , Grinding Unit like Rodmill , conveyors, single deck Wet screening unit, and processing unit consist of slurry pumps, water pumps, stub cone and long cone hydro cyclones, dewatering cone, Fluidised Bed Concentrator (FBC), Rougher spirals, Cleaner Spirals, Tailings Scavenger Spirals and Tailings Cleaner Spirals, Shaking Table( Tripple deck) stock piling areas, Ground water reservoir, Zero discharge Tailings Pond .
10. **Standard procedure:** Chemical dosing system will be there near the 1st settling tank and dosing done according to requirement at tank No-1. The water of the COB process and tailing may hazardous in nature due to the presence of chromium. If hexavalent Chromium factor arises, then it is to be neutralized by adding a ferrous sulfate solution to the process to detoxify hexavalent chromium and convert into trivalent chromium which is not harmful. Ferrous iron added for reduction of hexavalent chromium is being oxidized to ferric iron and subsequently precipitated as Ferric Hydroxide. Polyelectrolyte is added to enhance settling of the precipitate and suspended solids.
11. **Total water requirement and waste water management:** About 90 KL/day of water will be required for the process as make up water which will be drawn from Ground water. Water requirement of the process (Make up water) will be 80 KLD, Dust suppression and other necessary work 5 KLD, and about 5KLD will be used for drinking water. The company obtained necessary approval from Central Ground Water Board to draw 95 KLD Water.

SI.	PARTICULARS	QUANTITY	SOURCE
i)	Process Water Requirement (Make Up Water)	80 KLD	Ground water
ii)	Dust suppression and other necessary work	5 KLD	Ground water/treated water
iii)	Drinking Water	5 KLD	Ground water

12. **Power Requirement and solar power details:** The proposed Chrome Ore Beneficiation Plant requires a contract demand of 500 KVA. The existing Ferro chrome plant has a dedicated 132KV Double Circuit line from Old Duburi Substation from an Independent Bay. Power can be obtained from the Ferro Chrome plant substation with necessary statutory permission.
13. **Rain water harvesting details:** The total runoff available from Rooftop will be around 3529 cum/annum, which can be stored in the reservoir pit in the industry premises, and runoff available

from road & Paved area will be approx. 3176 cum/annum which will be used to recharge the ground water via recharge pit after treatment.

Location	Area in Sq.m	Rainfall annum (m)	per Runoff coefficient	Total Harvestable quantity (Cu.m)/ Annum	
Corrugated Roof	2385	1.557	0.9	3342.101	3529
Roof top	150	1.557	0.8	186.84	
Paved area and Road	2040	1.557	0.6	1905.768	3727
other areas	1425	1.557	0.4	887.49	
Green area	3000	1.557	0.2	934.2	
<b>Total</b>	<b>9000</b>				

14. **Greenbelt Development:** Green belt area provided more than 33% of the total plot area (3000 sqm)

The PP initiated the plantation program along the boundary, near the material storage area and office building. About 50 saplings of Teak, Chakunda, Neem, Simarouba, Hibiscus, Nerium etc.			
<b>PROPOSED GREEN BELT PLAN</b>			
Location	Area Under Plantation	No. of saplings Planted	Species Proposed
Green Belt around the plant boundary	3000 SQM (9m width)	750	<i>Dalbergia sisoo, Cassia siamea, Gmelia arborea, Tectona grandis, Alstonia scholaris, Azadirachta indica, Bamboo sps, Mangifera indica, Phyllanthus emblica, Punica granatum, Psidium guajva, Mimosops elengii, Hibiscus rosa sinensis, Nerium oliander</i>
Open space plantation		20	<i>Cassia siamea, Tecoma sps, Hibiscus sps, Nerium sps, Nyctanthes etc.</i>
Plantation along the internal Road		15	<i>Dalbergia sisoo, Cassia siamea, Gmelia arborea, Acacia sps, Tectona grandis, Alstonia scholaris</i>
Near COB plant		35	<i>Mimosops elengii, Alstonia scholaris, Cassia siamea, Gmelia arborea</i>
<b>Total</b>	<b>3000</b>	<b>820</b>	
<b>The proposed Green belt will be developed within 2 years of the plant operation</b>			

15. **Solid waste generation and management:** The solid waste generated will be in form of Tailings mud. The quantity of Tailings will be 1,01,000 TPA. Dry cake of COIBP tailing will be utilised to fill up low lying areas of Ferro chrome plant area, subjected the said materials do not contain any toxic materials. Some studies are in pipeline to have commercial use of tailings. Till then, they will be handed over to Ramkey for preservation/disposal of the same. They have registered in Ramkey, since long for such disposal of Hazardous wastes. Other solid wastes like waste

cottons, empty bags, rejected gaskets, empty bottles, band jerry canes, steel structures and rejected spares of process equipment etc., generated may have scarp value and shall be disposed off with price realization to the authorized vendors. Used oil will be disposed to authorized reprocessing units having valid authorization from Odisha State Pollution Control Board.

16. **Manpower requirement:** The Plant would operate for about 330 days in a year. The estimated requirement of employment is about 50 employees (direct and indirect) to operate the plant

17. **Project Cost:** The Project cost of the proposed project is Rs. 560 lakhs and EMP cost is Rs.60.00 lakhs (Capital cost) and Rs.12 lakhs (Recurring cost).

SL. NO.	DETAILS	Cost in Lakhs
1	Land Labeling and Civil Construction	100
2	New Equipment procurement	250
3	Electrical and Automation	100
4	Installation and commissioning	50
5	Environment Management Plan	60
	TOTAL	560

Table: EMP cost

S. NO	HEADS	CAPITAL COST (RS. IN LAKHS)	RECURRING COST PER ANNUM (RS. IN LAKHS)
i)	Air Pollution Control	20.00	
ii)	Water Pollution Control	20.00	
iii)	Environment Monitoring and Management	-	5.00
iv)	Occupational Health	3.00	1.00
v)	Green Belt	2.00	1.00
vi)	Others (House Keeping & Remedial Activities)	5.00	3.00
vii)	Fund allocated for Corporate Environmental Responsibility (CER).	10.00	2.00
	Total	60.00	12.00

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

Considering the information furnished and the presentation made by the consultant, **M/s Visiontek Consultancy Services (P) Ltd., Noida** along with the project proponent, the SEAC decided to take the decision on the proposal after receipt of the following from the proponent:

a) Permission letter from the Water Resources Department for the use of ground water as the water usage is too high i.e., 90 KLD.

- b) The proponent shall not use the dry tailing in land fill. The PP shall carry out a mineralogical analysis of the tailings, determine the solutes for the presence of Hexavalent Chromium and carry out sludge quantification and chromium balance and accordingly, decision to be taken for disposal of tailings to TSDf if applicable. If the proponent will store the dry stacking of tailings, then it should be lined by geotextile membrane along with engineering designs so that leaching won't take place. If the Project Proponent determines to use dry tailings for landfill process, then complete description of the whole process to be submitted. If Project Proponent proposes to handover COB tailings to Ramky, then supporting documents to be submitted.
- c) The proponent shall provide the complete material balance with quantity for Chromium along with its sludge disposal plan for the tailings of COB plant.
- d) The SEAC suggested for separate land acquisition for handling of tailings of COB plant, as currently 0.9Ha. project land will be insufficient for the landfill purpose of tailings.
- e) The proponent shall furnish detailed land use breakup including greenbelt development and other plant facilities, storage of raw material, product and tailings.
- f) The Proponent shall provide Surface Runoff Management/Treatment Plan for the whole plant to collect the runoff in monsoon.
- g) Copy of application along with supporting documents to know the current status of Forest Clearance applied for 0.9Ha.
- h) Include the compliance of the Specific TOR in EIA and submit the revised EIA report.
- i) Traffic study report should be vetted by institute of repute.
- j) Transport vehicles carrying the materials should be properly covered while plying through the transportation routes.
- k) Avoid recharging of rainwater, as it might contain hexavalent Chromium rather than use the rain water collected in plant.
- l) Previously, there was a Beneficiation Plant in the same location. Present status of that beneficiation plant and proposed plan for operation of the existing Beneficiation Plant.
- m) Detailed proposal for Zero Liquid Discharge (ZLD).
- n) Proponent was mentioning about dry storage of tailing which is not the common practice due to associated dusting pollution. Thus, the PP needs to provide current tailing ponds dimensions, its capacity, current status, proposed tailing pond dimension, capacity and management of tailings with Cr+6. All the above to be provided in a layout and if required a visit could be made.
- o) Since tailings containing Cr<sup>+6</sup> is hazardous and sizeable quantities would be generated almost on daily basis, the plan of dry disposal through authorised agency is a not viable option. The PP needs to elaborate in case they still plan to do so and the agency capabilities for such wastes, its management in details to be submitted for further verification if required.
- p) Levels of chromium in the ground water samples collected from the study area for preparation of the EIA/EMP report to be recorded and they will be used as references for monitoring possible ground water contamination during operation phase of the project.

