PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 13th JANUARY, 2023

The SEAC met on 13th January, 2023 under the Chairmanship of Sri Sashi Paul, Retd. IFS. The following members were present in the meeting.

1.	Sri. Sashi Paul	-	Chairman
2.	Dr. K. Murugesan	-	Member Secretary
3.	Dr. Chittaranjan Panda	-	Member
4.	Prof. (Dr.) H.B. Sahu	-	Member
5.	Prof. (Dr.) Abanti Sahoo	-	Member
6.	Dr. Ashok Kumar Sahu	-	Member
7.	Er. Fakir Mohan Panigrahi	-	Member (through VC)
8.	Prof. (Dr.) B.K. Satpathy	-	Member (through VC)
9.	Dr. K.C.S Panigrahi	-	Member (through VC)
10.	Shri. Jayant Kumar Das	-	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 ENVIRONMENTAL CLEARANCE OF M/S HARSHPRIYA CONSTRUCTIONS PVT LTD FOR PROPOSED CONSTRUCTION OF RESIDENTIAL-CUM-COMMERCIAL BUILDING (LB+UB+G+14) BLOCK A, (LB+UB+STILT+15) BLOCK-B, LB+UB+G+4 (BLOCK-C) AND G+2 (BLOCK-D) OVER BUILT-UP AREA OF 50991.911 SQM AT PATIA, BHUBANESWAR, KHORDHA DISTRICT OF SRI CHETAN KUMAR TEKARIWAL - EC

1. The proposal is for Environmental Clearance of M/s Harshpriya Constructions Pvt Ltd for Proposed Construction of Residential-cum-Commercial building (LB+UB+G+14) Block A,(LB+UB+STILT+15) Block-B, LB+UB+G+4 (BLOCK-C) and G+2 (BLOCK-D) over built-up area of 50991.911 sqm at Patia, Bhubaneswar, Khordha District of Sri Chetan Kumar Tekariwal.
2. As per EIA Notification dated 14th Sept, 2006, as amended from time to time; this project falls under Category "B", Project or Activity 8(a) Building and Construction projects (EIA Notification dated 14th Sep, 2006 as amended on 2009).
3. M/s Harshpriya Constructions Pvt. has proposed Residential-cum-Commercial Building on land of 2.07 Acres at Plot No.: 1140, 1141, 1141/4157, 1142, 1142/2350, 1143, 1146, 1147, 1138, 1148, 1146/2198 & 1161.
4. **Location and Connectivity –** The proposed site is located at Baramunda, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is Latitude - 20° 16' 18. 08" N & Longitude - 85° 48' 16. 49" E. and the area comes under Survey of India Toposheet No-73H/11, 73H/12, 73H/15 & 73H816.The project site is well connected with National Highway NH-16. The nearest railway station is Bhubaneswar Railway station at a distance of approx.

4.1 Km in East direction. The nearest airport is Biju Pattnaik Airport at a distance of approx. 2.4 Km in East direction from project site.

5. The building details of the Project:

Particular	Existing (As per EC)	Expansion	Permissible
Project Name	Proposed (LB+UB+G+9)Block A, (LB+UB+G+4)Block -B (UB+G+4)Block-C and (G+1)Block-D Storied Residential-cum-Commercial with Multiplex Building	Proposed Construction of Residential-cum-Commercial building (LB+UB+G+14) BLOCK-A,(LB+UB+STILT+15) Block-B, LB+UB+G+4(BLOCK-C) and G+2 (BLOCK-D).	
Plot Area	7809.200 sqm	8400.37 sqm	--
Ground Coverage	3135.373 sqm(40.15%)	3276.144 sqm (39 %)	
Built up Area	26812.79	50991.911 sqm	--
FAR Area	2.446	4.490	--
Maximum Height	32m	52.5 m	--
Road & Paved Area	2647.32	3360.15 sqm	--
Parking Area	7711.11 sqm	11179.84 sqm	30% of Residential & 50 % Commercial Area
Green Belt Area	1590.0 sqm	1764.07 sqm (21%)	(20 % of Plot area)
Power/Electricity Requirement & Sources	1467	TPCODL - 2559 KW, Solar - 280 KW, Total - 2839KW	--
No. of DG sets	2 x 500 KVA	3x750 KVA	--
Water requirement & Sources	115 KLD	156 KLD (Fresh)	--
Sewage Treatment & Disposal	180 KLD	STP Capacity 230 KLD	--
Estimated Population-Residential, Floating/visitors	2350 nos	Residential – 1660 nos. Commercial- 40 nos. Floating- 170 nos.	--

6. **Water Requirement** – Fresh Water consumption for the Residential People 1660 @ 90 lpcd = 149.4 m^3/day, Flushing for Residential People 1660 @ 45 = 74.7 m^3/day, Fresh Water Consumption for Floating People will be 170 nos @ 30 = 5.1 m^3/day, Flushing for Floating

People will be 170 @ 15 lpcd = 2.55 m^3/day, Fresh Water Consumption for Commercial People will be 40 nos @ 30 = 1.2 m^3/day, Flushing for Commercial People will be 40 @ 15 lpcd = 0.6 m^3/day, for Landscaping the required water will be 7.06 m^3/day.

Total Water requirement

Sl. No.	Description	Total Population	Per Capita Consumption (ltr/day)	Water Requirement (KLD)		
				Domestic	Flushing	Total
i)	Residential	1660 nos	135	149.4	74.7	224.1
ii)	Floating	170 nos	45	5.1	2.55	7.65
iii)	Commercial	40 nos	45	1.2	0.6	1.8
			TOTAL	**155.7 ≈ 156.0**	**77.85 ≈ 78.0**	**233.55 ≈ 234.0**

Table for Wastewater Calculations

Details	Water (KLD)
Water requirement for domestic purpose	156.0
Wastewater generated from domestic use (@ 80 % of domestic water requirement)	146.15
Water requirement for Flushing Purpose	78.0
Wastewater generated from Flushing (@ 95 % of flushing requirement)	74.1
Total Wastewater generated	**146.15+74.1 = 220.25 KLD**
STP Loss (5 % of wastewater generation)	**11.01**
Recycled water form STP @ 95 % of wastewater generated	**209.24**

7. Rain Water will be harvested through 35 nos. of Rain Water recharging pits.
8. **Power Requirement** - The total consolidated electrical load estimate for proposed project is about 2839 KW. Power generated from Solar is 279.6 KW from 250 nos. of PV solar panels. Power backup incase of grid failure will be by 3 nos. of DG sets of 750 KVA capacities.
9. **Solid waste Management -** From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.4 kg/capita/day, which will be about 1660 x 0.45 = 747 kg/day. Waste generated from Commercial people will be @ 0.15 kg/capita/day, which will be about 40 x 0.15 = 6 kg/day. Around 110 kg/day of STP sludge will be generated. Sludge will be used as manure in landscaping. 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.

S. No.	Category	Counts (heads)	Waste generated
i)	Residents	1660 @ 0.45 kg/day	747.0
ii)	Commercial	40 @ 0.15 kg/day	6
iii)	Road sweeping	170 @ 0.1 kg/day	17.0
iv)	STP sludge		110
	TOTAL SOLID WASTE GENERATED		**880 kg/day**

10. **Green Belt**- Green belt will be developed over an area of 1764.07 sqm which is 21.0 % of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.
11. **Parking Details –** Total parking area allocated to the project is 11179.84 m^2/ 318ECS.
12. The project cost is ` 75 crores.
13. The proponent along with the consultant **M/s. Centre for Envotech & Management Consultancy Pvt. Ltd. Bhubaneswar** made a detailed presentation on the proposal on 15.07.2022.
14. The SEAC in its meeting held on 15.07.2022 decided to take decision on the proposal after receipt of certain information / documents from the proponent followed by site visit of the sub-Committee of SEAC.
15. The Project proponent has requested along with minutes of 95th EAC meeting of MoEF&CC, Govt. of India to delist the proposal, since the proposal has already been granted Environment Clearance in 95th Expert Appraisal Committee (EAC) dated 15.09.2022.

After detailed discussion, the SEAC recommended to return the proposal to SEIAA with a request to delist the proposal as requested by the proponent.

ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S RIVER FRONT DEVELOPERS PVT. LTD FOR PROPOSED RESIDENTIAL CUM COMMERCIAL APARTMENT [INTEGRATED ENVELOPE 3B + GF (COMMERCIAL) UPPER STILT +FIRST FLOOR (AMENITY FLOOR)+ SF (SERVICE FLOOR)+ 4 TOWERS OF 22 MULTI STORIED RESIDENTIAL APARTMENT BUILDING OVER CDA ALLOTTED DRAWING PLOT NO. 713,714,715,716,717,718,719 CORRESPONDING TO REVENUE PLOT NO. 94/2145, 95 (P), 98 (P) OVER AN BUILT-UP AREA 98706.93SQM OF MOUZA BIDAYDHARPUR UNDER SECTOR-8, BIDANASI PROJECT AREA IN FAVOUR OF SRI MANOJ KUMAR SAHOO - EC

1. The proposal is for Environmental Clearance of M/s River Front Developers Pvt. Ltd for Proposed Residential Cum Commercial Apartment [Integrated envelope 3B + GF (commercial) upper stilt +First Floor (Amenity Floor)+ SF (service floor)+ 4 towers of 22 multi storied residential apartment building over CDA allotted drawing plot no. 713,714,715,716,717,718,719 corresponding to Revenue plot no. 94/2145, 95 (P), 98 (P) over an built-up area 98706.93sqm of Mouza Bidaydharpur under Sector-8, Bidanasi project area in favour of Sri Manoj Kumar Sahoo .
2. As per EIA Notification dated 14th Sept, 2006, as amended from time to time; this project falls under Category “B”, Project or Activity 8(a) Building and Construction projects (EIA Notification dated 14th Sep, 2006 as amended on 2009).
3. M/s River Front Developers Pvt. Ltd has proposed a Residential Cum Commercial project [Integrated envelope 3B + GF (commercial) upper stilt +First Floor (Amenity Floor) + SF (service floor) + 4 towers of 22 multi storied residential apartment building over CDA allotted drawing plot no. 713,714,715,716,717,718,719 corresponding to Revenue plot no. 94/2145, 95 (P), 98 (P) in Khata no – 330 of Mouza Bidaydharpur under Sector-8, Bidanasi.

4. M/S. River Front Developers Pvt. Ltd. has obtained the land possession about 2.43 Acres. Proposed Built-up area-98706.93 m2 FAR Area: - 68396.9 m2 (6.95) at present the land is a barren land. The land has been earmarked for construction of residential building as per Plan approved by Cuttack Municipal Corporation.
5. **Location and Connectivity –**The Geographical co-ordinate of the project site is Latitude: 20°28'26.35"N and Longitude: 85°49'43.35"E and the area comes under Survey of India Toposheet No- 73H/11, 73H/12, 73H/15 & 73H816. The site is located close to Cuttack-Naraj-Athagarh Road which connects to Ring Road at Subhash Chandra Bose Sqaure, the Ring Road then connects to NH-16 at Link Road Square (covering a total of 10.5 km by road). and the site is approximately 12 km (by road) from Cuttack Railway Station. The nearest airport is Biju Pattnaik Airport at a distance of approx. 24 Km from project site.
6. The building details of the Project:
    - The project will be developed on the land measuring 9837.44 Sqmt or 2.43 Ac or 0.98338 Ha.
    - Plot Area = 2.43 Acres (9837.44 Sqm) As Per The Submitted Document
    - Plot Area as Per Plan = 9837.44 Sqm
    - Total Construction Area = 98706.93 Sqm
    - Total Built-Up Area = 68396.9 Sqm (FAR Area)
    - Total FAR = 6.95
    - Area Permissible For Ground Coverage=3939.1 Sqm
    - Total Ground Coverage Area Provided = 3924.4 Sqm
    - Total Ground Coverage In Percentage = 39.85 %
    - Total Parking Area Provided = (31.68 %) Of The Far Area
    - No. Of Blocks = 1
    - TOTAL NOS OF TOWER PROVIDED FROM THE HEIGHT OF 17.2m OF THE BLOCK For Residential Purpose = 4 Nos
    - No. Of Floors = Basement B1 + Basement 02 + Basement 03 + Commercial+ Upper Stilt For Parking + Amenity Floor + Service Floor + 22 Floors Of Residential Required Society Area for 440 Units = 440 Sqm.
    - Society Area Provided = 440.12 Sqm.
7. **Water Requirement** – Total Fresh Water requirement is 224 m3/day. Total Flushing Water requirement is 116 m3/day. Total Water requirement is 340 m3/day (fresh water + flushing water). Waste water generate is 272 m3/day treated in STP of capacity 300KLD. Treated water recovered is 218 m3/day. During non-monsoon period there is zero discharge and in monsoon period, 24KLD discharge to drain.
8. Rain Water will be harvested through 30 nos. of Rain Water recharging pits.

9. **Power Requirement** - Total electrical load for the project during operation phase 4431KW. In case of emergency, power backup is provided through DG Set is 1000 KVA (2X500KVA). Total Solar Panel to be installed - 5% of the total load i.e. 4434 KW x 5% = 221.7 KW or say 220 KW (880 Panel of 250Watts each).
10. **Solid waste Management -** The solid waste generated from the project shall be approx. 1125 kg/day. The total biodegradable solid waste will be 739 kg/day and total non-biodegradable solid waste will be 386 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. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid waste and construction and demolition waste. Biodegradable waste will be treated in a Organic Waste converter having capacity of 750 kg /Day.
11. **Green Belt**- Green belt will be developed over an area of 1969.87 sqm which is 20.02% of the plot area; by using the local species.
12. **Parking Details –** Total parking area allocated to the project is 21674.64 m^2/ 677ECS.
13. The project cost is ` 190 crores and EMP cost - ` 115 Lakh & Recurring Cost is ` 3.1 lacs.
14. The proponent along with the consultant **M/s. Visiontek Consultancy Services Pvt. Ltd. Bhubaneswar** made a detailed presentation on the proposal.
15. The SEAC in its meeting held on 15.07.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by Site visit of the sub-Committee of SEAC.
16. The proposed site was visited by the sub-committee of SEAC on 14.11.2022. Following were the observations of the sub-committee. The proponent was requested to submit the compliance as observed by the sub-committee of the SEAC as follows:

    i) Traffic Study Report vetted from reputed institute to be submitted.

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

    iii) Location, Source and utilisation/ disposal of STP effluents.

    iv) Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain.

    v) Permission for drawl of ground water.

    vi) Structural Stability Certificate

    vii) Fire fighting plan to be submitted along with fire safety recommendation.

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

    ix) Stack height vs building height may be furnished.

    x) Layout for green belt.

    xi) Details of land documents, Kissam, conversion, etc., if any.

Proceedings of the SEAC meeting held on 13.01.2023 (Old proposals – compliance received)

xii) Determining the High Flood Level and submission of soil testing report along with it.

xiii) Possibility of water seepage during high flood in Kathajodi in basement parking area to be ascertained.

xiv) Layout map for parking, entry and exit gates.