**ITEM NO. 02**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF DEPT. OF FISHERIES (FISHERY ENGINEERING DIVISION) FOR CONSTRUCTION OF STAGE-II DEVELOPMENT OF FISHING HARBOUR AT VILLAGE- NUAGARH, ASTARANGA, DIST: PURI OF SRI ALOK RANJAN PATRA - EC**

1. This proposal is for Environmental Clearance of Dept. of Fisheries (Fishery Engineering Division) for Construction of Stage-II Development of Fishing Harbour at village- Nuagarh, Astaranga, Dist: Puri of Sri Alok Ranjan Patra.
2. **Category:** The project falls under category "B" or activity 7(e) - Ports, Harbours projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. **Project details:** The Phase-I, project site has seen recurrence of natural calamities like floods and cyclones from the beginning of the construction. During August 1991, the river Devi was in floods caused severe damage to the jetty under construction. Later, the harbour suffered severe devastation due to the 1999 super cyclone. So the Department of Fisheries & Government of Odisha has decided to develop for stage-II. The proposed project is for Construction of Stage-II Development of Fishing Harbour at Village- Nuagarh, Astaranga, Puri, Odisha by Department of Fisheries, Odisha of Fishery Engineering Division, Bhubaneswar.
4. **Demarcation of HTL/LTL:** As per the requirements of Coastal Regulation Zone (CRZ) Notification, 2011, project specific HTL/LTL demarcation has been done through approved agencies. The project falls under: C R Z I B (between LTL and HTL), CRZ III (NDZ) (between HTL and 200 m) and CRZ IV B (12 Nautical Miles into the sea from LTL)
5. The total land is under possession of Dept. Of Fishery, Govt. of Odisha. The area is devoid of any forest land & free from encroachments.
6. The Terms of Reference (ToR) was issued vide File No. 4962/SEIAA on dated 28.07.2022 by SEIAA, Odisha.
7. **Other statutory clearances:** The CTE was approved vide letter No. 11265, Dated 18.07.2023. The CRZ clearance was obtained vide letter No. 139/OCZMA, Dated 30.05.2023.
8. **Public hearing details:** The Public Hearing was conducted on 15.03.2023 in the Ground Floor of Marine Police Station Building, Nuagarh, Astaranga, Puri. Issues raised during public hearing are employment, pucca road provision, peripheral development, environmental protection, financial help to the local fisherman, road repairing, protection of Olive ridley turtles etc. Budget incurred for action plan of public hearing is 1688.5 lakhs.
9. **Location and Connectivity** - Total land is 17.690 Acres is over Plot Nos. 863/3283, 852/3291, 860, 859, 849, 850, 858, 868/4110, 863/4111, 864/4112, 851/4113, 868/4114, of Nuagarh Village, Astaranga Tahasil of Puri District, Odisha. The geo co-ordinates are Latitude - 19°58'11.34"N-19°58'30.75"N & Longitude - 86°20'15.32"E- 86°20'32.27"E and is a part of Survey of India Toposheet bearing No. E45C05. The Kissam of land is Nadi, Rasta & Gochar. The project area is well accessed by Road. Puri Railway Station is at 55.42 Km distance and Biju Patnaik International Airport is at 62.64 Km distance from the site. The nearest town is Astaranga. Nearest habitation is Nuagarh village at 2.15 km from the project area. Nearest wildlife sanctuary is Balukhand - Konark Wildlife

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Sanctuary at 32.6 Km. The nearest RF/PF are Sahan P.F at 1.94 Km, Bandar P.F at 3.45 Km, Nadiakhia P.F at 6 Km. Nearest Rivers are Devi River at 100 m, Chanrapada Nadi at 300 m, Barada Nadi at 3.20 km, Siju Nadi at 4 Km.

10. **Facilities:** The different facilities to be developed and enhanced are Fish handling and auction hall; Fish loading area; Fishery administrative office; Fishermen gear sheds; Net mending sheds; Boat Repair Shop; Restaurant; Rest shed; Fish Merchants Dormitory; Public toilet blocks; Radio communication centre; Security/guardhouse; Compound wall; Approach Road; Internal roads; Parking area for vehicles; Fresh water supply and distribution system; Sea water supply and distribution system; Drainage/ Sewerage network; Effluent Treatment Plant; Electric power and lighting system; Ice plant and chilled storage; Public Amenities; Fire extinguishers; & Greeneries and landscaping.
11. The proposed Fishery Harbor is an existing harbor going for modernization and expansion & has been designed to accommodate 1960 mechanized fishing vessel comprising 1628 nos. of 9 m motorized craft, 64 nos. of 12 m trawlers and 268 nos. of 15 m trawlers.
12. The detailed CRZ mapping has been done by IRS, Anna University, Chennai, an authorized agency of MoEF&CC.

**13. Some of the salient features of the project are:**

- Shallow well / water harvesting structures as well as dedicated water supply by RWSS department will be made to facilitate fresh water supply.
- Pumped river water will be utilized for cleaning purpose.
- Provision has been made for Electric Power Supply general lightening and 500 KVA, 11/0.40 KV electric sub-station inside the Harbour Complex.
- Independent Sub-station will be installed to provide 120 KW power Supply round the clock from TPCODL.
- About 60 unit / per day load will be required for operation / illumination of Harbour Complex.
- For emergency situation, power would be supplied through stand by D.G. set.
- The project would give employment to 7,668 sea-going fishermen in 1,960 MFVs and about 7,000 persons in shore-based establishments, distribution and marketing of fish and crustacean products.
- Adequate STP facility will be provided within the harbor premises.
- Liquid waste generated from the washing of the catch material shall be processed in ETP and reused in the process after disinfection.
- The street lighting shall be done using solar power.
- The Operation and Management will be made by Management Society, Astaranga Fishing Harbor, constituted of local Fishermen, Stake Holders, Exporters, SP, Elected Representatives and Department Officials headed by Collector & DM, Puri.

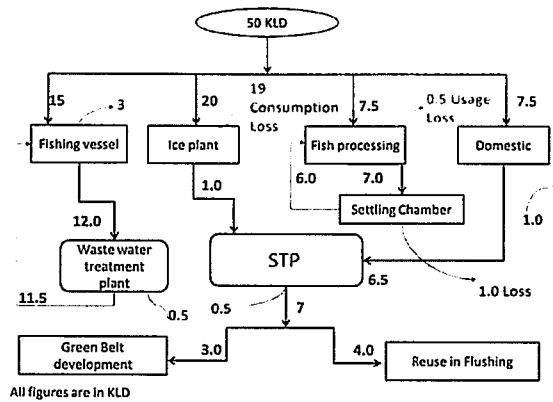
14. **Baseline study:** The primary Environmental and Marine baseline data monitored near project site and study area of 10 km radius covering three (3) months i.e., from Dec 2021 to January 2022.

- a) **Ambient air quality:** Ambient Air Quality Monitoring reveals that the concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> found between 43.20 to 58.1 µg/m<sup>3</sup> and 22.5 to 28.9 µg/m<sup>3</sup> respectively. The high value of Particulate pollutant was observed at plant site which can be attributed to industrial activities and vehicular movement. The concentrations of SO<sub>2</sub> and NO<sub>x</sub> were found to be in range of 6.0 to 9.10 µg/m<sup>3</sup> and 10.40 to 16.5 µg/m<sup>3</sup> respectively.
- b) **Ground water quality:** pH varies from to 6.54 to 8.2. Total Hardness varies from 89.44 to 114.40 mg/L. Total Dissolved Solids varies from 308 to 402 mg/L.
- c) **Surface water quality:** pH varies from to 7.18 to 8.20. Total Hardness varies from 329 to 464.1mg/L. Total Dissolved Solids varies from 396 to 882 mg/L.
- d) **Noise quality:** The day Noise levels have been monitored during 6 am to 10 pm and the night levels during 10 pm to 6 am. Ambient noise levels were compared with the Noise Pollution (Regulation & Control) Rules, 2000. The Leq values at this location for day and night time was observed to be varied between 47.3-55.4 and 32.0-43.5 dB(A)

Period	December - 2021 to February -2022
AAQ Parameters at 8 Locations	PM <sub>2.5</sub> = 22.5 to 28.9 µg/m <sup>3</sup> PM <sub>10</sub> = 43.2 to 58.1 µg/m <sup>3</sup> SO <sub>2</sub> = 6.0 to 9.1 µg/m <sup>3</sup> NO <sub>x</sub> = 10.4 to 16.5 µg/m <sup>3</sup>
Ground water quality at 8 locations	pH: 6.54 to 8.2, Total Hardness: 89.4 to 114.4 mg/l, TDS: 308 to 402 mg/l, Chlorides: 109.96 to 208.4 mg/l.
Surface water quality at 9 locations	pH: 7.18 to 8.2, Total Hardness: 329 to 464.1 mg/l, TDS: 396 to 882 mg/l, Chlorides: 129.69 to 289.84 mg/l, BOD: 2-28 mg/l, COD: 8-104 mg/l, DO: 4.7 to 6.1 mg/l.
Noise levels at 8 locations	47.3 to 55.4 dB(A) for the daytime and 30.4 to 43.5 dB(A) For the Night time.

15. **Land Requirement:** The proposed Fishing Harbour project will be established over the acquired land of 40.39 Ac. (Land area-17.39 Ac.+Inside water-23 Ac.) (Kisam- Nadi, Rasta & Gochar) on the Right Bank of river Devi.

16. **Water Requirement:** The total water requirements for the project are 50KLD. The water requirement will be met from Rural Water Supply Department of Govt. of Odisha.



17. **Power and Fuel requirement:** The fishery harbour during peak fishing season is expected to be operative round the clock, fish landing, outfitting, idle-berthing, and repair quays need to be well lit for easy access by the fishermen and fishing boats. Walkways and approaches to the fish landing, outfitting, idle-berthing, and repair quays need to be lighted for safety and security reasons. A lump sum provision is made in the estimate for electrical substation, high mast lighting and street lighting within the harbour complex. A plot of land of area 586.5 m<sup>2</sup> is proposed for installing electrical sub-station near the main entrance. A total of 120KW power consumption will require for this project.

S.N.	TYPE	QUANTITY	SOURCE	MODE
1	Water Requirement	50 KLD	Rural Water Supply Department of Govt of Odisha	Pipeline
2	Power /Energy	120 MW	Independent 11 Kv. Sub-station	Local Grid

18. **Solid Waste Generation & Management** - The proposed project is a purely one-time Civil construction activity that is not likely to generate any form of solid / other waste what so ever. Even the left-over trash fish, fetches a fairly high market value / price as a supplement to animal feed for various indigenous aquaculture farm around living no organic solid waste. The in-organic solid waste from the day-to-day activities (MSW) shall be stored in a covered container isolated from the operational area and shall be transported to a designated MSW Processing yard.

#### Solid & Hazardous Waste Generation & Management

S.N.	Name of Waste	Category	Quantity	Mode of Treatment & Disposal Method
i)	Used Oil/Spent Oil	5.1	1 KL/Year	Collected by oil blize, storage, transportation and disposal by selling to registered refiners.
ii)	STP Sludge	NH	1.5 TPA	Shall be treated in Vermi Composting pits and reused in Greenbelt Development.
iii)	ETP Sludge	33.5	6.2 TPA	Stored in separate drums and handed over to TSDF handling vendor.
iv)	Solid Waste	NH	5000 TPA	Supply as animal feed to various indigenous poultry farm.

19. **Liquid Waste Generation & Management** - The proposed project is not having processing unit and it is only a transit hub from harvest to dispose after fish paving a meager amount of waste water will be generated from the project. Besides for cleaning of the harbor, also 30KLD of waste

water will be generated from the project, which will be treated in 30 KL Capacity ETP followed by settling tank and recycled in the process. Approx. 10 KLD of domestic sewage shall be treated in modular STP of capacity 10 KLD and the treated water shall be used for greenbelt development.

20. **Greenbelt development:** The proposed Harbour land is govt. Revenue land and it is classified as Nadi, Rasta & Gochar, so only a few avenue plantation will be done on the village side.
21. **Manpower requirement:** Total manpower requirement for the proposed development of fishing harbour during construction phase estimated to be about around 200 nos. and during operational phase 30 - 40 nos. including both skilled and unskilled labourers.
22. **Project cost:** The total project cost for the proposed project is 82.86 Crores which has obtained administrative approval from the Govt. of India under PMMSY Scheme during March 2022. The EMP capital cost Rs.1858.5 lakhs and recurring cost is Rs. 626.5 lakhs.

Sl. No.	Environmental Management Plan	Capital Cost (₹ in Lakhs)	Recurring Cost (₹ in Lakhs)
i)	Sewage Treatment Plant	50	3
ii)	Greenbelt Development	75	5
iii)	Stormwater Drains	35	2
iv)	Solid Waste Management	5	1
v)	Fish Waste Management	5	0.5
vi)	Public Hearing Compliances	1688.5	615
	<b>Total</b>	<b>1858.5</b>	<b>626.5</b>

23. **Environment consultant:** The Environment consultant M/s Ind Tech House Consult, Rohini, Delhi along with the proponent has made a presentation on the proposal before the Committee.

Considering the information furnished and the presentation made by the consultant, M/s Ind Tech House Consult, Rohini, Delhi along with the project proponent, the SEAC recommended for grant of Environmental Clearance for the project valid upto 10 years with stipulated conditions as per Annexure – A and following specific conditions:

- As per the State Government rules, a seven-month-long ban on fishing activities during the period from 1<sup>st</sup> November to 31<sup>st</sup> May to facilitate Olive Ridley turtle nesting. So, the project proponent shall ensure that there will be no activity within that period and area should be earmarked as restricted zone (as applicable) in consultation with DFO.
- The proponent shall carry out monthly harbour monitoring to assess the water quality of the region. Harbour water quality assessment should include parameters like, total coliforms, phytoplankton, parameters for heavy algal bloom, oil and grease as well as other organic and microbial pollutants.
- The proponent shall prepare Risk Management Plan and Evacuation plan for any probable natural calamities like cyclones, floods, lightning strikes etc. since berthing activities are involved in the project.
- Navigation guidelines for the movement of Trawlers shall be kept in place.
- The project proponent should organise awareness programmes for the fishermen, so that they can avail the facilities available under Environment Management Plan of this project.

**ITEM NO. 03**

**Proposal for Environmental Clearance of M/s. Bivab Developers Private Limited for Construction of B1+B2+G+11 storied residential and B1+B2+G+8 storied commercial building over a built-up area At: Sipasurubili, Dist – Puri of Sri Binay Krishna Das - EC**

The project proponent has requested to defer the proposal to next meeting. The SEAC decided to defer the proposal to next SEAC meeting as requested by the proponent.

**ITEM NO. 04**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S UTKAL HEALTHCARE PVT. LTD FOR REGULARIZATION OF EXISTING LOWER BASEMENT + UPPER BASEMENT + GROUND+ 5<sup>TH</sup> STORIED MULTI SPECIALTY HOSPITAL & ONE GROUND + 6<sup>TH</sup> STORIED DIAGNOSTIC CENTER OVER AN BUILT-UP AREA 30046.75 SQM PROJECT LOCATED AT PLOT NO-C/3, NILADRI VIHAR, CHANDRADEKHARPUR, BHUBANESWAR, DIST: KHORDHA OF SRI SAILENDRA NARAYANA PANDA - EC**

1. This proposal is for Environmental Clearance of M/s Utkal Healthcare Pvt. Ltd for Regularization of existing Lower Basement + Upper Basement + Ground+ 5<sup>th</sup> storied Multi specialty Hospital & one Ground + 6<sup>th</sup> storied Diagnostic Center over an built-up area 30046.75 sqm project located at at Plot No-C/3, Niladri Vihar, Chandradekharapur, Bhubaneswar, Dist: Khordha of Sri Sailendra Narayana Panda.
2. The project falls under category "B" or activity 8 (a)-Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. **Violation Justification** - The proponent has already constructed the total project with built-up area 30046.75 m<sup>2</sup> without obtaining Environmental Clearance. Hence, this is a violation case. The EIA/EMP report has been prepared in conformity with all issues brought out in the detailed Violation ToR issued by SEIAA, Odisha vide letter No. SIA/OR/MIS/77289/2022, dated 19.01.2023.
4. **Location and Connectivity** - The proposed site of 2.47 Acres of land is located at Plot No.: Plot No-C/3, Near NH-16 Road, Niladri Vihar, Bhubaneswar, Khurda district in the state of Odisha. The Geographical co-ordinates of the project site are: latitude 20° 19' 15.88" N and longitude 85° 48' 01.90" E and the area comes under Survey of India Toposheet No- F45T11, F45T12, F45T15, F45T16. The total Plot Area is 10015.104 sqm and Built up area – 30046.75 sqm. The Kisam of Land is Gharabari. The project site is well connected with National Highway-16. The nearest railway station is Mancheswar Railway station at a distance of approx 4.7 Km in East Direction. The nearest airport is Biju Pattnaik International Airport Bhubaneswar at a distance of approx. 7.7 Km in South direction from project site. The site is located adjacent to the local landmarks such as Trident Academy of Technology, Akash Institution Chandrasekharapur, DAV School Campus-II Etc. There is no structure or encroachments on the site. The site is easily accessible from NH-16 Road. Nearest river is Kuakhai River at a distance of 6.8 km from project site.
5. The site is coming under Bhubaneswar Development Authority (BDA).
6. The total plot area is 10015.104 sq.mt. with total built-up area 30046.75 sq.mt.

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7. The Building Details of The Project:

Particular	Proposed
Project Name	Regularization of existing Lower Basement + Upper Basement + Ground+ 5 <sup>th</sup> storied Multi specialty Hospital & one Ground + 6 <sup>th</sup> storied Diagnostic Center
Plot Area	10015.104 sqm
Ground Coverage	3208.64 sqm
Built up Area	30046.75 sqm
Road Area	4796.46 sqm
Parking Area(% hospital area)	12197.64 sqm
Green Belt Area	2010.00 sqm(20.07 %)
Power/Electricity Requirement & Sources	2727 KW
No. of DG sets	2 DG sets of 1010 KVA and one 750 KVA
Water requirement & Sources	240 KLD (Fresh)
Sewage Treatment & Disposal	STP Capacity 300 KLD ETP Capacity= 30 KLD
Estimated Population- Residential, Commercial, Floating/visitors	Hospital Beds-350 Floating Population-2050

8. Statutory clearances obtained are -

- i. BDA Approval vide letter No- 1641/BDA, Bhubaneswar, dated 12/01/2021.
- ii. Fire Safety Clearance Certificate from office of deputy fire officer vide letter no – 108/2017-BBs.CIR
- iii. Ground Water application submitted to CGWA vide application no. 21-4(413)/SER/CGWA/2012-3375, dated 07/05/2012.
- iv. Grant consent to Operate vide letter No- 10554/IND-I-CON-6809 , dated 18.06.2022.
- v. Authorization of Biomedical Waste vide letter No- 14111/SPCB/Authorization(Biomedical Waste) IND-IV-BM-2686 dated 24/10/2017.