17. 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
i)	Revisit water balance and submit with backup calculation.	During Operation Phase : ➢ Total Fresh Water requirement is 224 KLD. ➢ Total Flushing Water requirement is 116 KLD. ➢ Waste water generate is 272 KLD. ➢ Treated water recovered is 218 KLD ➢ During rainy season 48 KLD of treated waste water will be discharge to nearest Municipal Drain. Source: Ground Water Details of water requirement and water balance is attached as **Annexure-1.**
ii)	Traffic Study Report vetted from repute institute to be submitted.	Traffic Study Report is attached as **Annexure-2.**
iii)	Layout of internal drainage map and their fallout to external public drain.	The layout of internal drainage map has been prepared. There is underground drainage system in north side approach road by the Cuttack Municipal Corporation which is very close and adjacent to the project site. It is proposed to connect the internal drainage system to the existing external drainage. There is provision of rooftop rainwater harvesting structure to recharge the rain water accumulated on roof top to deep aquifer. The external drainage system runs through Sector-8 of CDA and outfall into Peta Nalah which outfall into Kathajodi river near Belleview. The map showing the internal drainage and its proposed connection to existing external underground drainage system of CDA is attached as **Annexure-3**.
iv)	Layout showing Rainwater Harvesting pits, DG sets, STP, greenbelt.	The layout map showing roof top Rainwater Harvesting pits/ structure, DG sets, STP, Greenbelt has been prepared and submitted to the development authority. The map showing Rainwater harvesting

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		pits (rooftop rainwater harvesting structure), DG set, STP, Greenbelt is attached as **Annexure-4. 4.1 & 4.2**
v)	Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain.	The Cuttack Municipal Corporation, Cuttack is authority of the external drainage system leads to Peta Nalah. Cuttack Municipal Corporation have approved the project in its 4th DP &BP Committee meeting held on 01.02.2022and communicated vide letter No 382 (PLG/ DP/CMC) dated 23.02.2022. The necessary approval of the project has been granted by the Cuttack Municipal Corporation, Biju Bhawan, Chaudhary bazaar, Cuttack in B.P.No. 80/2022/CMC and communicated vide memo no. 1189(PLG) BP/CMC, Cuttack dated 21-06-2022 wherein in condition 14, the permission is accorded with a condition for payment of Rs. 1,90,13,088.41 in four equal installment out of which Rs. 47,53,273(Forty seven lakhs fifty three thousand two hundred seventy three only) has been paid on 17-06-2022 to CMC by the project proponent as first installment towards External Infrastructure Development Plan(EIDP).The balance amount as per the installment in time frame will be deposited to CMC Memo no. 1189(PLG) BP/CMC, Cuttack dated 21-06-2022 of Cuttack Municipal Corporation is attached as **Annexure-5**.
vi)	Permission from WR deptt. for drawl of ground water.	During construction phase of the project the required water both for construction purposes and used by the workmen will be supplied through Pvt. Tanker. Permission from Central Ground Water Board has been obtained for drawl of required quantity of ground water during operation phase. Permission from WR Deptt. will be obtained as per Odisha Irrigation Rules 1961 and its Amendment from time to time during the year 1993, 2010, 2012 and 2016 before drawl of required ground water during operation phase. Separate bore well has been proposed for commercial and domestic use which is shown in the drawing. The map showing location of bore-well for

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		commercial use and bore-well for domestic use is attached as **Annexure-4**.
vii)	Explore the possibility source of water from Kathajodi River for the project.	The Kathjodi river near to the project and the minimum width of the river both 5 km Upstream and Downstream of the project is 2.5 km. It is observed that the river is very often changing its coarse with sand casting in either side. The project is basically a residential cum commercial building which needs 24X7 water supply during operation phase. The intake well may suffer with shortage of water in future when the river changes its course. Since this project is a small one for catering need of 2200 persons in residential unit with total fresh water requirement of 224 KLD. The proposal for drawl of water from Kathajodi river is not feasible as per the study.
viii)	Reduce the quantity of water required for the project.	It is proposed for treated waste water recycling and reuse for flushing, car washing, road washing and plantation. Besides low water consumption and plumbing fixtures will be installed to reduce the quantity of water required as per provisions for green building during operation phase. It is also proposed to use curing compound during the construction phase to reduce the water requirement towards curing. However the water requirement of 135 LPCD has been considered as per standard norm during operation phase. All possible steps will be incorporated during construction and operation phase for minimal use of water.
ix)	Structural Stability Certificate procured from CDP approved planners as per CDA by law and one copy to be submitted to WR deptt.	The project has been conditionally approved in fourth DP and BP committee meeting of Cuttack Municipal Corporation held on 01-02-2022 and communicated vide Letter no. 382(PLG/DP/CMC) dated 23-02-2022 in file no. PLG-BP-80/2022 wherein Cuttack Development Authority is a member of the committee and CMC has been pleased to approve the building plan and communicated vide memo no. 1189(PLG)BP/CMC, Cuttack dated 21-06-2022. In the above approval order in condition (iv) construction of the project will be ensured considering all structural elements/safety factors vetted by IIT, Guwahati vide letter dated 08-02- 2022.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		The structural design is being taken up by Mr Sanjiv J. Parekh being registered structural engineer of Directorate of Town Planning, ODISHA, Bhubaneswar vide registration No RTP/DTP(ST.ER) – 457/2022 valid up to 28.09.2025. Besides the structural element/ safety factors has been vetted by IIT, Guwahati vide their dated 08.02.2022 submitted to CMC. The letter no. 382(PLG)BP/CMC dated 23-02-2022 and memo mo. 1189(PLG)BP/CMC, Cuttack dated 21-06-2022 , Letter dated 08.02.2022 of IIT Guwahati and Copy of the Registration certificate of Sri SANJIV J. PAREKH bearing registration No RTP/DTP(ST.ER) – 457/2022 valid up to 28.09.2025 as technical person of Development authority is attached as Annexure-6.
x)	Cost of Solar Installation to be calculated and EMP budget and to be resubmitted.	Cost of Solar Installation to be calculated and EMP budget and to be resubmitted
xi)	Mitigation measures suggested for disaster management plan with Funds allocated towards it.	The building has been designed considering the seismic load, wind load as per the NBC 2016 and all terms and conditions imposed in the Fire recommendation given by the Fire Officer, Fire Prevention Wing, Cuttack vide fire recommendation no. RECOMM1101020082022000578 dated 28-04-2022 will be followed strictly during construction and operation phase. The required budgetary provision for construction of project to mitigate the recommendation has been made. Further an amount of Rs. 15, 00,000 is allotted by the project proponent and deposited in separate accounts of the society before handing over and the same will be utilized for Disaster Management purposes as and when required during operation phase as per decision of the society.
xii)	Increase no. of tree plantation to reduce discharge of treated water to drain.	During dry season there it will be follow zero discharge of surplus treated wastewater and 48 KLD will become surplus in monsoon season and will be discharged into municipal sewer. Sewerage treated water can be used in Toilet Flushing & non domestic utilization to reduce the load on fresh water.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		Water balance diagram is attached as **Annexure-1.**
xiii)	Determining the High Flood Level and submission of soil testing report along with it.	**Flood:** The high flood level of river kathajodi at Belview 2 km downstream of project site as collected from WR deptt. Is at RL 26.70 mtr on dated 20.08.2008 during the year 2008. The floor level of commercial units has been proposed in the project above 1.8m from existing embankment top level of river Kathajodi and the floor level of residential units are above 10.80 mtr. Above the top level of the Embankment level of the River Kathajodi. **SOIL TESTING REPORT:** The soil testing of the project site has been conducted. Soil testing report is attached as **Annexure-7.**

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

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

ii) **The Proponent shall obtain permission/NOC from Executive Engg (PHD) and / or from the appropriate authority for disposal of excess STP treated water to the nearest drain without which the Proponent will not start construction work. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission and possession as the case may be**

iii) **The proponent shall take all preventive measures during construction phase for possibility of seepage into basement, from river Kathajodi during high flood.**

iv) The proponent shall use solar energy at least to the tune of 5%of total power requirement as proposed.

v) Trees located within the project area shall be transplanted to alongside the boundary green development area.

vi) 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.

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

viii) The proponent shall Comply to the provision of structural stability certificate as per the bye-law of the Development Authority.

ix) When the public water supply will be available adjacent to/ in the vicinity of the proposed project in future, the PP shall avail it following due procedure of the Govt if the concerned authority agrees and dispense with the drawl of ground water except one borewell for emergency purpose. The PP shall take up suitably for the purpose with the concerned authority of the Government.

x) The structural stability shall be vetted by NIT or IIT before construction.

xi) The traffic study report shall be vetted by reputed institution before construction.

xii) The PP shall adhere to terms of Agreement with CDA.

xiii) **All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.**

ITEM NO. 03

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR "DIAMOND CITY CUTTACK" RESIDENTIAL APARTMENT ALONG WITH COMMERCIAL BUILDING PROJECT LOCATED AT PLOT NO2340, 2340/3563, 2343, 2333/5410, 2343/5411, 2344, 2334/6142, 2346/5962, 2347, 2347/5956, 2348, 2248/5496, 2248/5497 OVER BUILT-UP AREA OF 54514.323 SQM LOCATED IN THE VILLAGE: PRATAPNAGARI, NUAGADA, DISTRICT: CUTTACK OF M/S. EASTERN ESTATE CONSTRUCTION AND DEVELOPERS PVT. LTD OF SRI SANJEEV KUMAR - EC

1. The proposal is for "Diamond City Cuttack" Residential Apartment along with Commercial Building Project Located at Plot No2340, 2340/3563, 2343, 2333/5410, 2343/5411, 2344, 2334/6142, 2346/5962, 2347, 2347/5956, 2348, 2248/5496, 2248/5497 over built-up area of 54514.323 sqm located in the Village: Pratapnagari, Nuagada, District: Cuttack of M/s. Eastern Estate Construction and Developers Pvt. Ltd of Sri Sanjeev Kumar.
2. The project falls under category "B" or activity 8 (a) - Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Eastern Estate Construction & Developers Pvt. Ltd. for Residential Project "Diamond City, Cuttack" on plot area 10,039.85 m^2 /2.48 acres located at Village: Pratapnagari, Nuagada, District: Cuttack, Odisha and total built up area – 54,513.32 m^2. A part of project was approved for the built-up area i.e. 16,161.56 sq.m vide letter PLN-BDP-420/15 and construction was started based on that, which was less than 20,000 sq.m. Now the planning has been revised and the estimated Built-up area is 54,513.32 sq.m (including all FAR, Non-FAR and other services), which is more than 20,000 sq.m area which attracts the EIA notification 2006 and its amendments thereof.
4. **Location and Connectivity –** The proposed site is located at Village: Pratapnagari, Nuagada, District: Cuttack, Odisha. The Geographical co-ordinate of the project site are Latitude: 20°23'31.26"N & Longitude: 85°53'9.06"E. The site is very near to AH 45 (NH 16 Bhubaneswar Road) is approx. 0.06 m in SW direction. Ring Road is approx. 1.92 km in ENE direction. The

nearest railway station is New Bhubaneswar Railway Station approx. 5.337 km in West direction from the project site. Biju Patnaik International Airport is at a distance of approx. 17.284 km in SW direction from the project site. Chandka-Dampara Wild Life Sanctuary is about 6.9 km in NW direction. Nandankanan Wild Life Sanctuary is about 5.9 km in W direction.

5. The site is coming under Cuttack Municipal Corporation.

6. The plot area of the project site is 10039.85 m^2 (2.48 acres) and estimated built-up area of the project is 54514.323 m^2. Total population of project is 2,425 persons (including Residents + Staff + Visitors).

7. The project facilities will develop 388 Dwelling Units which includes three blocks (2B+S+12), one block (B+S+8), Commercial (S+5) & Club House (2B+2) & other services and amenities.

8. The building details of the Project:

S. No.	Particulars	Details
i)	Total Plot Area (Acres)	2.48
ii)	Total Plot Area (Sq.m)	10039.85
iii)	Total FAR Area (Including Services)	40346.04
iv)	Achieved FAR	4.0
v)	Ground Coverage (Permissible) 40% (sq.m)	4015.94
vi)	Achieved Coverage (Permissible) 38.50% (sq.m)	3865.34
vii)	Non Far (Combined Stilt and Basement built-up area)	12168.261
viii)	Miscellaneous Area (Guard Room, STP, UGT etc.)	2000
ix)	**Total Built-up Area (3+8+9)**	**54514.323**
x)	Green belt Area (sqm) (20% of total plot area)	2007.97
xi)	Paved Open Green & Avenue Green area (sq.m) (13% of total plot area)	1305.18
xii)	Road and Open Area	1857.38
xiii)	No. of DU	388.0
xiv)	Total Project Cost (Land + Development Cost)	75 Crores
xv)	No. of DG sets for Backup (KVA)	1x62.5+2x400
xvi)	Total Power Requirement KVA	2300.0
xvii)	Maximum Height of Building (m)	46

9. **Water Requirement** – The total water requirement will be 280 KLD. The fresh water requirement will be approx. 180.5 KLD, which will be provided by Bhubaneswar Municipal Corporation. The project will generate approx. 235 KLD of wastewater. The wastewater will be treated in onsite STP of 280 KLD capacity. Treated wastewater will be re-used for flushing, landscaping, floor & car washing. Surplus treated effluent will be discharged to external sewer with permission.

10. **Total no. of Rainwater Harvesting pits** – 10 nos for the project.

11. **Power Requirement** - The total power requirement for the Residential Project is 2300 kVA, The Source of Power supply will be from (Odisha State Electricity Board). There will be provision of 3 no. of DG sets of total capacity 862.5 KVA (1×62.5+ 2×400 KVA each) for power

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

12. **Solid waste Management** - The solid waste generated from the project shall be approx. 591 kg per day. The solid waste will be collected then segregated at source. Adequate number of coloured bins (green, blue & dark grey) separate for biodegradable and non - biodegradable are proposed to be provided at the strategic locations within the site. STP sludge is proposed to be used for horticultural purpose as manure. Landscaping waste/ Biodegradable waste will be composted by Organic Waste Converter 100 sq.m area has been proposed for OWC. Spent oil from DG sets will be sold to CPCB authorised recyclers.

S. No.	Category	Kg per capita per day	Waste generated (kg/day)
i)	Residents	1940 @ 0.5 kg/day	**970**
ii)	Staff	107 @ 0.25 kg / day	**26.75**
iii)	Visitor	281 @ 0.15 kg /day	**42.6**
iv)	Landscape waste	0.8184 @ 0.2 kg/acres	**0.16**
Total Solid Waste Generated			**1039.35 kg/day**

Note: Sludge from STP: 14.68 Kg/day, which will be dried and used as Manure in landscaping.
(Sludge Calculations = (Inlet BOD- Outlet BOD) x WW x 0.25
(= (280 – 30) x 235 x 0.25 = 14.68 Kg/day)

13. **Green Belt** – Total Green area including paved green / open area measures 3312 m2 i.e. 33 % of the total area. In which peripheral green belt including external and internal periphery area is 2007.97 (20 % total area), Open Pavered Green, Terrace Green and Vertical green area is 1003.985 (10 % total area) and Lawn Green Area 301.19 (3% of total area). Total no. of trees proposed = 132 Nos**.**

14. **Parking Details –** Total Parking Area Provided - 10694.10 Sq. Mt / 334 ECS.