9. **Power requirement:** The daily power requirement for the proposed project is preliminarily assessed as 2727 KW source from TPCODL. In order to meet emergency power requirements during the grid failure, for this purpose diesel generator having 2x1010 KVA & 1x750 KVA capacities for power back up in the proposed Project. DG set stack height is 27.35m.

10. **Solar Power Generation** - Total 170.6 KW Solar Power Generation which is 6.2% of total power required in project. (5.04KW to be generated from 70 nos of Solar Lighting poles (@72

Watt) which has been proposed for Street lighting and solar energy generated from 120 nos. of PV solar panels per day = 165.6 KW).

11. **Water requirement:** Fresh make up of 240 m<sup>3</sup>/day will be required for the project which will be sourced from WATCO. Total waste water generated from the hospital is 240.33 KLD which is treated in STP & ETP. Capacity of STP is 300 KLD & Capacity of ETP is 30 KLD. Treated water discharge to drain in Non Monsoon Period is 45.7KLD and in Monsoon Period is 75.33KLD.

Total Water requirement						
Sl. No.	Total Population		Per Capita Consumption (Ltr/day)	Water Requirement (KLD)		
				Fresh	Flushing	Total
i)	350 Patient Beds	350	450 (Fresh Water- 405liters/day and Flushing Water- 45 liters/day)	141.75	15.75	157.5
ii)	Staff (Permanent)	300	135 (Fresh Water- 90 liters/day and Flushing Water- 45 liters/day)	27.0	13.5	40.5
iii)	Staff (Day Shift)	250	45 (Fresh Water- 20 liters/day and Flushing Water- 25 liters/day)	5.0	6.25	11.25
iv)	Visitor/ OPD	1500	15 (Fresh Water-6 liters/day Flushing Water-9 liters/day)	9.0	13.5	22.5
v)	Kitchen	1		10.000	0	10.000
vi)	Laundry	1		30.000		30.000
vii)	Water Treatment plant back wash, regeneration	1		9.000		9.000
viii)	Misc. – Water features	1		7.750		7.750
<b>TOTAL</b>				<b>239.5</b>	<b>49</b>	<b>288.5</b>

12. **Rain Water harvested** 137cum through 8 nos. of Rain Water recharging pits. .

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

14. **Parking** - Total parking area provided is 12197.64 Sq.mt. and total 382 nos. of ECS and location of parking area is Basement.

Parking Area Provided			
Basement Parking			12197.64 sqm
<b>Total Parking</b>	--	--	<b>12197.64 sqm</b>
Equivalent Car Space Provided			
	Area(sqm)	Area/ECS	
Basement Parking	12197.64	32	381 ECS
<b>Total Parking Provided</b>			<b>382 ECS</b>
Total Hospital Beds			350 Nos.

15. **Green Belt Development:** Green belt is developed over an area of 2010.0 sqm which is 20.07% of the total plot area. Total 1230.0 nos. of plants to be planted and 3 tier plantation.

16. **Solid Waste Management:** Solid waste generated from floating population Such as hospital staffs (including doctors, Nurses etc.) and miscellaneous waste will be generated @ 0.45

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kg/capita/day, which will be about 247.5 kg/day. The generated solid waste from the Super-Specialty hospital complex will be collected into a garbage bin located at a suitable location inside the complex. Bio-medical waste generation from 350 beds will be 525 Kg/day.

Sl. No.	Category	Counts (heads)	Waste generated (kg/day)	Management
i)	Staff Employee	550 @ 0.45 kg/day/person	247.5 kg/day	Handover to approved vendor
ii)	Visitors/OPD	1500 @ 0.15 kg/day/person	225 kg/day	Handover to approved vendor
iii)	STP Sludge	--	120 Kg/day	Landscaping
<b>Total Waste Generated</b>			<b>592.5 kg/day</b>	

Sl. No.	Category	Counts (heads)	Waste generated (kg/day)	Management
i)	Patient 350 beds	350 @ 1.5 kg/day/bed	525 kg/day	Handover to M/s Sani Clean
<b>Total Waste Generated</b>			<b>525 kg/day</b>	

17. **Details of Court cases, if any** – Case No. (2).C No- 93/2017, dated 18.01.2018 (U/s 15 of The Environment (Protection) Act, 1986).

18. **The cost estimated towards Violation as follows** - The summary of budgetary allocation with respect to violation activity and remediation/ EMP measures suggested/recommended and community resource augmentation are as per the table:

Sr. No.	Description	Estimated Cost (Rs.)
1.	Estimated cost of damage / remediation with respect to ecological aspects	24,50,000.00
2.	Community resource augmentation plan	1,50,000.00
<b>Net Expenditure:</b>		<b>26,00,000.00</b>

#### CSR Expenditure FY-2023

Sr. No.	Description	Estimated Cost (Rs.)
1.	Contributed to PM's National Relief Fund	25,000.00
2.	Expenditure towards development & maintenance of (BMC) Hospital front Garden	6,89,538.00
3.	Expenditure on Free Health Camp	1,72,538.00
<b>Net Expenditure:</b>		<b>8,87,076.00</b>

19. **Penalty cost for Violation:** The Penalty Provisions as per Notification F. No. 22-21/2020-IA.III, dated 07.07.2021 is 1% of the total project cost. The cost of the project is Rs. 30.06 Crores. So total penalty of this project is Rs. 3,25,00,000/- which is 1% of the total project cost.

20. The estimated project cost is 30.06 Crores and cost for EMP is 4.17 Crores.

21. **Baseline study:** The primary Environmental and Marine baseline data monitored near project site and study area of 10 km radius from 01<sup>st</sup> October 2022 to 31<sup>st</sup> October 2022.

a) **Ambient air quality:** Ambient Air Quality Monitoring reveals that the concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> found between 62.3 to 70.6 µg/m<sup>3</sup> and 26.1 to 32.4 µg/m<sup>3</sup> respectively. The



concentrations of SO<sub>2</sub>, NO<sub>x</sub> and CO were found to be in range of 10.4 to 15.1 µg/m<sup>3</sup> , 14.1 to 19.4 µg/m<sup>3</sup> , <0.1 µg/m<sup>3</sup> respectively.

b) **Ground water quality:** pH varies from to 6.5 to 8.5. Total Hardness varies from 102 to 121 mg/L. Total Dissolved Solids varies from 138.7 to 187 mg/L.

Sl. No	Parameter	Unit of measurement	Standard as per IS: 10500, 2012		GW1	GW2	GW3	GW4	GW5
			Acceptable Limit	Permissible Limit					
i)	Colour	Hazen	5	15	<5	<5	<5	<5	<5
ii)	Odour	--	UO	UO	UO	UO	UO	UO	UO
iii)	Taste	--	AL	AL	AL	AL	AL	AL	AL
iv)	Turbidity	NTU	1	5	2	<1	<1	<1	2
v)	pH Value @ 25°C	--	6.5-8.5	No Relaxation	7.11	7.08	7.16	7.05	7.13
vi)	Total Hardness (as CaCO <sub>3</sub> )	mg/l	200	600	112	102	121	109	107
vii)	Iron (as Fe)	mg/l	0.3	No Relaxation	0.12	0.06	0.21	0.16	0.18
viii)	Chloride (as Cl)	mg/l	250	1000	64	59	61	53	57
ix)	Residual, free Chlorine	mg/l	0.2	1.0	ND	ND	ND	ND	ND
x)	Total Dissolved Solids	mg/l	500	2000	138.7	145.2	186.4	187	144
xi)	Calcium (as Ca)	mg/l	75	200	26.1	25.7	26.5	25.2	26.3
xii)	Magnesium (as Mg)	mg/l	30	100	9.1	11.4	12.6	10.9	10.3
xiii)	Copper (as Cu)	mg/l	0.05	1.5	<0.03	<0.03	<0.03	<0.03	<0.03
xiv)	Manganese (as Mn)	mg/l	0.1	0.3	<0.05	<0.05	<0.05	<0.05	<0.05
xv)	Sulphate (as SO <sub>4</sub> )	mg/l	200	400	16.3	18.4	17.2	16.6	15.8

c) **Surface water quality:** pH varies from to 6.5 to 8.5. Total Dissolved Solids varies from 243 to 251 mg/L.

Sl. No	Test Parameters	Unit	Standard as per IS 2296	SW1	SW2	SW3
a)	Colour, Max.	Hazen	300	22	17	15
b)	pH	--	6.5 to 8.5	6.89	6.76	6.81
c)	Iron as Fe, Max.	mg/l	50	0.16	0.19	0.22
d)	Chloride as Cl, Max.	mg/l	600	35	27	31
e)	Dissolved Solids, Max.	mg/l	1500	251	246	243
f)	Dissolved Oxygen, Min.	mg/l	4	6.2	6.7	6.4
g)	BOD: 3 days at 27 <sup>o</sup> C, Max.	mg/l	3	2.7	2.2	2.3
h)	Oil & Grease, Max.	mg/l	0.1	ND	ND	ND

i)	Copper as Cu, Max.	mg/l	1.5	<0.03	<0.03	<0.03
j)	Sulphate as SO <sub>4</sub> , Max.	mg/l	400	12.2	10.6	11.4
k)	Nitrate as NO <sub>3</sub> , Max.	mg/l	50	2.9	2.3	2.6
l)	Fluoride as F, Max.	mg/l	1.5	0.05	0.05	0.05
m)	Anionic detergent	mg/l	1	ND	ND	ND
n)	Cadmium as Cd, Max.	mg/l	0.01	<0.003	<0.003	<0.003
o)	Selenium as Se, Max.	mg/l	0.05	<0.001	<0.001	<0.001
p)	Arsenic as As, Max.	mg/l	0.2	<0.001	<0.001	<0.001
q)	Cyanide as CN, Max.	mg/l	0.05	ND	ND	ND
r)	Phenolic compound as C <sub>6</sub> H <sub>5</sub> OH, Max.	mg/l	0.005	ND	ND	ND
s)	Lead as Pb, Max.	mg/l	0.1	<0.05	<0.05	<0.05
t)	Zinc as Zn, Max.	mg/l	15	<0.05	<0.05	<0.05
u)	Hexavalent Chromium as Cr <sup>+6</sup> , Max.	mg/l	0.05	<0.05	<0.05	<0.05
v)	Total Coliform, Max.	MPN/100ml	5000 MPN/100ml	321	578	589
w)	Faecal Coliform	MPN/100ml	--	47	41	45

d) **Noise quality:** The day Noise levels have been monitored during 6 am to 10 pm and the night levels during 10 pm to 6 am. Ambient noise levels were compared with the Noise Pollution (Regulation & Control) Rules, 2000. The Leq values at this location for day and night time was observed to be varied between 50.9-54.3 and 41.7 - 43.5 dB(A).

e) **Soil quality :** The results of soil quality monitoring data as follows:

Sl. No.	Test Parameters	S1	S2	S3	S4	S5
a)	pH value (1:10) at 25°C	7.17	7.23	6.89	7.11	7.09
b)	Electro Conductivity at 25 °C (µmho/cm)	88	91	98	123	117
c)	Moisture content in %	10.1	9.7	9.9	10.7	11.1
d)	Sodium (as Na) in mg/Kg	33.2	32.5	32.8	35.2	34.7
e)	Bulk Density in g/cc	1.23	1.09	1.11	1.25	1.23
f)	Sand in %(W/W)	63.12	65.42	61.11	63.28	66.43
g)	Silt in %(W/W)	15.09	15.87	20.31	19.78	20.12
h)	Clay in %(W/W)	21.79	18.71	18.58	16.97	13.45
i)	Texture in %(W/W)	sandy	sandy	sandy	sandy	sandy
j)	Nitrogen as N in mg/kg	168.2	164.7	167.2	171.3	178.6
k)	Phosphorus as P in mg/Kg	2.11	2.41	2.13	1.89	1.93
l)	Potassium as K in mg/Kg	31.26	18.63	22.61	21.74	20.82
m)	Sodium absorption ratio (SAR)	1.67	1.74	2.21	2.03	2.46
n)	Cation Exchange Capacity (meq/100g)	5.5	4.9	7.6	6.9	8.7
o)	Organic Matter in %	0.04	0.07	0.12	0.14	0.16

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

Considering the information furnished and the presentation made by the consultant, **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** with the project proponent, the SEAC decided to take the decision on the proposal after receipt of the following from the proponent followed by site visit by the sub-committee of SEAC.

- a) License copy/certified documents from the concerned authority Atomic Energy Regulatory Board for the usage, storage, handling and management of radioactive materials such as radio isotopes used for patient diagnostic purpose and radiopharmaceuticals for treatment of patients.
- b) Detailed write up on present handling of radioactive materials (usage, storage and its disposal).
- c) Traffic study report duly vetted by institute of repute.
- d) Obtain Fresh permission from DFO of the Chandaka Forest division.
- e) Total cost of the project & total turnover cost duly certified by Govt. authorised CA firm for calculation of penalty.
- f) Details of case registered under violation.
- g) Permission from concerned authority for High-tension Electricity line near to the project site and mention the aerial distance of the High-tension Electricity line from the proposed site.
- h) Include compliance to Specific TOR point 1 in EIA.
- i) Timeline for completion of pending infrastructure like installation of solar panels, organic waste converter etc.
- j) The proponent shall provide adequate space for visitors parking.
- k) It is a case of violation and all aspects related to environmental regulations need to be verified for which the PP needs to provide them in a tabular form giving the date of completion and current status etc.

**ITEM NO. 05**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE OF M/S VIGYAN BHARATI CHARITABLE TRUST (HI-TECH MEDICAL COLLEGE AND HOSPITAL) AT KHATA NO. 111(RAKHIT) & 113(ANABADI) OVER AN BUILT-UP AREA 92379 SQM ROURKELA, DIST SUNDERGARH OF SRI SURESH PANIGRAHI - TOR.**

The Project Proponent has requested to reject/withdraw the EC proposal, as there are some changes in the proposal has been submitted for Environmental Clearance.

After detailed discussion, the SEAC recommended to de-list the proposal as requested by the project proponent.

**ITEM NO. 06**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR ENHANCEMENT IN PRODUCTION OF GRAPHITE FROM 4750 TPA TO 27091 TPA FROM GANDABAHALI GRAPHITE MINES OVER AN AREA OF 28.615 HA AT VILL.- GANDABAHALI, TAHASIL - SINAPALLI IN THE DISTRICT OF NUAPADA OF SRI PRABHAS CHANDRA AGRAWAL - TOR**

The project proponent has requested to defer the proposal to next meeting. The SEAC decided to defer the proposal to next SEAC meeting as requested by the proponent.

**ITEM NO. 07**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR RENGITIPALLI - A,B,C,D & E STONE QUARRIES CLUSTER OVER AN AREA OF 170.249 ACRES OR 68.899 HECTARES IN THE VILLAGE RENGITIPALLI UNDER TAHASIL KODALA IN DISTRICT GANJAM OF SRI JUTI KRUSHNA PANDI - TOR**

1. The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. **Category:** As per EIA Notification 2006, and its subsequent amendments, the proposed project falls under B category in item 1(a) - Mining of Minerals.
3. This proposal is for Terms of Reference for obtaining Environmental Clearance for Rengitipalli - A, B, C, D & E Stone Quarries Cluster over an area of 170.249 acres or 68.899 hectares in the village Rengitipalli under Tahasil Kodala in District Ganjam of Sri Juti Krushna Pandi.
4. The mining plan was approved by Sri S.P. Nanda vide letter no. 714,716,718 & 720 on dated 27.05.2022.
5. Mining lease is an identified sairat source in the DSR Ganjam in Para no 14 - Rengitipalli-A, 13 - Rengitipalli-B, 26 - Rengitipalli-C, 27 - Rengitipalli-D, 28 - Rengitipalli-E in Page no.65,67.
6. The proposed project is a 5 stone quarries cluster mines Rengitipalli A & B were existing mines and the Rengitipalli C,D,E are new mines.

Sl. No.	Quarry name	Name of Lessee
01	Rengitipalli - A	Sri Juti Krushna Pandi
02	Rengitipalli - B	Sri Juti Krushna Pandi
03	Rengitipalli - C	Not Auctioned
04	Rengitipalli - D	Sri Bhagaban Parida
05	Rengitipalli - E	Sri Bhagaban Parida

7. **Location and connectivity:** The quarries are located in SE Part of village Rengitipalli, under Kodala Tahasil of Ganjam district in Odisha State. District headquarters Chatrapur is at a distance of 28.00 Km and is covered in the Survey of India Topo Sheet No – E45A14. The geo-coordinates of the quarry cluster are: Latitude - 19°35'54.52"N to 19°36'25.49" N Longitude - 84°54'01.95"E to 84°55'12.95"E. Nearest National Highway is NH-16 is at a distance of 20.20

Km in SE. The quarry is of 1.30 Km in NE away from the state highway is SH-30. The Nearest Airport is Biju Patnaik International Airport which is at a distance of approx. 160 km towards NE direction. Nearest Dam is Luhakote dam at a distance of 8.00 Km in NW. Nearest reserve forest is Karishinagiri hill Reserve Forest is at a distance of 4.85 Km in SE. Nearest road bridge is Makundapur bridge over Rushikulya River at a distance of 11.00 Km. in SW. Nearest river embankment is Makundapur bridge over Rushikulya River at a distance of 11.00 Km. in SW. Nearest Electric transmission line is 0.20 Km from the Lease area. The Nearest Habitation is 0.20 Km in the North direction.