15. **Rain Water harvested** through 10 nos. of Rain Water recharging pits.

16. **Firefighting Installations:** Firefighting system will be installed as per recommendation of the Firefighting Officer, Odisha and as per the provisions given in Part-IV of National Building Code of India -2016 and relevant BIS specifications.

17. The project cost is 75 crores and Environmental Monitoring Programme Cost – 241 lakhs, which is approx. 3 % of total project cost.

18. The project proponent along with the consultant **M/s OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd., Ghaziabad, U.P - 201012** made a detailed presentation on the proposal on 03.08.2022.

19. The SEAC in its meeting held on 03.08.2022 decided to take decision on the proposal after receipt of certain information / documents from the proponent followed by site visit of Sub-Committee of SEAC. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent

Proceedings of the SEAC meeting held on 13.01.2023 (Old proposals – compliance received)

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
i)	Structural Stability certificate from appropriate authority as per CDA guidelines be submitted and vetted from reputed institute with reference to approved original plan and the revised plan approved.	Structural drawings are being vetted by BIT Engineering College, Sindri, and Government of Jharkhand as per CDA guidelines. The final drawings are under process and will submit in the due course of time. Affidavit regarding the same is attached with the reply. PO and Receipt is attached as an **Annexure (a)**.
ii)	Separate two entry and exit gates to be made for residents and commercial.	Commercial area is planned for the person is adding inside the residential project. Although for access control, separate entry/exit gates for commercial with boom barriers are provided. Parking plan with marking of separate entry and exit gates for residents and commercials is attached as **Annexure (b)**.
iii)	Certificate from Charted Civil Engineer how much construction has been made. Construction status with reference to original plan and revised plan.	Civil Engineer certificate is attached as an **Annexure C**.
iv)	Comparative statement in terms of physical features in original plan and present plan.	Comparative area statement in terms of all the salient features is attached as **Annexure (d)**.
v)	Parking in terms of space and ECS for 4 wheelers, 2 wheelers including bicycles be calculated separately for dwellers & visitors (floating population) and also for commercial complex the norm as well and showing it in the layout map & be submitted since provision of 356 ECS against 388 dwelling units proposed.	Detailed parking calculation and parking plan is attached as **Annexure (e)**.
vi)	Detailed calculation of Rain Water Harvesting and Layout showing Rainwater Harvesting pits.	Detailed Rain water harvesting calculations and RWH plan is attached as **Annexure (f)**.
vii)	Layout map showing the treated water fallout to nearest drain and it's distance.	The Distance from our project site to nearest public drain is 30m which falls in the service road of NH-16 on our own cost shall be developed by PP. Drainage Map showing terminal discharge is attached as **Annexure (g)**.
viii)	Layout of internal drainage map and their fallout to external public drain.	Map showing internal drainage and their fallout to external public drain is located at ROW of service road of NH-16 is attached as **Annexure (g)**.
ix)	Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain.	NOC from CDA regarding the discharge of the treated water is attached as **Annexure (h)**.
x)	Reduce discharge of treated water to drain.	Revised water balance diagram is attached as **Annexure (i)**.
xi)	A detailed write up with justification as	Justification for being non violation case is

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Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	to why this case will not be treated as violation case.	attached as **Annexure (j)**.
xii)	Traffic study be undertaken at intersecting points with NH from a reputed Institute or vetted by a reputed Institute be submitted.	Traffic study duly vetted by School of Civil Engineering, KIIT Deemed to be University, Bhubaneswar is attached as an **Annexure (k).**
xiii)	Impact/ effect of change in ground coverage due to revised plan and to be shown in the layout drawing with dimension.	Comparing Area Statement comparing the ground coverage is attached as **Annexure (l)**. According to Old Drawing, Ground coverage is 35% out of 40% of the Total Plot area. There is no significant change in the ground coverage.
xiv)	A comparative statement of original plan vis- a - vis the revised plan with super imposition of the revised one on the original one be submitted.	Comparative area statement attached as annexure (d) and Superimposed plan is attached as **Annexure (m)**.
xv)	Quality of underground water	Test report is attached as **Annexure (n)**.
xvi)	To explore whether Puri canal be source of domestic water since it is at 340 mtrs with provision of WTP.	There is no provision of supply from the Puri canal supply. Henceforth, we have applied to CGWA for fresh water supply dated on 10.11.2021 till the Cuttack municipal Corporation does not start. Application of the same is attached as **Annexure (o).**
xvii)	The PP to submit sabik RoR with kisam, Hal RoR with kissam for the project area to rule out the investment of Forest/DLC land.	Gharbari documents are attached as **Annexure (p)**.
xviii)	To submit the Fire Safety recommendation of the State Government Fire wing.	Fire recommendation is attached as **Annexure (q)**.
xix)	To submit the plan for Ventilation, lightning and air conditioning of lift from lowest basement floor to terrace floor.	Ventilation, lightning and air conditioning plan for lift from lowest basement floor to terrace floor is attached as an **Annexure (r)**.
xx)	Provision of solar power for the project.	Solar water heater and solar street lights are proposed all over the project. Calculated Quantum of the project is attached as **Annexure (s)**.

20. The proposed site was visited by the sub-committee of SEAC on 14.11.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    i. Structural Stability certificate vetted from reputed institute.

    ii. Separate two entry and exit for four wheelers, 2 wheelers including bicycles for dwellers & visitors and also for commercial complex.

    iii. Detailed calculation of Rain Water Harvesting and layout showing Rainwater Harvesting pits.

    iv. Separate Parking for residents, guests and commercial

v. Lay out map for entire drainage system for planned four blocks including commercial unit

vi. Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain.

vii. Traffic study be undertaken at intersecting points with NH from a reputed Institute or vetted by a reputed Institute be submitted.

viii. Firefighting plan to be submitted along with fire safety recommendation.

ix. Details of solar power calculation, generation and use in % of total power.

x. Permission for drawing ground water from concerned authorities.

xi. Location, Source and utilisation/ disposal of STP effluents.

xii. Details of solar power calculation, generation and use in % of total power

xiii. Details of Land documents, Kissam, conversion, etc., if any.

xiv. Stack height vs building height may be furnished.

xv. Layout for green belt.

21. The proponent has already submitted most of the information and documents as desired by the sub-committee of SEAC. However, they need to submit the following information as desired by the sub-committee of SEAC.

a) Separate Parking for residents, guests and commercial

b) Permission for drawing ground water from concerned authorities.

c) Stack height of DG Set vs building height may be furnished.

d) Layout for green belt.

22. The Committee opined the following:

i) The proponent has clarified that a part of project was approved for the built-up area i.e. 16,161.56 sq.m vide letter PLN-BDP-420/15 and construction was started based on that, which was less than 20,000 sq.m. The current construction is 1673.84 sqm till date which is based upon old drawing and does not exceed the permissible limit approved. Now the building plan has been revised and approved by CMC vide letter no.1130 (PLG)BP/CMC dated 13.06.2022 over plot area 2.48 acre with the estimated built-up area 54,513.32 sq.m (including all FAR, Non-FAR and other services), which is more than 20,000 sq.m area which attracts the EIA notification 2006 and its amendments thereof. The project proponent claims that it will not be treated as a violation case as they have started constructed activity for the project having built-up area less than 20,000 m^2 as per the building plan approved for built-up area of 16,161.56 sq.m. However, they have not submitted copy of building plan approval letter for built-up area of 16,161.56 sq.m. Moreover, justification given by the proponent is silent about whether the

proposed project of built-up area 54,513.32 sq.m will be constructed over the foundation made by the project for the built-up area of 16,161.56 sq.m. If, this will be the fact, than the project proponent had taken building plan approval for built-up area less than 20,000 m^2 just to avoid Environmental Clearance when the actual built-up area 20,000 m^2. Hence, the project proponent needs to submit certificate from the CDA that the proposed project of built-up area 54,513.32 sq.m will not be constructed over the foundation made by the project for the built-up area of 16,161.56 sq.m and this will be separate project within the same premises.

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

a) Separate Parking for residents, guests and commercial

b) Permission for drawing ground water from concerned authorities.

c) Stack height of DG Set vs building height may be furnished.

d) Layout for green belt.

e) Copy of building plan approval letter for built-up area of 16,161.56 sq.m.

f) Certificate from the CDA that the proposed project of built-up area 54,513.32 sq.m will not be constructed over the foundation made by the project for the built-up area of 16,161.56 sq.m and proposed project will be a separate project within the same premises.

ITEM NO. 04

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR DEVELOPMENT OF PRIVATE HOUSING PROJECT 2.191 ACRES OF LAND AT PLOT NO.: 336/2120, 336/3046, 336/3035, 336/2764, 336, 336/3221, 334/2272 KHATA NO- 703/362, 703/1499, 703/1496, 703/1222, 703/2256, 703/1720, 703/559, OVER AN BUILT-UP AREA – 47957.9 SQ.M NEAR NH-16 ROAD, AT-PATRAPADA, BHUBANESWAR, DIST – KHORDHA FOR M/S. UTKAL BUILDERS LTD OF SRI RAKESH BHURA – MOD EC

1. The proposal is for Modification of Environmental Clearance of M/s. Utkal Builders Ltd. for Development of Private Housing Project 2.191 Acres of land at Plot No.: 336/2120, 336/3046, 336/3035, 336/2764, 336, 336/3221, 334/2272 Khata No- 703/362, 703/1499, 703/1496, 703/1222, 703/2256, 703/1720, 703/559, over an built-up area – 47957.9 SQ.M Near NH-16 Road, at-Patrapada, Bhubaneswar, Dist – Khordha of Sri Rakesh Bhura.
2. Environmental Clearance from SEIAA vide letter no. 1739/SEIAA, dated 16.07.2021 of total built up area is 33,621.35 sqm and total nos. of floor is 17 nos. in Residential Block & 4 Nos. in Commercial Block, but due to height restriction from Airport Authority of India we have reduce the 5 nos. of floor in Residential Block & increased the 8 Nos. of Floor in Commercial Block (Convenient Store) & revised the built-up area i.e. 47,957.94 sqm.
3. **Location and Connectivity** - The proposed site is located at Patrapada, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude -20° 14’ 44.81” N & Longitude - 85°

46’ 32.78” E. The project site is well connected with National Highway-16 (Jharpokharia-Chennai Road). The nearest railway station is Bhubaneswar Railway station at a distance of approx 10.6 Km in South West direction. The nearest airport is Biju Pattnaik Airport Bhubaneswar at a distance of approx. 13.4 Km in South-West direction from project site.The site is located adjacent to the local landmarks, Haridaspur Mosque, Jagannath Temple, Pahala Etc. There is no structure or encroachments on the site. The site is easily accessible from NH-05 Road.

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

5. **Building Details of The Project:**

Total Plot Area	**:**	**8,866.66 sqm**
Kisam of Land	:	Gharabari
Residential Builtup Area	:	33,350.98 sqm
Commercial Builtup Area	:	14,606.96 sqm
Total Builtup Area	**:**	**47,957.94 sqm**
Total FAR Area	**:**	**36,535.71 sqm**
Ground Coverage	:	3,015.00 sqm
Road & Paved Area	:	2,483.00 sqm
Green Belt Area	:	1,793.52 sqm
Total Parking Area	:	11,922.22 sqm
Height of the Building	:	42.00 m

6. **Water requirement:** Fresh make up of **104.0 m^3/day** will be required for the project which will be sourced from Ground water. Waste water of 132.1 KLD will be treated in a STP of 150 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the Near Drain.

7. **Power requirement:** The daily power requirement for the proposed building is preliminarily assessed as 1376 KW. In order to meet emergency power requirements during the grid failure, there is provision of 2 nos. of DG set having 320 KVA capacities for power back up in the proposed Building Project.

   For energy conservation, there will be 33 nos. of Solar Lighting poles (@72 Watt) has been proposed for Street & common area solar lighting, so

   Energy conservation by using Solar Street Lighting = 33 x 72 = 2376 watt = 2.4 KW

   Energy conservation by using Solar lighting for common area = 151.8 KW

   Total Energy Conservation = (151.8+2.4) KW = 154.2 KW

   Total Energy saving = 154.2/1376 = 0.1120 x 100 = 11.2 %

8. **Rain Water Harvesting:** Rain Water will be harvested through 6 nos. of recharging pits.

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

10. **Green Belt Development:** Green belt will be developed over an area of 1,793.52 sqm which is 20.23 % of the plot area; by using the local species like Neem, Karang, Golden Champa, Bakul, Bela, Bottle Palm, Cheekoo, Guava etc.

11. **Solid Waste Management:** From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 476.1 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate coloured beans. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste. Waste generated from Commercial people will be @ 0.15 kg/capita/day, which will be about 45.0 kg/day

    Solid waste from sweeping and Dry Garbage containing non-biodegradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored in separate garbage bin and send to approved recyclers. Around 66.0 kg/day of STP sludge will be generated.

    Solid Waste from Residential Population - 476.1 kg/day

    Solid Waste from Commercial Population - 45.0 kg/day

    STP Sludge - 66.0 kg/day

    Total Solid Waste Generation - 587.1 kg/day

12. The Estimated Project cost is ` 40 Crores and Environment Management Cost is ` 220 Lakhs

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

14. The SEAC in its meeting held on 03.08.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of Sub-Committee of SEAC.

    i) Structural Stability certificate from appropriate authority as per BDA guidelines be submitted and also for revise plan also with corresponding studies made for both approved original plan and revised approved plan.

    ii) Certificate from charted civil engineer how much construction has been made for both approved original plan and revised approved plan.

    iii) Comparative statement in terms of physical features in original plan and present plan.

    iv) Compliance Report to Previous EC conditions duly certified by Regional Officer of MoEF & CC.

    v) Permission from Water Resources deptt. For usage of ground water in commercial complex.

    vi) Approval from Fire Safety Dept. for 6m fire tender corridor for high rise building of 40m height.

    vii) As per BDA norms, is ground coverage for the project is 35% of total area?

    viii) Justification as to why this will not be treated as a violation case.

    ix) Impact and effect of change in ground coverage with reference to the original approved plan and the revised plan.

15. The project proponent was requested vide letter no. 765(10)/ SEAC – (Misc) - 28, dated 06.09.2022 to submit the information / documents as sought by the SEAC at para 14 above. But, they have not yet furnished the same.

16. The proposed site was visited by the sub-committee of SEAC on 14.11.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    i) PP and Consultant were present. It was observed that part construction has been initiated towards the back side of the plot and the permission is for commercial and residents use. The PP explained that the construction was based on earlier EC, but now the commercial part has been reduced to cater only the residents and accordingly the plan was modified. No construction was initiated at the front side where modification was sought. However, an undertaking that the Commercial area identified shall be used only for the people who would be residing in the complex may be submitted or the same can be put as a condition of EC.

    ii) Copy of drainage plan approved by BMC with any layout/drawing vetted and NOC needs to be taken before construction including from NHAI if connecting to their drain be a condition of EC.

    iii) Justification as to why the case cannot be considered as a violation case with reference to BDA norm.

    iv) All documents or information as asked by Committee during presentation

17. The Sub-committee recommend for EC subject to above conditions and submission of documents /compliances as asked by the committee during presentation.