8. **Baseline study:** Baseline Study has been conducted during the period March, 2023 to May, 2023.
9. **Reserves and total production:** The total Geological reserve of cluster area is 12167027 Cum and Mineable reserve is 6739940 Cum and the total production for the Proposed Project is 11,900 cum/year.

Name of Sources	Vol. of Sand in (m <sup>3</sup> )
Rengetipalli - A	4200
Rengetipalli - B	3500
Rengetipalli - C	---
Rengetipalli - D	2000
Rengetipalli - E	2200
<b>TOTAL</b>	<b>11900</b>

10. **Mining method:** The Method of Mining will be opencast Semi-mechanized Method. Extraction and loading into truck & Tractor will be done by Machinery. The transportation of Stone from Quarry site to destination shall be achieved by dumper/tractor.
11. **Waste generation and management:** During plan period 2975 cum per annum of waste will be generated from the total cluster area and the waste will be used in maintenance of haulage road and back filling.

Plan Period	Name of Quarry	Maximum Production (cum)	Waste (cum)
5 Years	Rengitipalli - A Stone Quarry	4200	1050
5 Years	Rengitipalli - B Stone Quarry	3500	875
5 Years	Rengitipalli - D Stone Quarry	2000	500
5 Years	Rengitipalli - E Stone Quarry	2200	550
Total		11900	2975

12. **Water requirement:** Total Water Requirement for the proposed project will be 33 KLD.

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10 lpcd per labor 39 *10/1000= 0.39 KLD	0.39
Dust suppression	Total haulage road to be water sprinkled = 2528 m 2528*6m* 1.0 ltr * 2times/1000= 30336 LPD 30.336 KLD	30.336
Plantation	1000 plant in five year @ 2 L/per plant= 1000*2 = 2000/1000 = 2.0 KLD	2.0
<b>Total</b>		<b>32.726 KLD ~ 33 KDL</b>

**13. Greenbelt development:** The plantation proposal has been given to plant around 1000 saplings over an area of 0.40 ha. in the auctioned area. Species likely to be planted are Chakunda, Neem etc. as per the availability. Spacing between the saplings will be kept 2.5 meters x 2.5 meters only.

**14. Manpower:** Total number of persons that will be required for the proposed project is 39 numbers.

**15. Project Cost:** The estimated cost of the proposed project is Rs 1 crore.

Sl. No.	Activity	Capital Cost (in Rs.)
1	Health check ups Facility in Rengitipalli village.	1,00,000
2	Distribution of Sanitizer and Mask to the villagers of Rengitipalli village	40,000
3	Water Storage tank in village Rengitipalli	20,000
4	Distribution of educational kits & books in schools (@ Rs. 2,000/kit)	40,000
<b>TOTAL (in life time)</b>		<b>2,00,000</b>

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

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

- Previous Environmental clearance copies along with its compliance report of existing mines.
- Include Quarry C in the EIA report which is not auctioned yet, as reported by PP. Submit the revised KML file including all quarries present in the cluster.
- Copy of agreement/letter of authorisation from all the lease holders present in the cluster to take the lead and carry out the EIA study prior to recommendation of TOR.

**ITEM NO. 08**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR PAKTIA QUARTZ & QUARTZITE MINE OVER AN AREA OF 8.85 ACRES OR 3.581 HECTARES IN VILLAGE PAKTIA UNDER SARASKANA TAHASIL OF MAYURBHANJ DISTRICT OF SRI LALIT DAS - EC**

1. This proposal is for Environmental Clearance for Paktia Quartz & Quartzite Mine Over an area of 8.85 Acres or 3.581 Hectares in village Paktia under Saraskana Tahasil of Mayurbhanj District of Sri Lalit Das.
2. **Category:** The project falls under category "B" or activity 1 (a) – Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. This application is for extension of lease period and expansion of production from the Environmental Clearance issued by DEIAA, Mayurbhanj for the lease period, vide Ref. No. DEIAA/119 dated 21.06.2017 for production of 1,06,287 MT of Quartz & Quartzite in the plan period.
4. Environmental Clearance is sought for the production of 52,012MT/annum, of Quartz & Quartzite and 607 MT/annum of sub grade material. The ML area is 8.85 Acre or 3.581 ha, out of which only 1.85 ha will be utilized for mining & allied activities during the Plan period.
5. Mining Lease was granted in favour of Shri Lalit Kumar Dash on 30.12.2000 for 20 years vide letter No.- III (c) M-2/2000-16981SM, and the said lease was Executed on 30.03.2001 for 20 years, which was expired on 29.03.2021.
6. The lessee has carried out mining operation in the lease till the expiry of the lease period upto 29.03.2021 and before completion of lease period the Lessee has applied for Extension of Mining lease u/s 8 A (3) of MMDR Amendments Act 2015 & u/r 66(1) of OMMC Rules, 2016.
7. The Internal verification Committee (IVC) meeting held on 08.05.2023 and IVC have recommended to extend the lease period u/r 66(1) of OMMC Rules, 2016 for fifty years from the original lease deed.
8. Dept of Steel and Mines Govt. of Odisha has extended the lease period upto 29.03.2051 vide letter no. 6298 dated 21.06.2023 with condition to obtain all statutory clearance.
9. The mining operation was undertaken with all statutory clearances.
10. The Environmental Clearance was obtained from DEIAA, Mayurbhanj for the lease period, vide Ref. No. DEIAA/119 dated 21.06.2017 for production of 1,06,287 MT. in the plan period.
11. Total lease area of 3.581 ha. is non-forest Govt. waste land.
12. The scheme of mining has been approved vide letter no.: 2848/Mines, Dated 30.03.2019 by Directorate of Mines, Bhubaneswar, Govt of Odisha.
13. Quartz & Quartzite is under Specified Minor Mineral Category.
14. DSR of Mayurbhanj district has been approved on 28.12.2019 & the said lease details has been shown as identified source in SI No- 1 after Page No. 48 of Quartz and Quartzite.
15. **Location and connectivity:** The Paktia Quartz & Quartzite Mines is in the village - Paktia under Saraskana Tahasil, in the district of Mayurbhanj of Odisha State. The area is featured in

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toposheet no 73J/7 (F45I7) and is bounded between Latitude: 22°19'05.32920" to 22°19'13.55160"N, Longitude: 86°28'41.47680" to 86°28'49.06920"E. The nearest National highway is Chennai-Kolkata (NH 06) at a distance of 20 Km. The nearest Railway station is at Bangiriposi at a distance of 20 Km. There is no eco sensitive zone situated within 10Kms from the lease area. However reserve forest is at a distance of 5.5 kms & water body is located within the buffer zone of the lease area at 2.5 kms. Road Bridge at 14.0 kms and Rail bridge at 93.2 kms. River embankment at 2.5 kms and electric transmission line at 0.2 kms. Village road at 1 km and habitation at Paktia at 0.2 km.

16. **Reserves:** As estimated the total geological reserve is about 4,15,462 MT, out of which 3,93,153 MT have been considered as mineable reserves.

17. **Total production:** (52,012MT/annum) quartz and quartzite (26852 cum/Annum) from excavation and (25160 cum/Annum) from dump working and (607 MT/annum) of Sub Grade Material. During 5 years of plan period 132934 MT of Quartz & Quartzite from mine working, 107030 MT of Quartz & Quartzite from dump working will be excavated and 3005 MT of sub grade will be generated.

Year	Quartzite from mine working in MT	Quartzite from dump working in MT	Sub-grade generation in cum	Waste generation in cum
1st Year	24200	18171	547	1095
2nd Year	25747	20209	582	1165
3rd Year	29946	19612	677	1355
4th Year	26189	23878	592	1185
5th Year	26852	25160	607	1215
<b>Total</b>	<b>132934</b>	<b>107030</b>	<b>3005</b>	<b>6015</b>

18. **Method of mining:** Opencast semi-mechanized method will be adopted using machineries such as Excavator, compressor & jack-hammer (if required), screening vibrator etc. for screening. Bench parameter will be kept at 3m height and 3m width. Overall pit slope will be 75°-85°. Excavation & separation of Quartz & Quartzite is done in two phases. One is removal of Quartz & Quartzite from the quarry face; it is the main stage. The second phase is sorting-sizing-screening/cleaning of excavated material as per the required size. Manual labours with crow-bar and pick-axe will be used for segregating the waste material from the useful material. Shallow hole Blasting shall be carried out using safety fuse with ordinary detonator.