    After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as requested vide letter no. 765(10)/ SEAC – (Misc) - 28, dated 06.09.2022 and as sought by the Sub-Committee of SEAC at para 16 above.

ITEM NO. 05

PROPOSAL FOR CONSTRUCTION OF PROPOSED FIVE BLOCKS OF (S+10) AND THREE BLOCKS OF (S+9) STOREYED APARTMENT BLOCKS AND ONE STOREYED (G+2) CLUB CUM SOCIETY BUILDING WITH BUILT UP AREA 42746.84 M^2 AT KESURA, BHUBANESWAR BY M/S STATE BANK OF INDIA STAFF ASSOCIATION (S.B.I.S.A.) (EC).

1. The proposed site of State Bank of India Staff Association (S.B.I.S.A.) is located at Kesura, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20° 16' 27.03" N & Longitude - 85° 52' 35.63" E. BDA has provisionally approved the Building Plan vide letter no. MBP1B-0005/15/BDA, Bhubaneswar, Dated 06.07.2015. The project site is well connected with National Highway NH-203. The nearest railway station is Bhubaneswar Railway station at a distance of approx. 3.5 Km in South West direction. The nearest airport is Biju Patnaik Airport at a distance of approx. 7.1 Km in South West direction from project site. The maximum temperature is about 41.0^o C and the minimum temperature is 20.0^o C felt in

the area. The area receives rainfall from the south-west monsoon. The average annual rainfall in the area is 1452.62 mm. Total Plot Area is 17711.43 m^2 and total Built up Area 42711.84 m^2. Total landscape Area is 3542.28 m^2 (20 %). Total parking area is 10375.0 m^2. The daily power requirement for the proposed complex is preliminarily assessed as 1870.4 KW source from CESU of Odisha State Electricity Board. In order to meet emergency power requirements during the grid failure, there is provision of two nos. of DG sets having 500 KVA capacities for power back up in the Residential Building Project. Fresh make up of 151.6 m^3/day will be required for the project which will be sourced from Ground Water. The proposed capacity of STP is 200 KLD. Total Capital Cost is ` 120 Lakhs. The **Consultant M/s Centre for Envotech & Management Consultancy Pvt. Limited, Bhubaneswar** made a detailed presentation on behalf of the project proponent on 20.02.2016. T**he SEAC opined to take decision on the proposal after a field visit by the sub-committee.**

2. The site was visited by the sub-committee on dated 11.03.2016. The sub-committee opined that the proposal for discharge of storm water and treated sewerage water is not convincing due to certain reasons. The proponent was requested to clarify the above reasons. They have clarified the reasons and the SEAC verified the same as follows:

Sl. No.	Clarification sought by the sub-committee	Compliance furnished by the proponent	Views of the SEAC
i)	The existing sewerage line is for a specific capacity. It may hardly accommodate the proposed quantum of treated sewerage water. Therefore, storm water disposal through existing sewerage line should not be attempted and the proponent is to propose the arrangement for disposal of storm water for the project site.	The existing sewerage line laid out for the other State Bank of India Staff Association Cooperative Ltd. building, nearby, may not be sufficient to accommodate the additional sewage as well as storm water from the proposed building.	Since the clarification given by the proponent is a deviation from the original application and project report, the unit has to obtain permission from Bhubaneswar Municipal Corporation and / or Concerned Authority and approved layout plan of sewerage system and discharge
ii)	The members of the society of existing housing complex have to allow the project proponent to use their sewerage line. In view of such arrangement, the project proponent is to submit a MoU/commitment letter from the old society.	The members of the existing housing complex are not consenting to allow additional sewage water through their existing underground pipeline. Hence, it has been decided by the State Bank of India Staff Association Cooperative Ltd. to laid new underground line to carry treated sewage and storm water with due permission from the local authority, so that it can discharge	

Sl. No.	Clarification sought by the sub-committee	Compliance furnished by the proponent	Views of the SEAC
		to Gangua Nallah.	system and resubmit the proposal with necessary modification .
iii)	A layout of the sewerage of the existing system sewerage may be submitted only with above compliance.	Sri Ganga Prasad Pattnaik, Chief Executive, State Bank of India Staff Association Co-operative Ltd. has submitted an undertaking that new underground line of required capacity will be laid from the proposed site to Gangua Nallah before completion of the project. They have furnished the layout of the sewerage of the existing system.	

3. The SEAC in its meeting held on 01.09.2016, decided to take decision on the proposal after receipt of the above information / documents from the proponent.
4. The proponent was requested to obtained permission from Bhubaneswar Municipal Corporation and / or concerned authority and also approve layout plan of proposed sewerage system and discharge system and resubmit the proposal with necessary modification.
5. In the meantime, the copy of the letter received from Planning Member, BDA in which they have intimated to the proponent that the external infrastructure development plan i.e. drainage and sewerage disposal plan submitted by the proponent is under scrutiny by the Chief Engineer-cum-Engineer Member, BDA.
6. The SEAC in its meeting held on 09.06.2017 decided to take decision on the proposal after the proponent obtained permission from Bhubaneswar Municipal Corporation and / or concerned authority and also approve layout plan of proposed sewerage system and discharge system and resubmit the proposal with necessary modification.
7. The proponent has intimated the following:
   (i) The external infrastructure development plan i.e. drainage and sewerage disposal plan submitted by us is under scrutiny by the Chief Engineer-cum-Engineer Member, BDA.
   (ii) Approval of the drainage and sewerage disposal plan it will take long time and the project is pending for more than one and half year.
8. The proponent has requested to grant conditional Environmental Clearance for aforesaid construction project. They have assured that before completion of the project, they will submit the approved Drainage and Sewerage disposal plan to SEAC/ SEIAA and furnished an undertaking to this effect.
9. The SEAC in its meeting held on 12.01.2018, opined that the Environmental Clearance will be considered after the proponent submits the approval of the drainage and sewerage disposal plan by the competent authority.

Proceedings of the SEAC meeting held on 13.01.2023 (Old proposals – compliance received)

10. The proponent has furnished Gram Panchayat NoC letter along with approved drainage and sewerage disposal plan for construction of new drainage line.
11. The MoEF & CC, Govt. of India notification vide S.O. 5733 (E), 14th Nov, 2018 stipulates that local bodies such as Municipalities, Development Authorities, District Panchayats as shall stipulate environmental conditions while granting building permission in respect of building or construction projects with built-up area >20,000 m^2 to 50,000 m^2 and industrial sheds, educational institutions, hospitals and hostels for educational institutions 20,000 m^2upto 1,50,000 m^2.
12. The MoEF & CC, Govt. of India notification vide S.O. 5736 (E), 15th Nov, 2018, exempted Environmental Clearance for building and construction project < 50, 000 m^2 and industrial sheds, educational institutions, hospitals and hostels for educational institutions < 1,50,000 m^2.
13. The SEAC in its meeting held on 03.12.2018 opined that Environmental Clearance is not required for this project as per the MoEF & CC, Govt. of India notification vide S.O. 5736 (E), 15th Nov, 2018 as the total builtup area is< 50, 000 m^2 . Hence, proposal was returned to SEIAA.
14. Moreover, the Hon'ble NGT, Principal Bench, New Delhi in O.A. No. 1017/2018, dated 03.12.2018 has stayed the above notifications of MoEF&CC, Govt. of India.
15. The SEAC in its meeting held on dated 13.12.2018 recommended that the SEIAA, Odisha may consider to request the MoEF&CC, Govt. of India regarding the operational part of the above notifications of MoEF&CC, Govt. of India in view of directions of Hon'ble NGT, Principal Bench, New Delhi before taking a decision on the proposals under the above category.
16. During the last meeting of SEIAA held on 05.04.2019, the authority had decided to send the building and construction projects under above category to SEAC, Odisha for appraisal as per the OM No. 3-150/2017-IA-III dated 03.04.2018. This decision of SEIAA, Odisha was communicated by the SEIAA office to SEAC office vide letter no. 6621/SEIAA, dated 17.04.2019.
17. The SEAC decided to appraise building and construction projects of above category as per above decision of the SEIAA, Odisha.
18. The SEAC observed that the information / documents furnished by the proponent as per para-10 is not adequate to consider the proposal for grant of Environmental Clearance.
19. The SEAC in its meeting held on 27.04.2019, decided to take decision on the proposal after the proponent submits the approval of the drainage and sewerage disposal plan by the competent authority such as Bhubaneswar Development Authority (BDA).
20. The proponent has not submitted any approval of the drainage and sewerage disposal plan by the competent authority such as Bhubaneswar Development Authority (BDA) through online system.
21. The SEAC observed that this is a case more than four years and also data provided is more than four years old and also the proponent has not able to comply the same within the time frame in online system.

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22. The SEAC in its meeting held on dated 06.06.2022 decided to return the proposal to SEIAA, Odisha with a request to delist the proposal and ask the proponent to apply afresh with all required documents.
23. The Project proponent has applied afresh for Environment Clearance with all documents and also submitted the clarification asked by SEAC in its meeting 27.04.2019.
24. The proponent has furnished the compliance and the SEAC verified the same i.e. the proponent has submitted the approval of the drainage and sewerage disposal plan by the competent authority such as Bhubaneswar Development Authority (BDA).
25. The SEAC in its meeting held on 20.08.2022 decided to take decision on the proposal after a fresh visit by the Sub-Committee of SEAC to verify the present status of the project as the proposal had been appraised long back.
26. The proposed site was visited by the sub-committee of SEAC on 09.11.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:
    i) PP and Consultant were present. No construction initiated at the project site and few plantations were in place at the green belt.
    ii) PP shown the drain line (a long drain from site till it falls on the Nalha crossing the highway). The PP informed that they have taken permission from NHAI for the same for which it was delayed. As the drain to be passed through the revenue road, NOC from sarpanch or appropriate authority for using the road may be taken before construction. Also, NOC from BDA for construction if any, may be taken along with NHAI NOC.
    iii) Stack height to be designed as per guideline and should be more than building height.
    iv) Total Parking, ECS and Visitor Parking (both 2 and 4 wheelers) with % of visitor parking w.r.t. total parking was explained.
    v) Land details and Kisam was informed to be gharabari, so necessary condition to be incorporated in EC.
    vi) Solid waste disposal facilities and any tie up for garbage disposal to be a condition of EC
    vii) Fire authority permission, RWH, Solar Power etc to be put as standard conditions of EC.
27. The Sub-committee of SEAC recommended for EC subject to above conditions and submission of documents /compliances if any asked by the committee during presentation.
28. The proponent has submitted the compliance as requested earlier and it has been mentioned above at para 24.

Considering the information furnished and the presentation made by the consultant, **M/s Centre for Envotech & Management Consultancy Pvt. Limited, Bhubaneswar** along with the project proponent, the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – B** in addition to the following specific

conditions**.**

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

ii) The Proponent shall obtain permission/NOC from Executive Engg (PHD) and / or from the appropriate authority for disposal of excess STP treated water to the nearest drain without which the Proponent will not start construction work. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission and possession as the case may be

iii) The proponent shall use solar energy at least to the tune of 5%of total power requirement as proposed.

iv) Trees located within the project area shall be transplanted to alongside the boundary green development area.

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

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

vii) The proponent shall Comply to the provision of structural stability certificate as per the bye-law of the Development Authority.

viii) When the public water supply will be available adjacent to/ in the vicinity of the proposed project in future, the PP shall avail it following due procedure of the Govt if the concerned authority agrees and dispense with the drawl of ground water except one borewell for emergency purpose. The PP shall take up suitably for the purpose with the concerned authority of the Government.

ix) The structural stability shall be vetted by NIT or IIT before construction

x) The PP shall adhere to terms of Agreement with BDA

xi) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. STALWART PROJECT PVT LTD FOR PROPOSED B1+B2+G+6(BLOCK-A) COMMERCIAL, B1+B2+S+31(BLOCK-B) RESIDENTIAL BUILDING, B1+B2+S+13 (BLOCK-C) RESIDENTIAL BUILDING & G+3 CLUB HOUSE (BLOCK-D) OVER BUILT-UP AREA OF 63560.91 SQM STORIED RESIDENTIAL COM COMMERCIAL BUILDING AT MOUZA- PATIA, BHUBANESWAR, DIST – KHORDHA OF SRI SARAT KUMAR SAHU – EC

1. The proposal is for Environmental Clearance of M/s. Stalwart Project Pvt Ltd for proposed B1+B2+G+6(Block-A) Commercial, B1+B2+S+31(Block-B) Residential Building, B1+B2+S+13 (Block-C) Residential Building & G+3 Club House (Block-D) over built-up area of 63560.91 sqm

storied residential com commercial building at Mouza- Patia, Bhubaneswar, Dist – Khordha of Sri Sarat Kumar Sahu.

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

3. M/s Stalwart Projects Pvt. Ltd. has proposed for Development of Housing Project on 2.44 Acres of land at Plot No.: 306/1712/4449, 306/1712/4450, 306/1712/4935, 306/1712/4256, 306/1712/4840, 306/1712/4812, 306/1712/4841, 306/1712/4963, 306/1712/4033, 306/1712/4163, 306/1712/4695, 306/1712/4255, 306/1712/3986, 306/1712/5692, 306/1817, 306/1711/5556, 306/1711/5557 & 306/1711/5558 on Khata No- 474/2770, 474/2771, 474/3474, 474/3700, 474/3160, 474/3162, 474/6177, 474/3988, 474/2369, 474/2506, 474/3470, 474/3000, 474/2601, 474/2331, 474/6210, 474/5007, 474/5008 & 474/5009, Near NH-16 Road, at-Patia, Bhubaneswar, Odisha.

4. **Location and Connectivity –** The proposed site is located at Patia, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20° 21' 34.1" N & Longitude - 85° 49' 41.8" E. The project site is well connected with National Highway-16 (Jharpokharia-Chennai Road). The nearest railway station is Patia P.H. Railway station at a distance of approx 1.9 Km. The nearest airport is Biju Pattnaik International Airport Bhubaneswar at a distance of approx. 12.4 Km in South-West direction from project site.

5. The site is coming under Bhubaneswar Development Authority.

6. Bhubaneswar Municipal Corporation has provisionally approved the building plan vide letter no. 23849, dated 05.05.2022.