19. **Post mining land use:**

Purpose	Existing	Plan Period	Conceptual Period	Total Area In Ha.
Mining	0.390	0.549	0.911	1.850
Dumping	0.016	0.098	0.164	0.278
Ore stack yard	0.014	0.118	0.006	0.138
Road	0.157	0.007	----	0.164



Plantation	0.560	0.200	0.140	0.900
Screening Plant & Machineries, Infrastructure Site service R. shed and office	0.045	0.005	--	0.050
Topsoil stack	0.012	--	--	0.012
Sub-grade stack	--	0.120	--	0.120
Total	1.194	1.097	1.221	3.512
Unused	--	---	--	0.069
Total Lease Area				3.581

20. **Waste generation and its management:** During plan period 16,306 cum of waste will be generated. Total waste will be dumped over 0.098 ha. of area. Further non saleable ore as sub-grade of 3005 cum will excavated in 5 year also will stacked over 0.12 ha. of land. Further 34,807 cum of intercalated waste will be generated during conceptual period which will be accommodated within a surface area of 2776 sq. meter. The dump will be maintained below 28 ° slope with a height of 15 meter. There will be 3 terraces with 5 meter each. The sub-grade material to generate will be utilized for blending. There is one top soil dump of 0.012 ha. size to accommodate top soil if any.
21. **Water requirement:** 2 m<sup>3</sup>/day (1 m<sup>3</sup> for dust suppression, 0.5 m<sup>3</sup> for Plantation & 0.5 m<sup>3</sup> for drinking purpose). As the requirement of water is not so huge, the mine will draw water as per suitability in accordance to the existing guidelines.
22. **Greenbelt:** A total 420 saplings have been planted as on 31.03.2018 over 0.264 ha. And regularly funds have been deposited towards DMF Trust & OEMF Trust. Total 320 trees shall be planted over an area of 0.20 ha. during plan period.
23. **Manpower:** Administrative & supervisory personnel will be 3 numbers and 19 workers will be employed under skilled (4), semi-skilled (8) & un-skilled (4) category in the mine.
24. **Project cost:** Total cost of the project will be Rs. 40 Lakhs (approx.) and a budget of Rs. 7.1 lakhs is proposed as EMP cost for the lease area. Lessee will spend towards CSR activities about Rs. 4 lakhs for the peripheral development towards education, Health check-up camp and maintenance of roads etc.
25. **Environment Consultant:** The Environment consultant M/s Srushti Seva Private Limited, Nagpur along with the proponent made a presentation on the proposal before the Committee.
- Considering the information furnished and the presentation made by the consultant, M/s Srushti Seva Private Limited, Nagpur along with the project proponent, the SEAC decided to take the decision on the proposal after receipt of the following from the proponent
- a) Copy of lease extension documents of the concerned authority.

- b) Certificates from concerned DFO, that the proposed quarry does not come under DLC land and distance of the proposed quarry from Similipal Wildlife Sanctuary and distance from its Eco-Sensitive Zone.
- c) Note on Blasting management and flying rocks assessed properly from experts.
- d) Past production figures since the inception of the mine till now duly certified from Mining Officer.
- e) Copies of Consent to Establish and Consent to Operate of the mine.
- f) Environmental Clearance granted by DEIAA valid upto 2021. No mining activity has been carried out after 2021. Supportive documents to this effect shall be submitted.
- g) RL of the mineralised area pre and post mining as per the approved mining plan along with the RL of ground water during rainy and summer seasons in the ML area.

#### ITEM NO. 09

**PROPOSAL FOR EXTENSION OF ENVIRONMENTAL CLEARANCE OF M/S AMJ GLOBAL HOMES PVT. LTD FOR CONSTRUCTION OF PROPOSED (B+G/S+9) STORIED RESIDENTIAL APARTMENT BUILDING OVER A BUILT-UP AREA- 96533.0 SQM AT MOUZA - EBARANGA, BHUBANESWAR, DIST.- KHORDHA OF SRI SARADA PRASAD RATH - MOD EC**

1. This proposal is for Extension of Environmental Clearance of M/s AMJ Global Homes Pvt. Ltd for Construction of Proposed (B+G/S+9) Storied Residential Apartment Building over a Built-Up Area- 96533.0 sqm at Mouza - Ebaranga, Bhubaneswar, Dist. - Khordha of Sri Sarada Prasad Rath.
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, and its amendments thereafter.
3. **Project details:** M/s AMJ Global Homes Pvt. Ltd. had earlier applied for Environmental Clearance for the proposed residential building with B+G/S+9 storied with built up area of 96,533 sqm and Plot area 31901.0 sqm. Environmental Clearance had been granted by SEIAA to the proposed residential building then through Ref No.- 3610/ SEIAA dated 14.07.2015 for a period of 5 years. The construction activity was delayed due to covid constraints. However, Environmental clearance validity can be given for 10 years for Building Construction projects as per O.M, F.No.1A3-22/28/2022 -IA.111[E181584] Dt. 13th December 2022. The project has been started, but due to covid constraints, the construction has not been completed and requires extension of EC of 2 (two) years. There is no change in built up area and Plot area. Now the proponent has applied for Extension of Environmental clearance validity.
4. Consent for Establish was obtained from SPCB Odisha with order no.697/IND-II-CTE-6452, on 15.01.2021.
5. **Location and Connectivity:** M/s AMJ Global Homes Pvt. Ltd has a multistoried Residential Apartment Project, Four blocks, B+G+9 ,Two Blocks B+S+9, One Block S+9 and 1 Block Recreational Block ( Club house) (G+1) , located at Plot No. 799, 797, 811, 812/871, 798, 795, 800, 768, 785, 769/1002, 793, 792, 789, 790 in Khata No. 345/1175, 345/187, 172 34 5/19,

345/1443, 345/208, 345/217, 345/182, 345/493,100,345/1292,345/328 & 345/285 , in Mouza- Ebaranga, Tahasil- Bhubaneswar, District- Khordha Odisha. The Built-up area is 96,533 Sq. Mt. Plot Area is 31901.0 sqm. The project site is located at Ebaranga. NH-16 is at a distance of 3.6 km., NW. Jatni Road is at a distance of 0.07 km. Bhubaneswar town is located at a distance of 5.0 km. Biju Patnaik Airport is at a distance of 4.4 km, NE. Bhubaneswar Railway station is at a distance of 6.8 km. Bhubaneswar Fire Station is located at a distance of 6.0 km.

**6. Project Area Details:**

- I) Plot Area : 31901.0 Sqm.
- II) Total Built-up Area : 96,553 Sqm.
- IV) Green Area : 6722 Sqm.
- V) Height of the Building : 29.95 Mts.
- VI) No. of Blocks : 7 Blocks + Clubhouse, B+G/ S+9 Floors
- VII) No of Units : 714

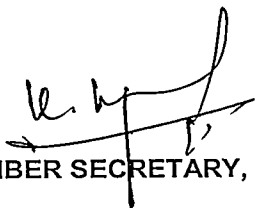
**7. Environmental Clearance Amendment details:**

S.No.	Details of Residential Building	Previous Configuration (EC granted by SEIAA)	Proposed Configuration
i)	No. of Floors	B+G/S+9 (Blocks 7) +Club House (G+1)	No change
ii)	Built up Area	96,553 sqm	No change
iii)	Building Height	29.95 m	No change
iv)	Total Water Requirement	328.3 KLD	No change
v)	Fresh Water Requirement	196 KLD	No change
vi)	STP Capacity	475 KLD	No change
vii)	STP Technology	FAB	No change
viii)	Treated Waste water	243KLD	No change
ix)	Total Green Belt Area	6722 sqm (21.6%)	No change
x)	Total Parking Area	22331.0 sqm	No change
xi)	Solid Waste	1964 Kg/Day	No change
xii)	Project Cost	75.0 Crores	No change

**8. Water Requirement:** Total water of 328.3 KLD will be required for the residential building which will be sourced from Ground Water. Fresh water required is 196 KLD. NOC from CGWA is obtained vide NOC No. CGWA/IND/Proj/2014-1530 for 196. The wastewater will be treated in the STP with FAB Technology of capacity of 475 KLD provided within the plot boundary.

9. **Solid Waste Management:** Total solid waste generation will be 1964 Kg/Day.
10. **Rainwater Harvesting:** Rainwater will be harvested through 24 nos. of Rainwater recharging pits.
11. **Power Requirement:** The total consolidated electrical load estimate for proposed project is about 3000 KW. Power backup in case of grid failure will be by 2 nos. of DG set of 1500 KVA.
12. **Green Belt Development:** Greenbelt will be developed over an area of 6722 Sqm (21.6%) of the plot area; by planting 100 nos. of the local species like Eucalyptus, Mango, Neem, Daffodils, Night Blooming Jasmine.
13. **Firefighting Arrangements:** The height of the building is up to 29.95 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.
14. **Environment Consultant:** The Environment consultant **M/s Rightsource Industrial Solutions Pvt. Ltd.** along with the proponent made a presentation on the proposal before the Committee.
15. The SEAC observed the following:
- Environmental Clearance granted to the project dated 14.07.2015 for a period of 5 years, but it should be valid for 7 years as per MoEF&CC, Govt. of India S.O. No. 1141 (E), dated 29.04.2015, S.O. No. 2571 (E), dated 31.08.2015 and subsequent OM F.No. 22-27/2015-IA-III, dated 12.04.2016 i.e. upto 13.07.2022.
  - The MoEF&CC, Govt. of India vide S.O. No. 1807 (E), dated 12.04.2022 extended the validity period of Environmental Clearance for different type of projects. The validity period of the projects other than river valley, nuclear and mining projects further extended for 3 years as per the notification dated 12.04.2022.
  - The MoEF&CC, Govt. of India vide F. No. 1A3-22/28/2022-1A.111 [E 181584], dated 13.12.2022 clarified that the validity of the Environmental Clearances, which had not expired as on the date of publication of Notification i.e. 12.04.2022, shall stand automatically extended to respective increased validity.
  - The validity period of the Environmental Clearance for this project (i.e. 13.07.2022) was not expired as on the date of publication of Notification i.e. 12.04.2022. Hence, validity period of the project shall automatically extend to another 3 years i.e. 13.07.2025.

Considering the information furnished and the presentation made by the consultant, **M/s Rightsource Industrial Solutions Pvt. Ltd.** along with the project proponent, the SEAC recommended for extension of validity period of Environmental Clearance for the project upto 13.07.2025.

  
MEMBER SECRETARY, SEAC

**CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR ENVIRONMENTAL CLEARANCE OF DEPT. OF FISHERIES (FISHERY ENGINEERING DIVISION) FOR CONSTRUCTION OF STAGE-II DEVELOPMENT OF FISHING HARBOUR AT VILLAGE- NUAGARH, ASTARANGA, DIST: PURI OF SRI ALOK RANJAN PATRA – EC.**

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**PART-A: SPECIAL CONDITIONS:**

1. The proposal shall not attract the following Acts & Rules:
  - a) Forest Act 1980,
  - b) Wild life (Protection) Act,1972;
  - c) The Eco sensitive areas as notified under Environment (Protection) Act,1986;
  - d) Critically polluted areas as notified by CPCB and also shall not harm live stocks and human beings and disturb their activities.
2. The project proponent shall comply the conditions stipulated in CRZ Clearance vide letter No. 139/OCZMA, dated 30.05.2023 issued by Odisha Coastal Zone Management Authority (OCZMA), as per CRZ Notification 2011.
3. The industry shall comply both PCB NOC and CRZ conditions. This fishing harbour shall be utilized for only fishing and related activity and not to be used for the import or export of any other products / materials or for any other purposes.
4. The project proponent shall provide the Sewage Treatment Plant (STP). As the treated effluent is proposed for recycle, the suitable disinfection system is to be provided in addition to the STP proposed in the EMP. The STP shall be provided in open area.
5. Dual plumbing system to be provided for reuse of the treated effluent for flushing and other purposes.
6. Solar Energy systems to be planned to utilize at least one third of the roof area.
7. The building shall be designed for compliance with earth quake resistance and resisting other natural hazards.
8. The proponent shall use only fly ash-based products for construction, such as cement or concrete, fly ash bricks or tiles or clay fly ash bricks, or bricks, blocks or tiles or cement fly ash bricks or blocks or similar products or a combination or aggregate of them as required under MOEF&CC, Govt. of India fly ash notification.
9. Provision for Rain Water Harvesting (RWH) is to be made for collection, usage and also for ground water table maintenance.
10. The proponent shall use only LED lights in the common areas and internal roads.
11. The proponent shall create required Corpus Fund to ensure continuous operation of STP/ETP.
12. The proponent shall obtain required clearances if any from all regulatory Departments including Fire Department, before starting the construction.

  
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13. The project proponent shall implement the solid waste management as per the Solid Waste Management Rule, 2016 with in-site garbage segregation facility, applicable for construction projects;
14. The Project Proponent shall develop the avenue plantation along the approach road leading to the proposed project site.

**PART-B: SPECIFIC CONDITIONS:**

**I. CONSTRUCTION PHASE:**

- i) Temporary colonies of the labour work force, etc. should be established, outside CRZ and proper sanitation including toilets facilities should be provided. Sewage and other wastes generated in these settlements should not be released into the sea/ creek.
- ii) No ground water shall be extracted in the CRZ area.
- iii) No construction work other than those permitted in Coastal Regulation Zone Notification, 2011 may be carried out in Coastal Regulation Zone area.
- iv) No ecological sensitive areas such as mangroves should be destroyed during construction/ operation of the project.
- v) The wastewater generated by washing of jetties, cleaning and packing shed, net mending shed, etc. should be treated in the Effluent Treatment Plant before reuse.
- vi) Dredging operations shall be extended towards riverine side to maintain minimum depth during lowest low tide
- vii) Provision shall be made for the housing of the construction labour within the site with all necessary infrastructure and facilities such as safe drinking water, fuel for cooking, mobile toilets, mobile STP, medical health care, creche etc., The housing may be in the form of temporary structures to be removed after the completion of the project. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- viii) Temporary colonies of the labour work force, etc. should be established, outside CRZ and proper sanitation including toilets facilities should be provided. Sewage and other wastes generated in these settlements should not be released into the sea/ creek.
- ix) A First Aid Room shall be provided in the project both during construction and operation of the project.
- x) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- xi) Disposal of muck during construction phase should 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.
- xii) Soil and ground water samples will be tested to ascertain that there is no threat to

  
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ground water quality by leaching of heavy metals and other toxic contaminants.

- xiii) Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- xiv) Any hazardous waste including biomedical waste, if any, should be disposed of as per applicable Rules & norms with necessary approvals of the Andhra Pradesh Pollution Control Board.
- xv) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to E (P) Rules prescribed for air and noise emission standards.
- xvi) Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- xvii) Ambient noise levels should conform to the residential standards both during day and night as notified by the MoEF&CC, GOI from time to time. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by the CPCB.
- xviii) Ready mixed concrete must be used in building construction.
- xix) Storm water control and its re-use shall be as per CGWB and BIS standards for various applications.
- xx) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- xxi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xxii) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices of sensor based control.
- xxiii) Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on air-conditioning. If necessary, high quality double glass with special reflective coating in window is to be used.
- xxiv) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- xxv) Adequate measures to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits.
- xxvi) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.

  
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- xxvii) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of firefighting equipments, etc. as per National Building Code including protection measures from lightening etc.
- xxviii) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.

## II. Occupational Phase:

- i) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the SEIAA before the project is commissioned for operation. Discharge of treated sewage shall conform to the norms & standards of the Andhra Pradesh Pollution Control Board. Sewage Treatment Plant should be monitored on a regular basis. No waste water shall be discharged outside the premises until outlet is connected to public sewer line. Till such time, the excess treated sewage, if any, is to be discharged into an artificial pond within the premises and can be utilized for recreational purpose.
- ii) Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- iii) The solid waste generated should be properly collected & segregated before disposal to the Facility. The organic waste shall be composted.
- iv) The D.G. Sets shall be provided with acoustic enclosures and adequate stack height as per CPCB norms. The fuel used for the diesel generator sets should be low sulphur diesel and should conform to E (P) Rules prescribed for air and noise emission standards.
- v) Any hazardous waste including biomedical waste should be disposed of as per applicable Rules & norms with necessary approvals of the Andhra Pradesh Pollution Control Board.
- vi) The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use by the MoEF&CC, GOI/CPCB. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- vii) Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.
- viii) Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. A hybrid systems or fully solar system for a portion of the apartments should be provided by utilizing atleast 1/3<sup>rd</sup> roof area for solar energy system.
- ix) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.

  
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- x) Adequate number of parking spaces shall be provided for visitor vehicles. Rest room facilities should be provided for service population. The proponent shall provide public convenience facilities such as toilets, bathrooms, waiting rooms etc. for the drivers, workers etc. so as to maintain cleanness/hygienic conditions in the surroundings of the project.
- xi) The proponent shall comply with Energy Conservation Practices, Energy efficient practices and energy audit practices. Wherever feasible, green building concepts shall be adopted. Use of solar panels may be done to the extent possible.
- xii) Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.

The project proponent shall comply with the commitments made during public hearing. Putrefied and discarded parts of fishes should be removed from the Fish Landing Centre and converted into organic fertilizer.

The site should be kept free from pollution by providing suitable drainage system.

**PART-C: GENERAL CONDITIONS:**

- i) This order is valid for a period of 10 years.
- ii) "Consent for Establishment" shall be obtained from Odisha State Pollution Control Board under Air and Water Act before the start of any construction work at site.
- iii) The proponent shall submit half-yearly compliance reports in respect of the terms and conditions stipulated in this order & monitoring reports in hard and soft copies to the SEIAA, Odisha, District Collector and Ministry's Regional office, Bhubaneswar on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year.
- iv) Officials from the Regional Office of MoEF&CC, Bhubaneswar / The SEIAA, Odisha through the Regional Offices of Odisha State Pollution Control Board, who would be monitoring the implementation of environmental safeguards should be given full co-operation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents shall be submitted to the Regional Office, MoEF&CC, Bhubaneswar.
- v) In the case of any change (s) in the scope of the project, the project would require a fresh appraisal by this SEIAA. No further expansion or modifications in the project shall be carried out without prior approval of the SEIAA, Odisha.
- vi) The project proponent shall submit the copies of the environmental clearance to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- vii) The proponent shall obtain clearance from Fire Department. All other statutory clearances shall be obtained, as applicable by project proponents from the competent authorities.
- viii) The project proponent should 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

  
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letters are available with the Odisha State Pollution Control Board. The advertisement should be made within 7 days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bhubaneswar.

- ix) The funds earmarked for environmental protection measures (capital cost Rs.1858.5 lakhs and recurring cost is Rs. 626.5 lakhs) should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the SEIAA and Ministry's Regional Office located at Bhubaneswar.
- x) 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.
- xi) The SEIAA may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- xii) Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986 without any prior notice.
- xiii) These stipulations would be enforced among others under the provisions of 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 EIA Notification, 2006.

  
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