7. Height Clearance from Airport Authority of India vide NoC Id no. BHUB/EAST/B/110421/633732, dated 11.11.2021.

8. The building details of the Project:

Particular	**Proposed**	**Permissible**
Project Name	Proposed B1+B2+G+6 (Block-A) Commercial, B1+B2+S+31 (Block-B) Residential Building, B1+B2+S+13 (Block-C) Residential Building & G+3 Club House (Block-D)	--
Plot Area	9895.0 sqm	--
Ground Coverage	3940.04 sqm (39.82 % of Plot area)	--
Total FAR Area	63560.91 sqm	--
Built Up Area (Residential)	54396.79 sqm	--
Built Up Area (Commercial)	9164.12 sqm	--
Total Built up Area	**80683.44 sqm**	
FAR	6.42	--
Maximum Height	92.07 mtr (Residential) 25.2 mtr (Commercial)	--

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Road & Paved Area	4122.16 sqm	--
Parking Area	17928.48 sqm (30 % of Residential FAR Area + 50 % of commercial FAR Area)	17751.78 sqm (30 % of Residential FAR Area + 50 % of commercial FAR Area)
Green Belt Area	2218.45 sqm (22.42% Plot Area)	1979.0 sqm (20% Plot Area)
Power/Electricity Requirement & Sources	3372 KW Source: TPCODL	--
No. of DG sets	4 x 750 KVA	--
Fresh Water requirement & Sources	270.48 KLD Source-Ground Water	--
Sewage Treatment & Disposal	STP Capacity 350 KLD	--
Estimated Population-Residential, Floating/visitors	3146 nos.	--
Estimated Population-Commercial, Floating/visitors	150 nos.	--

9. **Water Requirement** – Fresh make up revised to 217 m^3/day in ADS submitted will be required for the project which will be sourced from Ground water. Waste water of 292.6 KLD will be treated in a STP of 350 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge will 34.7KLD to the Nearest Drain in Non-Monsoon period and 74.0KLD in Monsoon period.
10. **Total no. of Rain water Harvesting pits** – 44 nos for the project.
11. **Power Requirement** – The daily power requirement for the proposed Project is preliminarily assessed as 3372 KW source from TPCODL of Odisha State Electricity Board. In order to meet emergency power requirements during the grid failure, there is provision of 4 nos. of DG set having 750 KVA (4 Nos.) capacities for power back up in the Housing Project.

    For energy saving,

    Energy Conservation by using Solar Street Lighting = 70 x 72= 5040 W, 5.04 KW

    Energy generated by 85 nos. of PV solar panel per day = 175.92 KW

    Total Energy Saving = (175.92+5.04) KW = 180.96 KW

    Total Solar Energy saving = 180.96/3372 = 0.0536 x 100 = 5.36 %
12. **Solid waste Management –** From the proposed Housing project solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 1287.0 kg/day and waste generated from the commercial will be @ 0.15 kg/day, which will be 22.5 kg/day. The waste generated from floating population in residents will be @ 0.15 kg/day, which will be 42.9 kg/day.

S. No.	Category	Counts (heads)	Waste generated

i)	Residents	2860 @ 0.45 kg/day	1287.0 kg/day
ii)	Commercial population (including Floating Population)	150 @ 0.15 kg/day	22.5 kg/day
iii)	Floating population in residents	286 @ 0.15 kg/day	42.9 kg/day
iv)	STP sludge		60.0 kg/day
Total Solid Waste Generated			**1412.4 kg/day**

13. **Green Belt**- Green belt will be developed over an area of 2218.45 sqm (22.42 %) of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.

14. **Parking Details –** Total parking area of the project is revised to 22061.62 sqm/ 703 ECS.

15. The project cost is ` 75 crores and Environmental Monitoring programme – 2.2 crores.

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

17. The SEAC in its meeting held on dated 18-05-2022 decided to take decision on the proposal after receipt of the following information / documents from the project proponent followed by site visit of the Sub-Committee of SEAC.

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

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
i)	2 separate Entry and Exit gates for commercial and Residential units.	The separate entry & exit will be provided for Residential & Commercial Units. The layout plan showing both entry & exit is attached in **Annexure - 1**.
ii)	No. of DG sets calculation needs to be rechecked. PP has stated to have 4 nos. of DG sets with capacity of 750KVA each, totaling to 3000KVA.The basis of deriving the number & capacity be submitted and reworked out to reduce the number & cumulative capacity and be submitted.	Total Power Requirement of the project is 3372 KW which will be sourced from TPCODL and total two nos. of DG set (750 KVA) will be provided for the proposed building project.
iii)	Capacity of STP needs to be increased, and submission of calculation of water balance of 135KLD. Basis of arriving at population of residents, visitors, club and commercial complex be submitted with details of water consumption, flushing	Total Fresh Water Requirement of the projects is 217.0 KLD and total 292.6 KLD waste water will be generated in the proposed building. The STP capacity is 20% more of total waste water generation. So STP capacity is 350 KLD. The revised water balance is attached in **Annexure-2**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	water & water balance thereof. Accordingly, STP capacity be revisited and confirmed.	
iv)	Excess treated waste water is said to be discharged to nearby drain. Thus, the distance of the drain from the project boundary and the ownership / Row of the said land be submitted along with the permission from drain Authority to take the Addl. Load of this project. Besides, the start & the fall out of the drain to which the treated waste water will be discharged be informed.	Total 34.7 KLD treated water will be discharged to nearest Municipal drain which is adjacent to the proposed project site. We have already applied to BMC for discharged of treated water in this drain, once the permission letter will be received from BMC we will submit to SEAC/SEIAA committee before commencement of the project.
v)	No of rain water harvesting pits (RWHP) 11 Nos has been calculated. This calculation be re-visited taking in to consideration of hourly maximum rainfall in 24hours is past 30 years based on logical climate data with real time input an co-efficient of run-off & retention time or reference be submitted on their basis.	Rain Water harvesting pits (RWHP) have been calculated as per 30 years Rainfall data (1988-2021), as per 30 years Rainfall maximum rainfall 150 mm/hr is considering. So total rain water available for recharging is 258m^3 an total 44 nos. of rain water harvesting pits has been provided for ground water recharging. Detail calculation is given in **Annexure-3**.
vi)	Structural Stability Certificate from an institute of repute like- NIT, IIT etc. shall be submitted as per the bye law of the Development Authority.	Structural Stability Certificate is attached in **Annexure-4**.
vii)	Parking in terms of ECS & space, both for 4 wheelers / 2 wheelers / Bicycle for residential apartment as well as commercial complex as per the norms showing the demarcation in the layout map be submitted, considering the residents, visitors & floating population for commercial complex as well be submitted.	Total parking area provided for the proposed building is 22061.62 sqm and 703 ECS provided for the building is 600 nos. of 4 wheelers & 450 nos. of 2 Wheelers including bicycle. Detailed parking calculation is attached in **Annexure-5**.
viii)	Availability of surface water through PHED/WATCO pipeline and evidence of refusal.	The Public water supply is not available in the nearby the project area; once the public water supply is available the permission will be obtained from Public Health Division (PHD).
ix)	Permission from WR Deptt. to be taken for water both for residential and use in commercial complex.	Ground water application is already submitted to CGWA vide application no. 21-4/4091/OR/INF/2022, once the permission is obtained from CGWA we will apply to Water Resource Department, Odisha. Ground Water application copy is attached in **Annexure-6**.
x)	Provisions of solar power (5.36%) of	Total power generation from Solar

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	total power demand in stated to have been made. Details of plan and consumption calculation vis-s-vis the generation of the same be submitted.	system is 180.96 KW through 85 nos, of PV panels & 70 nos, of Solar Street Lighting. Total power demand of the proposed building is 3372.0 KW. So total solar power generation from the proposed building is 5.36% of total power demand. For Solar Power distribution, 70 Nos. of Solar Street Light poles of 5.04 KW capacity is directly connected with Solar Panel and 175.92 KW Solar energy generated from 85 nos, of PV panel is directly connected with electric grid Details solar calculation is attached in **Annexure-7**.
xi)	Fresh traffic study to be carried out by an institute of repute (the vetted report will not be acceptable) and submitted once again.	Traffic Study has been carried out by CEMC. The vetted Traffic Study report is attached in **Annexure-8**.
xii)	Location of the DG set w.r.t predominant wind direction vis-à-vis the location of the apartment & commercial complex be submitted along with installation drawing of the exhaust pipe of the stack of DG Set be submitted. The capacity numbers and location of DG set to be reviewed to prevent noise and air pollution impact on the residents.	The predominant wind direction of the proposed project area is South and the DG set will installed as wind flow from South to North. The DG set position is marked in the layout with respect to predominant wind direction and location of the building tower along with installation drawing/ layout is enclosed as **Annexure-9**.
xiii)	Stretch and width of greenbelt with number of plants to be planted and species be submitted. The space for mechanical ventilation units and rain water harvesting pit should not be calculated as part of the greenbelt and landscape.	Total greenbelt area provided for the proposed building is 2218.45 sqm, which is 22.42% of the total plot area (9895.0 sqm). We propose to develop three tier hierarchal green belt along the periphery of the building. Greenbelt drawing is attached in **Annexure-10**.
xiv)	Layout of internal drainage map showing the drain network till fall out and RWH and Recharging pits.	Layout map showing internal drainage network, storm water drainage line, sewer water line is attached in **Annexure-1**.
xv)	Source of water is stated to be ground water to the tune of 270.58 KLD. PP need to submit a letter from the authority (Watch/ PHD/ Municipality) that they will not be able to supply pipe water.	The Public water supply is not available in the nearby the project area; once the public water supply is available the permission will be obtained from Public Health Division (PHD). Ground Water application is already submitted to CGWA vide application no. 21-4/4091/OR/INF/2022, once the permission is obtained from CGWA we will apply to Water Resource

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		Department, Odisha
xvi)	It is stated that 134.70 KLD treated waste water will be reused for vehicle/ AC make up/ other use. The detail calculation be submitted.	Total Fresh Water Requirement of the project is 217.0 KLD and total 292.6 KLD waste water will be generated in the proposed building. Total 278 KLD treated water will be reused in Flushing, HVAC, Green belt Development & Dust Suppression. The revised water balance is attached in **Annexure-2**.
xvii)	Power of Attorney from all land owners in favour of the PP for the plot s area be submitted and Kisam of the land in "Sabik & Haal" land record with conversion to Gharabari be submitted.	Total land area of the proposed project is 9895.0 sqm and the kisam of land is Gharabari. Land document is attached in **Annexure-11**.
xviii)	Number of overhead tanks with capacity and norms of water consumption for fresh water in residential areas and commercial areas.	Per head 135 liters per day water will be required for residential building & 45 liters per day per head required for commercial building. Total fresh water requirement of the proposed project is 217 KLD. Total 4 nos. of overhead tank is provided for the proposed building.
xix)	Similarly, no. of OH Tan for storage of STP treated wastewater for reuse in flushing of toilets supplied through dual plumbing system.	Total two nos. of Overhead tank is provided for STP treated water storage purpose.
xx)	The fire Safety recommendation by the state Sire Service Wing be submitted	Fire safety clearance is under process, once fire clearance is received we will submit to the SEAC/SEIAA.

19. The SEAC in its meeting held on 05.11.2022 decided to take decision on the proposal after the site visit by the sub-committee of SEAC.

20. The proposed site was visited by the sub-committee of SEAC on 09.11.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

a) PP and Consultant were present. No construction activity has been initiated at site. While explaining the master layout, it was observed that there is scope to increase the green belt. Also, entry and exit gate needs to be separated for commercial and residents to which the PP agreed.

b) A drain in-front of the land also found to which the treated water to be discharged after required NOC.

c) RWH, STP, generation of waste water and utilization of treated water and other documents / information sought by Committee during presentation to be complied or to be put as conditions including NOC from BMC for discharge of excess treated water if any to be taken.

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21. The Sub-committee of SEAC recommended EC subject to above conditions and submission of documents /compliances as asked by the committee during presentation.

22. The proponent has submitted the compliance as requested earlier and it has also been mentioned above.

Considering the information furnished and the presentation made by the consultant, **M/s Centre for Envotech & Management Consultancy Pvt. Limited, Bhubaneswar** along with the project proponent, the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – C** in addition to the following specific conditions**.**

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

ii) The Proponent shall obtain permission/NOC from Executive Engg (PHD) and / or from the appropriate authority for disposal of excess STP treated water to the nearest drain without which the Proponent will not start construction work. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission and possession as the case may be

iii) The proponent shall use solar energy atleast to the tune of 5%of total power requirement as proposed.

iv) Trees located within the project area shall be transplanted to alongside the boundary green development area.

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

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

vii) The proponent shall Comply to the provision of structural stability certificate as per the bye-law of the Development Authority.

viii) When the public water supply will be available adjacent to/ in the vicinity of the proposed project in future, the PP shall avail it following due procedure of the Govt if the concerned authority agrees and dispense with the drawl of ground water except one borewell for emergency purpose. The PP shall take up suitably for the purpose with the concerned authority of the Government.

ix) The structural stability shall be vetted by NIT or IIT before construction

x) The PP shall adhere to terms of Agreement with BDA

xi) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

ITEM NO. 07

Proceedings of the SEAC meeting held on 13.01.2023 (Old proposals – compliance received)

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR EXPANSION WITH MODIFICATION OF "ARIANA", MULTISTORIED RESIDENTIAL COMPLEX OVER AN BUILT UP AREA-58788.51 SQM AT MOUZA- SANKARPUR, BHUBANESWAR, ODISHA AT MOUZA- PATIA, OF BHUBANESWAR MUNICIPAL CORPORATION IN THE DEVELOPMENT PLAN AREA OF BHUBANESWAR DISTRICT KHORDA FOR M/S.KRIDAY REALTY PRIVATE LIMITED OF SRI SIDDHARTHA ROY – EC

1. The proposal is for Expansion with Modification of "ARIANA", Multistoried Residential complex over a built up area-58788.51 sqm at Mouza- Sankarpur, Bhubaneswar, Odisha of Bhubaneswar Municipal Corporation in the Development plan area of Bhubaneswar District Khorda for M/s.Kriday Realty Private Limited of Sri Siddhartha Roy.
2. The project falls under category "B" or activity 8 (a)-Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Kriday Realty Private Limited has proposed for expansion with modification of Residential Project "TATA ARIANA" located at Mouza - Sankarpur , Bhubaneswar in the district of Khurda in Odisha.
4. The project has been granted prior environmental clearance vide letter no - 1997/SEIAA on dated 24th April 2013 for construction of 12 Towers having total construction area of 1,85,176.33 m2 (including Basement) 132395.7 sqm (Excluding Basement area).
5. Later due to PPP agreement expired in the year 2017 & Extension of Time (EoT) received only in December'2021 from BDA building revised proposal for expansion and modification was submitted and recommended for the ToR .
6. Based on the same ToR was granted vide Letter No. SEIAA-File No- File No.76188/83-MIS/04-2022 dated 29.04.2022 for Expansion and Modification of Residential Project " TATA ARIANA " for total plot area of 12 Acre or 48575.31 sqm .
7. **Location and Connectivity –** The proposed site is located at Mouza- Sankarpur, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site are Latitude: 20°15'47.40"N & Longitude: 85°45'22.72"E. The site is very near to NH 5 is approx. 0.92km.The nearest railway station is Bhubaneswar Railway Station approx. 9.3 km from the project site. Biju Patnaik International Airport is at a distance of approx. 7km from the project site. Chandka-Dampara Wild Life Sanctuary is about 7.71km. Nandankanan Wild Life Sanctuary is about 14km.
8. The site is coming under Bhubaneswar Municipality area.
9. The residential population of the project will be 2392 persons after 100% completion. The population for the project is estimated at 2392 permanent, 316 visitors, and 1133 in retail, Club & Town admin building etc.
10. The Current Status of building Project:

S. No.	Project Activity	Details	Work completed so far	Work Yet to be completed
i)	Plot Area	Total Plot Area: 48575.31 sqm. (12.00 Acre/ 4.857531 Ha), In Possession-201537.49 sqm		
ii)	Ground coverage	9,977.279 (20.5%)	6918.703 (14.2%)	3058.576

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Environmental Scientist, SEAC

S. No.	Project Activity	Details	Work completed so far	Work Yet to be completed
				(6.3%)
iii)	Road Area	8075.162		
iv)	Green belt (plantation area)	9997.585		
v)	Green belt above Podium	8195.295		
vi)	Service Area	515.522		
vii)	Swimming Pool	269.383		
viii)	open parking area	5800.365		
ix)	Proposed FAR	Permissible -2.75 Proposed – 2.749		
x)	Built Up Area	EC obtained for 12 Towers with built-up area of 1,85,176.33 m^2 (including Basement) & 132395.7 sqm (Excluding Basement area)		
		The total built-up area after modification will be decreases from 1,85,176.33 m^2 (including Basement) to 171593.75 m^2	Existing-79458.56 sqm (Excluding Basement) 112805.24 sqm (Including Basement))	Proposed built up area-58788.51 sqm
xi)	Landscape Area Total Green belt (plantation area) 20.6 % Green belt above Podium 16.9 %	18192.88 sqm (37.5 %)	Green belt (plantation area 9997.585 sqm Green belt above Podium 8195.295 sqm	
xii)	Parking Area 30 % percentage of total built-up area towards FAR	Total parking area - 41,685.917	Existing 8 Towers = 24377.318 Sqm (31% of Built up area)	Proposed 4 Towers & = 17308.599 Sqm (30% of Built up area)
xiii)	Maximum height of building	66 m	–(G+13, G+14 , G+15 & G+16) -51 m	Proposed – (G+21) -66 m
xiv)	No. of Units	1210 nos.	792	418 Total no of L.I.G. Flats=244 nos (Which is more than 20% of total nos. of Flats)
xv)	Total project cost	` 557 Cr	` 346 Cr	` 211

11. **Water Requirement** – During Operation phase the total water requirement for proposed 4 towers is approx. 323 KLD (domestic + flushing), out of which total domestic water requirement for residential is 215 KLD, flushing water is 108 KLD . The total fresh water requirement is 215 KLD (daily basis for residential blocks for domestic requirement).It is expected that the proposed additional 4 towers will be generate approx. 269 KLD (80 % of wastewater from residential and club area. The wastewater will be treated in a STP having capacity of 860 KL (provided for Existing and proposed sewage water Treatment) provided within the complex generating 215 KLD of recoverable treated waste water from STP which will be recycled within the project. During dry season there it will be follow zero discharge of surplus treated wastewater and 140 KLD will become surplus in monsoon season and will be discharged into municipal sewer.

Sewerage treated water can be used in Toilet Flushing & Irrigation to reduce the load on fresh water.

Therefore, the total fresh water requirement is approx. 895 KLD (Existing +Proposed+ visitor and retail area etc.), out of which total domestic water requirement for residential is 589 KLD, flushing water is 306 KLD . The total fresh water requirement is 589 KLD (daily basis for residential blocks for domestic requirement).

12. **Total no. of Rainwater Harvesting pits** – 08 nos for the project.
13. **Power Requirement** - The overall maximum demand is approximately 4384.49 kW or 6000kVA at power factor 0.9. It is proposed to have Grid supply at 33KV from Electricity Supply Company. It is proposed to have 100% Power Backup for Common Area Services and limited for each flat. The Back-up power shall be provided by 415 Volt DG Sets. Total Backup power load is 3530 KVA which will be met by 3 nos. 1010 kVA, 1 no. 500 KVA 415 DG sets. Solar Power proposed for 4 towers is 100KW.
14. **Solid waste Management** - During operation phase, waste comprise of municipal waste majorly. Total waste generation after overall development of the project is estimated to be 3381 kg/day. Waste will be segregated into recyclable, compostable and inert waste. Apart from this E-waste will be generated from the project site. Hazardous waste to be generated from site is used oil only from DG sets. Presently, total solid waste generation is about 1.196 T/day. However, it is envisaged to be 3.8 T/day after 100% completion and operation of the project. The Municipal Solid Waste Management will be conducted as per the guidelines of Solid Waste Management Rules, 2016.
15. **Green Belt** – The project has been well planned to have sufficient open space and green coverage. The green area comprises of evergreen, tall and ornamental trees and ornamental shrubs inside the premises. The green area has been developed over total green area measuring 18192.88 sqm (37.5 %) has already been developed. The biodiversity in the area will improve due to the proposed green cover. Evergreen tall and ornamental trees and ornamental shrubs will be planted inside the premises.
16. **Parking Details –** Total Parking Area Provided - 41,685.917Sqm. (Existing 8 Towers = 24377.318 Sqm (31% of Built up area) & Proposed 4 Towers = 17308.599 Sqm (30% of Built up area).
17. **Rain Water harvested** through 08 nos. of Rain Water recharging pits. .
18. **Fire fighting Installations:** Fire fighting system will be installed as per recommendation of the Firefighting Officer, Odisha and as per the provisions given in Part-IV of National Building Code of India -2016 and relevant BIS specifications.
19. The project cost is 577 crores in total out of which for existing building is 327 crores and for proposed building is 250 crores. Environmental Monitoring Programme Cost Capital and recurring cost towards EMP will be Rs. 2058.75 lakhs and 429.9 lakhs/ annum respectively.
20. The project proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal on 03.08.2022.

21. The SEAC in its meeting held on 03.08.2022 decided to take decision on the proposal after receipt of certain information / documents from the proponent followed by site visit of Sub-Committee of SEAC.

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

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th></tr>
<tr><td>i)</td><td>Certificate from charted civil engineer that no construction has been made in proposed four towers bearing number 5,6,7,8. Construction status of the original plan approved vis- a- vis the approved revised plan also.</td><td>Certificate from Charted Civil Engineer attached as Annexure-1.</td></tr>
<tr><td>ii)</td><td>Comparative matrix on relevant environmental parameters e.g. impact on STP, Green belt, Fire tender roads etc on expansion. Whether existing system can accommodate the proposed expansion?</td><td>Comparative matrix on related to environment parameters e.g. impact on STP on expansion is attached as Annexure-2.</td></tr>
<tr><td>iii)</td><td>Reduce discharge of treated water to drain by utilising in green belt plantation.</td><td>Water balance diagram is attached as Annexure-3 During dry season there it will be follow zero discharge of surplus treated wastewater and 140 KLD will become surplus in monsoon season and will be discharged into municipal sewer.
Sewerage treated water can be used in Toilet Flushing & Irrigation to reduce the load on fresh water.</td></tr>
<tr><td>iv)</td><td>Detailed calculation on solar energy existing and proposed.</td><td>Solar Power Requirement (Existing phase , where OC is obtained)
SOLAR WATER HEATING
20 % of total hot water requirement must be catered through Solar Thermal system for ph-I &II:
No. of Flats = 1BHK= 222, 2BHK 378 nos.+ 3BHK 192 nos
TOTAL-= 792 Flats
Hot Water Requirement @ 40 lpcd = 33000 liters
Total solar collectors already installed= 262
Solar Power Requirement for 4 Towers
SOLAR PV SYSTEM
(Providing for emergency lighting of common area (Staircase, lift lobby, basement etc.) for phase-3
<table>
<tr><td>Tower No</td><td>Load - KVA</td><td>PV Solar Requirements</td><td>Total Solar PV</td><td>Space Required in Sq Ft</td></tr>
<tr><td></td><td></td><td>5% of Total</td><td></td><td></td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td></td><td>power requirement for proposed 4 towers</td><td></td><td></td></tr>
<tr><td>5</td><td>478.3</td><td>23.9</td><td>25 KW</td><td>3250</td></tr>
<tr><td>6</td><td>478.3</td><td>23.9</td><td>25 KW</td><td>3250</td></tr>
<tr><td>7</td><td>478.3</td><td>23.9</td><td>25 KW</td><td>3250</td></tr>
<tr><td>8</td><td>478.3</td><td>23.9</td><td>25 KW</td><td>3250</td></tr>
<tr><td>Total</td><td>1913.3</td><td>95.7</td><td>100 KW</td><td>13000</td></tr>
</table>
Detailed calculation on solar energy existing and proposed is given in Annexure-4.
</td></tr>
<tr><td>v)</td><td>Continuous greenbelt to be made. A detailed report and layout on green belt existing and proposed.</td><td>Agreed
The project has been well planned to have sufficient open space and green coverage. The green area comprises of evergreen, tall and ornamental trees and ornamental shrubs inside the premises. The green area has been developed over total green area measuring 18192.88 sqm (37.5 %) has already been developed. The biodiversity in the area will improve due to the proposed green cover. Evergreen tall and ornamental trees and ornamental shrubs will be planted inside the premises. and greenbelt plan is attached as Annexure-5.</td></tr>
<tr><td>vi)</td><td>Comparative statement for all physical features between existing and proposed expansion.</td><td>Comparative statement for all physical features between existing and proposed expansion is attached as Annexure-2.</td></tr>
<tr><td>vii)</td><td>Compliance Report to previous EC conditions duly certified by Regional Office, MoEF&CC, Bhubaneswar.</td><td>Compliance Report to previous EC conditions are attached as Annexure-6.</td></tr>
<tr><td>viii)</td><td>Structural stability from NIT/ IIT with endorsement from BDA as per the bye laws of the later with reference to original approved plan and revised approved plan in view of increase in number of floors and building height.</td><td>Structural stability Certificate attached as Annexure-7.</td></tr>
<tr><td>ix)</td><td>Traffic study undertaken as stated be vetted and submitted with</td><td>Traffic study report is attached as Annexure-8.</td></tr>
</table>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	decongestion plan as & if necessary.	
x)	The PP to submit sabik RoR with kisam, Hal RoR with kissam for the project area to rule out the investment of Forest/DLC land.	Land has been allotted for residential - development under Bhubaneswar Development Authority (BDA). There will be permanent change in land use pattern as mostly homestead land will be used for construction of Residential Building with Retail. Proposed area is coming under residential zone as per BDA plan. Total land requirement for this project is 12 Ac. The land documents given in **Annexure-9**. **Kisam of the plot –Gharabari.**
xi)	To submit a Fire Safety Certificate for the operating towers and utilities and Fire Safety recommendation for the remaining construction.	Fire Safety Certificate for the operating towers and utilities and Fire Safety recommendation for the remaining construction is attached as **Annexure-10**.
xii)	To submit the plan for Ventilation, lightning and air conditioning of lift from lowest basement floor to terrace floor.	All plans are attached as **Annexure-11.**
xiii)	Provision of solar power for the entire project with location of installation of photovoltaic frames and utilisation of solar power for the common area to be marked in the layout plan.	Attached as **Annexure-11.**
xiv)	To submit a bio-diversity register for the 12 acre project area as per the provision of biodiversity Conservation Act, 2003 along with a write up on the improvement in conservation of biodiversity during the year 2013 till now.	The project has been well planned to have sufficient open space and green coverage. The green area comprises of evergreen, tall and ornamental trees and ornamental shrubs inside the premises. The green area has been developed over total green area measuring 18192.88 sqm (37.5 %) has already been developed. The biodiversity in the area will improve due to the proposed green cover. Evergreen tall and ornamental trees and ornamental shrubs will be planted inside the premises and greenbelt plan is attached as **Annexure-4**. **Bio diversity report** for project site and study area is attached as **Annexure-12**.
xv)	To submit the Energy Conservation efforts made in the project as per bureau of Energy efficiency under Energy Conservation Act, 2002.	Energy Conservation Report is attached as **Annexure- 13**.
xvi)	To submit the original NoC from CGWA VIS-A-	Water requirement of the project has met from PHED Supply. Ground water has used as stand by or in

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	VIS the actual consumption of water for the last 10years along with the permission letter and agreement with the State Government Water Resource Department.	emergency purposes. The water supply connection has been invariably metered. Meter has approved or certified by concern Department. The water meter has been installed after getting the permission and being duly tested by the PHED, observing formalities as per Orissa Water Works (ULB) Rules, 1980 and as amended from time to time. Sanction Order for water supply connection from Office of the Sub-Divisional Officer, Bhubaneswar is attached as **Annexure-14**.
xvii)	To submit the organogram for management of WTP, WWTP, STP, SWM, Hazardous Waste, Greenbelt, DG set emission, Vehicular emission, Safety of Lifts, Fire safety and other safety requirements of the project including Battery rules, DG rules, BMW rule in case of Dispensary/First aid center etc.	Management plan is attached as **Annexure-15.**
xviii)	To submit the compliance of existing CTE & CTO duly certified by SPCB, Regional office, Bhubaneswar.	Compliance of existing CTE & CTO is attached as **Annexure-16**.

23. The SEAC in its meeting held on 02.11.2022 decided to take decision on the proposal after site visit of Sub-Committee of SEAC

24. The proposed site was visited by the sub-committee of SEAC on 09.11.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    i) No construction has been made in the proposed phase except the basement. PP and Consultant were present. PP informed that the basement approval for all 3 phases were taken earlier (PP informed to submit document). Similarly, the STP has already been installed for all 3 phases as informed by PP. Thus, calculation sheet justifying the capacity to be submitted.

    ii) Solar power (roof top) has not been installed for earlier 2 Phases, PP informed that the same was not a requirement while the approval for the earlier 2 phases were taken.

However, the solar power installations will be done for the current phase and details will be submitted.

iii) A drain is existing as shown by PP, thus NOC from BMC for draining excess treated water to be taken before construction.

iv) Stack height to be enhanced as committed in the proposal, as current height is less than Phase 3 building height.

25. The Sub-committee of SEAC recommended EC subject to above conditions and submission of documents /compliances as asked by the committee during presentation.

26. The proponent has submitted the compliance as requested earlier and it has also been mentioned above.

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

i) Project Proponent informed that the basement approval for all 3 phases were taken earlier. Similarly, the STP has already been installed for all 3 phases as informed by Project Proponent. Project Proponent shall submit copy of basement approval for all 3 phases and calculation sheet justifying the capacity for all 3 phases before issue of Environmental Clearance.

ii) **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.**

iii) The Proponent shall obtain permission/NOC from Executive Engg (PHD) and / or from the appropriate authority for disposal of excess STP treated water to the nearest drain without which the Proponent will not start construction work. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission and possession as the case may be

iv) The proponent shall use solar energy atleast to the tune of 5%of total power requirement as proposed.

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

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

vii) The proponent shall comply to the provision of structural stability certificate as per the bye-law of the Development Authority.

viii) When the public water supply will be available adjacent to/ in the vicinity of the proposed project in future, the PP shall avail it following due procedure of the Govt if the concerned authority agrees and dispense with the drawl of ground water except one borewell for emergency purpose. The PP shall take up suitably for the purpose with the concerned authority of the Government.

ix) The PP shall adhere to terms of Agreement with BDA

x) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.

ITEM NO. 08

PROPOSAL OF ENVIRONMENTAL CLEARANCE CONSTRUCTION OF SRI JAGADGURU KRIPALU 400 BEDED MULTI-PURPOSE HOSPITAL & RESEARCH CENTER WITH TOTAL PLOT AREA OF 56372.71 SQ.M I.E. 13.930 ACRES AND PLOT AREA OF 37504 SQ.M AT JAGADGURU KRIPALU UNIVERSITY, BANARA, CUTTACK DISTRICT OF SMT SULAKSHYANA DAS – EC

1. This proposal is for Environmental Clearance Construction of Sri Jagadguru Kripalu 400 Beded Multi-Purpose Hospital & Research Center with total plot area of 56372.71 Sq.m i.e. 13.930 Acres and plot area of 37504 Sq.m at Jagadguru Kripalu University, Banara, Cuttack district of Smt Sulakshyana Das.

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

3. Jagadguru Kripalu University is proposing for establishment of 400 bedded hospital and research center in outskirt of Cuttack City at Vill: Baanara, Banki, Cuttack District, Odisha. The plot area meant for construction of 400 beded hospital will be established over an area of 13.930 Acres i.e 56372.71 Sq.m with a total bultup area of 37404 Sq.m. Total parking provided for the project will be 11300 sq.m open parking (30% of builtup area) and 11274 sq.m green cover area (20% of Plot area). The land is of Gharabari kissam without any forest land included.

4. **Location and Connectivity** – The project is located at Plot No. 3654, 3656, 3858/4922, 3858/5001, Khata No- 771/462; Kissam – GharabariMauza Banara, Via: Munduli, Tahasil: Dampada. The Hosipital will be constructed within the existing campus of JKU. The Geographical co-ordinate of the project site are Latitude: 20° 24' 49.21” - 20° 25' 3.35” N, Longitude: 85° 45' 22"- 85° 45' 22"37 E. and finds place in Toposheet no. 73H/11. The nearest road is Banki Cuttack road at 1km. Nearest Railway station Baranga at 7km.Nearest River is Mahanadi at 2.5km. Munduli Barage at 3.5km.Chandaka Reserve forest at 1km.The nearest Ecologically sensitive area is Chandaka Elephant Sanctuary which is located at 1 Km from the project. The project site is located outside the ESZ boundary of the sanctuary.

5. **Water Requirement** - Total water requirement will be 677 cum per day out of which fresh water requirement will be 406 Cu.m Per day. Water will be sourced from ground water through bore well. Out of the total water requirement of 677 KLD, 406 KLD (60%) of fresh water, which will be met through bore well for drinking, washing and other domestic purpose. 271 KLD (40%) of water will be made available from treated waste water for Flushing and gardening purpose.

Application to CGWA for withdrawal of ground water is under process. The treated waste water will be completely used for green belt development, HVAC use and washing purpose.

6. **Waste Water Management** - The waste water generated from the project will be 302 KLD which will be treated through a Sewage Treatment Plant of 370 KLD. Another ETP is proposed for treatment of infectious waste water with capacity of 40 KLD.

7. **Rain water Harvesting** - For water conservation rain water harvesting is proposed which consists of 8 nos of 35 cu.m rain water recharge pits.

8. **Power Requirement** - Based on the Electrical Load calculation, overall maximum demand load is anticipated as approximately 2.5 MVA. 162 KW of solar power generation proposal is included in the project which reduces 7% of the total power requirement. There is the proposal for 100% power back up with 1x1250 kVA and 2x750 kVA DG sets.

9. **Green belt -** Plantation will be made over an area of 11274 Sq.Mt with 2500 saplings. The plantation will completed within 3 years of construction period.

10. **Solid Waste Generation -** During the implementation of the project the biomedical waste generated from the project will about 2100 Kg. The Bio medical waste generated will be collected, segregated and disposed as per Biomedical waste management rule, 2016. 3 Nos of solid waste segregation room will be constructed for separation of biological waste and other solid waste. Bio medical waste will be disposed through authorized agencies (RAMKY) (Authorized by Odisha State Pollution Control Board)

11. **Fire Fighting system** - The project includes Static water storage tanks and Fire pumps, Wet Riser system, Hose Reels, Portable Fire extinguishers, Automatic Sprinkler system. There is the proposal for 100 Cu.m UG tank and 10 cu.m OHT for fire fighting. The internal road will be 7m wide road which can serve for movement of fire vehicles. In the circulation plan of the project, there will be proper entry and exit points for systematic control of the vehicular movement within the medical complex.

12. All the materials used in construction of this building are strictly in accordance with BIS/ISI specifications and norms conforming to National Building Code, 2016 covering all the safety factors including earthquake and cyclone. The project obtained structural safety certification from the competent authority regarding the construction of the building.

13. **Project Cost -** Total cost of the project is Rs.90.76 crores and the capital cost for EMP is 95 lakhs and the recurring cost will be 27 Lakhs per annum.

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

15. The SEAC in its meeting held on 02.09.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of the sub-Committee of SEAC.

    i) Backup calculation to attain Zero liquid Discharge concept.

    ii) Details of Rain water Harvesting.

    iii) Location, Source and utilisation/ disposal of 40KLD ETP affluent.

iv) Provision for Incinerator.

v) Location of STP, disposal of STP water with no integration of STP & ETP.

vi) Backup calculation of 175KLD water used in HVAC.

vii) Parking area in terms of ECS for 4 wheelers and 2 wheelers and their location for staffs, patients and visitors.

viii) Traffic Study Report to be submitted duly vetted by institute of repute.

ix) Layout plan and width of road for movement of Fire Tender.

x) Detailed calculation of greenbelt with breakup and dimensions.

xi) Backup calculation of DG sets of 2750KW.

xii) Layout map showing nearest drain and it's distance.

xiii) Layout of internal drainage map and their fallout if any to external public drain.

xiv) Copy of permission of the concerned authority of the drain to discharge if any water from project to the nearby drain.

xv) Breakup of total built up area of the whole project area including university.

xvi) Permission/Undertaking that total built up area will not exceed 150000sq.mt.

xvii) Approval Letter from Fire Safety Deptt.

xviii) Details of accreditation of the University.

xix) Construction status of the project of the university such as prior to 2006 and after 2006 and till now.

16. The project proponent was requested vide letter no. 774(4)/ SEAC – (Misc) - 28, dated 06.09.2022 to submit the information / documents as sought by the SEAC at para 15 above. But, they have not yet furnished the same.

17. The proposed site was visited by the sub-committee of SEAC on 14.11.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

a) Lay out map for hospital road network, starting from entry gate to exit gate.
b) Lay out map for parking area for 4 wheelers and 2 wheelers for staffs, patients and visitors.
c) Traffic Study Report to be submitted.
d) Layout plan for Fire fighting gadgets and width of road for movement of Fire fighting vehicles.
e) Detailed calculation of greenbelt with breakup and dimensions. Backup calculation of DG sets of 2750KW.
f) Details of Rain water Harvesting.
g) Layout map for entire drainage system showing nearest public drain and it's distance.
h) Location, Source and utilisation/ disposal ETP and STP effluents, special emphasis on Zero liquid Discharge concept .
i) Details of solar power calculation, generation and use in % of total power.
j) Stack height vs building height may be furnished.

k) Layout for green belt.

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of information / documents as requested vide letter no. 774(4)/ SEAC – (Misc) - 28, dated 06.09.2022 and as sought by the Sub-Committee of SEAC at para 17 above.

ITEM NO. 09

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR RESIDENTIAL COMPLEX FOR TATA STEEL EMPLOYEES AT KALINGANAGAR INDUSTRIAL COMPLEX OVER AN AREA 14.74 HA LOCATED AT- VILLAGE KHURUNTI & GADAPUR, JAJPUR FOR M/S. TATA STEEL LIMITED OF SRI RAJIV KUMAR – MOD EC

1. This proposal is for Residential Complex for Tata Steel Employees at Kalinganagar Industrial Complex over an area 14.74 ha located AT- Village Khurunti & Gadapur, Jajpur for M/s. Tata Steel Limited.
2. Environment Clearance for Residential Complex of M/s Tata Steel Ltd located at Kalinganagar Industrial Complex at Khurunti & Gadapur, Dist Jajpur was granted vide letter number SEIAA/4669 dated 17.08.2015 for period of 7 (seven) years which is valid up to 16.08.2022.
3. The project total plot area is 2,02,204 Sq. m with developed of built-up area 1,47,380 Sq. m (Including parking).
4. Consent to Operate granted from OSPCB on 04th April 2018 valid till 31st March 2023.
5. Substantial progress has been made in construction of the township, but the project could not be completed within the stipulated time frame due to disruption of work because of surge in Covid-19 cases in the country during FY'21 and FY'22.
6. This is for EC validity extension for residential complex of M/S TATA Steel employees at-Kalinganagar Industrial Complex, Jajpur, Odisha w.r.to Gazette Notification S.O. 1807(E) dated 12th April 2022 of Ministry of Environment Forest and Climate Change, Govt of India.
7. Necessary permissions i.e Fire Safety Certificate from Directorate General Fire Services, Odisha on 31/01/2019 and Occupancy certificate from Kalinganagar Development Authority on 14/03/2019 and 26.04.2022 has been obtained.
8. The services and utilities are implemented to create an environmentally sensitive and sustainable township - e.g. organic treatment of solid waste and wastewater treatment in STP, harnessing solar energy for hot water and PV electricity generation, rainwater harvesting, ecology driven landscape strategy, resource saving fixtures and equipment, passive solar strategies and natural ventilation in building design, etc.
9. Measures are being taken for preventions, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management in compliance with the prescribed statutory norms and standards.
10. The project proponent made a detailed presentation on the proposal.
11. The SEAC in its meeting held on 03.08.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent.
12. 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
i)	Progress of the Project in form of Bar chart.	Annexure – 1 Enclosed
ii)	Compliance of EC conditions stipulated in 2015 duly certified by Regional Office MoEF&CC, Bhubaneswar.	Annexure – 2 Enclosed
iii)	Compliance report of CTE & CTO duly certified by the Regional Office, SPCB, Jajpur.	Annexure – 3 Enclosed
iv)	Clarification regarding obtaining of Occupancy Certificate for the entire project or part project completion may be submitted.	Annexure – 4 Enclosed

13. The MoEF&CC, Govt. of India vide notification no. S.O. No. 1807(E) dated 12/04/2022 amended the provisions of EIA Notification, 2006 regarding validity of Environment Clearance as mentioned below:

Type of Project	Earlier EC validity (Years) (A)	Further extendable for (Years) (B)	Increased EC validity (Years) (C)	Further extendable for (Years) (D)
River Valley projects	10	3	13	2
Nuclear projects	7	3	15	5
Projects other than River Valley, Nuclear and Mining Projects	7	3	10	1
Mining Projects	30		30 (Subject to adequacy of EIA/EMP to be reviewed every 5 years after 30 Years)	20

14. The MoEF&CC, Govt. of India vide OM no. F.No. 1A3-22/28/2022-1A.111 [E181584], dated 13.12.2022 clarified the applicability of the amended EIA Notification issued vide no. 1807(E), dated 12.04.2022 as under:

    i) 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 as mentioned at para no. 1 column (C) above:

    "Provided that the period of validity of Environmental Clearance with respect to the type of Projects and Activities listed at Para 1 above may be extended in respect of valid Environmental Clearance, by the regulatory authority concerned, by a maximum period

of years as indicated at Para No. 1 Column (D) above, if an application is made in the laid down proforma to the regulatory authority by the applicant as per the provisions of EIA Notification 2006: Provided further that the regulatory authority may also consult the concerned Expert Appraisal Committee before grant of such extension".

ii) The Environment Clearances for which the project proponents have submitted the application for extension of validity as per the provisions of the EIA Notification 2006 as on the date of publication of Notification i.e. 12/04/2022, shall stand automatically extended to respective increased validity as mentioned at Para no. 1 column (C) above.

After detailed discussion, the SEAC opined that revalidation of EC granted earlier is not required as validity of the Environmental Clearances for the project had not expired as on the date of publication of Notification i.e. 12/04/2022 and validity of EC shall stand automatically extended for another 3 years i.e. upto 16.08.2025. The SEIAA may consider to inform the project proponent accordingly.

ITEM NO. 10

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BHAGABANPUR DECORATIVE STONE AN AREA 4.50 HA. BEARING KHATA NO. 215, PLOT NO.705 (PART), 711 (PART), 714 (PART) IN VILLAGE -BHAGABANPUR, TEHSIL - KUKUDAKHANDI, DISTRICT-GANJAM OF MD IRFAN RAZZAK – EC

1. This proposal is for Environmental Clearance for Bhagabanpur Decorative Stone an area 4.50 ha. bearing Khata no. 215, Plot no.705 (Part), 711 (Part), 714 (Part) in village -Bhagabanpur, Tehsil - Kukudakhandi, District-Ganjam of Md Irfan Razzak.
2. The project is categorized under Category-B1 as the total lease area under cluster approach is more than 5 Ha (2 other mines are in the cluster) and is present in Schedule under item 1(a) in the EIA notification, 2006 and its subsequent amendments thereto.
3. This present proposal of Bhagabanpur Decorative Stone is a stone mining project and the total area is 4.50 Ha. / 11.12 acres and is located in Mouza - Bhagabanpur, Tahasil - Kukudakhandi, District - Ganjam of Odisha.
4. All the mining leases is granted by Tahasildar, Kukudakhandi, Ganjam and has been auctioned and leased out to the successful bidders. The LOI for mining has been issued for 5 years period vide letter no. 6602/SM, dated 06.09.2019. Now, Md. Irfan Razzak Niladri Vihar, (IInd Lane Extension), Aska Road, Berhampur-760001, Dist: Ganjam, Odisha. has applied for Environment clearance for the Bhagabanpur Decorative Stone.
5. TOR letter has been issued vide letter no. 1799/SEIAA on 26.07.2021.
6. Baseline study has been conducted for post monsoon season of 2020 i.e, from December, 2020 to Feb, 2021.
7. Public hearing was exempted for this project because Public Hearing previously was conducted for other 2 mines present in cluster on dated 02-07-2014. At the time of TOR (Terms of Reference), SEAC meeting held on 13.11.2020 had clarified that the same public hearing is valid for this project.
8. The Mining Plan of stone quarry has been approved by the approving authority, Office of the Joint Director of Mines, Odisha, Bhubaneswar for period of 5 years vide letter no 3118/DM on 15.05.2020.
9. **Location And Connectivity**: The Bhagabanpur Decorative Stone is proposed on Khata no-215, Plot no- 705(P), 711(P), 714(P) of Parbat Kissam in Mouza - Bhagabanpur in Tahasil Kukudakhandi in Ganjam District of Odisha. The area under discussion is featured in Survey of India Topo Sheet No – 74A/11 and is bounded between the Latitude: 19°20'20.00"N to 19°20'29.12854"N, Longitude: 84°44'08.30" E to 84°44'19.15"E. The lease area is located at a distance of 16 km from Mouza Berhampur and at a distance of 33 kms from Tahasil/ District Ganjam and 155.04 kms from the State Capital Bhubaneswar. Berhampur Railway station is the nearest railway station located at a distance of 16 kms from the lease area. Nearest Road bridge is at a distance of 1.5 km from the mining lease area. Metal road connecting to the lease area is at distance of 3 km. SH – 17 is the nearest State Highway at a distance of 3 kms. Major

district road is at distance of 3 km. NH-59 is the nearest National Highway which is at a distance of 12 km.

10. The mining lease area is identified and listed in the DSR of Ganjam under minor mineral - stone and is mentioned in Annexure – IX.

11. **Reserves, Method of Mining and Production** – The geological reserves is 126547 cum and Mineable reserves is 92948 cum. Bhagabanpur Decorative Stone is a minor mineral extraction project for exploitation of stone. The average production from the mining is proposed to be 3105 cum/year and total production will be 12,285 cum during the valid lease period of 5 years. The method of mining is proposed as Open cast semi-mechanized method as well as manual method. There is no overburden outside the mine lease area. During the plan period over 0.358ha of land in the south-western side of the M.L area is proposed for waste dump. A total of 36,858 cum (in-situ) waste/rejects is likely to be generated during the plan period. Depending upon the essentially about 70 % of these waste/rejects will be utilized con-currently for construction and maintenance of road in the lease area and will be disposed of as minor mineral other than decorative stone with the permission of the competent authority.

Total Production of the Bhagabanpur Decorative Stone

Year	Total Volume of Excavation M^3	Waste Volume @ 45%: m^3	Present Presently non-saleable stone @ 40% (m^3)	Vol of Decorative Stone (Block & Khanda) @15% (m^3)
1st Year	12000	5400	4800	1800
2nd Year	14300	6435	5720	2145
3rd Year	16100	7245	6440	2415
4th Year	18800	8460	7520	2820
5th Year	20700	9315	8280	3105
Total	**81900**	**36855**	**32760**	**12,285**

12. **Green Belt** in the lease area shall be developed over an area of 0.793 Ha and 3700 saplings will be planted during the valid plan period. This project is expected to meet the demand supply gap of the area for different uses in the domestic market.

13. **Water requirement**: Water requirement for the project will be 11.0 KLD. Water required in the project will be for drinking purpose and dust suppression, which will be sourced from water tanker.

14. **Power Requirement**: Power Requirement will be required for mining operations and transportation will be met through diesel. Site services in the mining lease area will be electrified by power supply from Orissa Electricity board.

15. **Employment Generation**: Employment Generation from the project is 32 nos. of people and OMS has been assumed to be 0.5 cum. 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 personals.

16. **Project Cost**: The total project cost of entire mining is 90 lakhs and EMP cost is Capital cost Rs. 7.15 lakhs and Recurring cost 10.69 Lakhs/annum.

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

18. The SEAC in its meeting held on dated 02-09-2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent.

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

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	In view of the likely revision of DSR for Ganjam District in future the details of this Minor Mineral reserve to be ensured in the revised DSR.	No information has been furnished	Not complied
ii)	NOC from concerned competent authority for usage of road for transportation of minerals.	Undertaking by Lessee that transportation of minerals will be done in existing road. No NOC has been furnished by the proponent.	Not complied
iii)	Plantation on both sides of approach road and its maintenance.	No information has been furnished.	Not complied
iv)	Zero liquid discharge from lease area to be maintained.	Brief note submitted	-
v)	In case village / any habitation is very nearby, plan to ensure safety of human life and livestock from accidents be submitted.	Sarpanch has certified that the nearest habitation is at 1km	-
vi)	NOC of BDO of Panchayat for usage of haulage road/ Panchayat Road.	Not furnished	Not complied
vii)	Silt management and mitigation from agricultural fields and water bodies nearby.	Submitted	Not properly arranged or explained
viii)	Composition of wastes/dumps and it's storage plan for different years with proposed layout	Submitted	Not properly arranged or explained
ix)	Mitigation of flying rock if likely to generate due to possible use of explosive.	Not furnished	--
x)	The EIA and CSR activities should be made in cluster approach.	EMP and CSR budgets for the cluster submitted.	Complied
xi)	ToR was issued to conduct EIA study and submit final EIA report after conducting public hearing. However, the proponent has submitted EIA report without conducting a fresh public	MoEF notification S.O. 2269(E) dated 01.07.2016 has been submitted and copy of Public Hearing of Dakhinapur Decorative stone of Ajax Petro has been submitted. Proceedings of SEAC Meetings 13.11.2020 and 02.09.2022 has been	Not properly arranged or explained Proper justification not given

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	hearing and intimated during presentation that public hearing is not required as a public hearing has already been conducted in 2014. The proponent has to give a detailed justification as to why a fresh public hearing will not be conducted.	submitted.	
xii)	Detailed status of all the mines in cluster.	Mining officer, Ganjam Circle, Berhampur has certified presence of 2 mines, Bhagabanpur Decorative Stone mines of M/s Ajax Petro and Bhagabanpur Decorative Stone mines of M/s Neelachal Granites Pvt. Ltd. are within the 500m radius periphery of the proposed quarry.	Complied

20. The SEAC in its meeting held on 05.11.2022 decided to take decision on the proposal after receipt of the following information from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th><th>Views of SEAC</th></tr>
<tr><td>i)</td><td>In view of the likely revision of DSR for Ganjam District in future the details of this Minor Mineral reserve to be ensured in the revised DSR</td><td>For Revision of DSR we are requesting to District administration, Ganjam for inclusion of our Proposal.
Letter copy has attached as Annexure – I.</td><td>Complied</td></tr>
<tr><td>ii)</td><td>NOC from concerned competent authority for usage of road for transportation of minerals</td><td>NoC Letter from Panchayat, Lanjia has attached as Annexure-II.</td><td>Complied</td></tr>
<tr><td>iii)</td><td>Plantation on both sides of approach road and its maintenance</td><td>
<table>
<tr><td rowspan="2">Year</td><td colspan="2">Plantation in Safety Zone Area</td><td colspan="2">Plantation along the road side</td><td>Species</td></tr>
<tr><td>Area (Ha.)</td><td>Number of plants</td><td>Area (Ha.)</td><td>Number of plants</td><td rowspan="6">Guava, mango, Jammun, neem etc</td></tr>
<tr><td>1st</td><td>1.48</td><td>1480</td><td>0.264</td><td>264</td></tr>
<tr><td>2nd</td><td colspan="2" rowspan="3">Maintenance</td><td colspan="2" rowspan="3">Maintenance</td></tr>
<tr><td>3rd</td></tr>
<tr><td>4th</td></tr>
<tr><td>5th</td><td colspan="2" rowspan="2">1480</td><td colspan="2" rowspan="2">264</td></tr>
<tr><td></td></tr>
<tr><td colspan="6">Total 1745</td></tr>
</table>
</td><td>Complied</td></tr>
<tr><td>iv)</td><td>Zero liquid discharge</td><td>Garland drains along with settling tank and retention/</td><td>Complied</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Information Sought by SEAC</th><th>Compliance furnished by the proponent</th><th>Views of SEAC</th></tr>
<tr><td></td><td>from lease area to be maintained</td><td>toe wall will be constructed on the sloping side barrier of the ML area. The garland drain will be routed through settling tank to remove suspended solids from flowing into storm water and choking streams/ Nala. Detail & garland drain map has been attached as Annexure-III.</td><td></td></tr>
<tr><td>v)</td><td>In case village / any habitation is very nearby, plan to ensure safety of human life and livestock from accidents be submitted</td><td>None within 500m buffer. Panchayat letter has attached as Annexure-IV.</td><td>Complied</td></tr>
<tr><td>vi)</td><td>NOC of BDO of Panchayat for usage of haulage road/ Panchayat Road</td><td>NOC has been attached as Annexure II</td><td>Complied</td></tr>
<tr><td>vii)</td><td>Silt management and mitigation from agricultural fields and water bodies nearby</td><td>In order to prevent siltation in the slope due to run off garland drain along with setting tank will be provided in boundary of section. Around dump retaining wall will be constructed.</td><td>Complied</td></tr>
<tr><td>viii)</td><td>Composition of wastes/dumps and it’s storage plan for different years with proposed layout</td><td>A total of 36888m^3 (In situ) or 44230 m^3 swollen (Swell factor of 1.2) waste /rejects is likely to be generated during the plan. Depending upon the essentially about 70% of these waste/rejects will be utilized concurrently for the construction and maintenance of road in the lease area and will be disposed of as minor mineral other than decorative stone with the permission of the competent authority. The remaining wastes will be confirmed to be dumped on the demarcated area towards west over 0.303 hectares at an average of 4m height maintaining overall slope of the dump at 22^o.
<table>
<tr><td>Year</td><td>Waste/Rejects(cum)</td></tr>
<tr><td>1st Year</td><td>5400</td></tr>
<tr><td>2nd Year</td><td>6435</td></tr>
<tr><td>3rd Year</td><td>7245</td></tr>
<tr><td>4th Year</td><td>8460</td></tr>
<tr><td>5th Year</td><td>9315</td></tr>
<tr><td>Total</td><td>36855</td></tr>
</table></td><td>Complied</td></tr>
<tr><td>ix)</td><td>Mitigation of flying rock if likely to generate due to possible use of explosive</td><td>Not Applicable as there is no blasting is involved. That’s why there will be no mitigation of flying rock.</td><td>Complied</td></tr>
<tr><td>x)</td><td>The EIA and CSR activities should be made in cluster approach.</td><td>The EIA report has already been prepared in cluster Detail attached as Annexure V.</td><td>Complied</td></tr>
<tr><td>xi)</td><td>ToR was issued to conduct EIA study and submit final EIA report</td><td>Clarification attached as Annexure VI.</td><td>Complied</td></tr>
</table>

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	after conducting public hearing. However, the proponent has submitted EIA report without conducting a fresh public hearing and intimated during presentation that public hearing is not required as a public hearing has already been conducted in 2014. The proponent has to give a detailed justification as to why a fresh public hearing will not be conducted.		
xii)	Detailed status of all the mines in cluster	Cluster letter from Mining Office, Brahmapur has attached as **Annexure VII.**	Complied

Considering the information furnished and the presentation made by the consultant, **M/s P & M Solution, Noida** along with the project proponent, the SEAC recommended for grant of Environmental Clearance upto lease period with stipulated conditions as per **Annexure – E and following additional conditions;**

i) 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 decorative stone quarry for ensuring that working personnel are not affected by silicosis.

ITEM NO. 11

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR ADDITIONAL INSTALLATION OF CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA WITHIN THE EXISTING CAMPUS OVER AN AREA OF 7.76 ACRE OR 3.14 HA. IN PLOT NO. 30/301, AT VILLAGE: JAMINIBANDHA, P.O: BHANDARI FOR M/S SHREE MONOLITHICS PVT. LTD OF SRI CHANDRA SEKHAR SAMAL – EC

1. This proposal is for Environmental Clearance for Additional installation of Chrome Ore Beneficiation Unit of throughput capacity 18,500 TPA within the existing campus Over an area of 7.76 Acre or 3.14 Ha. In Plot No. 30/301, at Village: Jaminibandha, P.O: Bhandari for M/s Shree Monolithics Pvt. Ltd of Sri Chandra Sekhar Samal.
2. The project falls under category “B” or activity 2(b) - Mineral beneficiation projects and category ‘B2 ’as the throughput capacity of the beneficiation plant is 18,500 TPA (<20,000 TPA) under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Shree Monolithics Pvt. Ltd. proposes for establishment of Chrome Ore beneficiation plant over an area of 7.76 Acres or 3.14 Ha with throughput capacity of 18,500 TPA within the existing Chrome Monolithic Unit at Jaminibindha, Bhandaripokhari, Dist: Bhadrak, Odisha.

4. **Existing Project Details** – The Project has existing Chrome Monolithic unit (Refractory: 2500 MT/month), Refractory mortar: 500 MT/month, Ramming mass: 250 MT/month, Nozzole filling compound: 500 MT/month, Felting mass: 250 MT/month, Chrome Monolythic: 500 MT/month, Chrome sand: 500 MT/ month, High carbon Ferrochrome: 2000 MT/month (reclaimed from nonhazardous slag of steel and ferro alloys) and Ferro Alloys metal: 50,000 MT/ annum (reclaimed from nonhazardous slag of steel and ferro alloys).
5. **Proposed Details** – The Project has proposed an Additional Installation of beneficiation plant with throughput of 18500 TPA
6. Terms of Reference was granted by SEIAA vide letter no – 4180/SEIAA dated 03.03.2022.
7. The existing chrome monolithic unit has obtained Consent to Establish vide letter no – 428/NOC/1473 dated 15.02.2010 and Consent to Operate vide Consent Order NO- 170/CTO-2956/2017 dated 31.08.2018 valid upto 31.03.2022.
8. The EIA EMP study was carried out based on the baseline study carried out during October to December 2020 by M/s Kalyani Laboratories Pvt. Ltd. (KLPL).
9. **Location and Connectivity** - The project is located at Jaminibindha village over an area of 7.76 Acres in Plot No:25/285,19,27,17,18,30,20,21,96/321,29,30/301. Khata No.: 9/9, 92/67, 9/5, 92/61, 9/6, 92/65, 92/62 and 92/64. The project can be identified in Survey of India Toposheet No.:73L/5 & 73K/8; Latitude:20^0 57' 26.88"N Longitude:$86^0$21 '21.67"E. The project site is well accessible through NH 5 at 0.1km and railway station is East Coast Railway at 7Km. Nearest River Baitarani at 7km. Nearest habitation is Rebo – 1km and town is Bhandaripokhari-2 Km.
10. **Water Requirement** - Total water requirement for the proposed project will be 150 KLD and make up water requirement will be 10 KLD. Out of the makeup water requirement 1 KLD used for drinking purpose which will be sourced by borewell and rest water requirement of 9 KLD will be sourced from Rain Water Harvesting Pond and ground water. There is a proposal for the installation of ETP of 50 KL capacity for the beneficiation plant to treat the surface runoff water.
11. **Rain Harvesting System** - For water conservation two rain water storage tanks of dimension 50 x 80 x 3 m has been constructed within the plant premises to store the harvested quantity of rain water and for use. Total storage capacity of the tank will be 12000 Cu.m.
12. **Power Requirement** - The total power requirement is estimated as 100 KVA. It is proposed to draw the power from the NESCO.
13. Employment Generation - The project generates employment opportunities for 12 personnel which includes operator -2, supervisor 2, 4 nos of semi skilledlabour and 4no of unskilled labour.
14. **Raw materials and Process** - The raw material i.e. low grade chrome ore will be sourced from mines of Odisha Mining Corporation, Sukinda which is located at a distance of 46 Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks. The beneficiation process of chrome ore involves up-gradation of low grade chrome ore (<40% Cr2O3) to semi high grade ore (50-65% of Cr2O3). The beneficiation process of chrome ore include dispersal of the ferruginous coating and removal of the gangue material from the ore. Before the low grade feed to the beneficiation plant the chromites ore

lumps were screened and oversized material i.e -20 to 100 mm size material will sent to the grinding unit.

15. **Waste Generation** - The major solid waste will be the tailings generated from the beneficiation process. The quantity of tailings to be 4700 TPA having <10% Cr2O3. The tailings will be collected & treated with Ferro-Sulphate solution and dried through a filter press. Further, the tailing will be stored in the tailing dump. After drying the tailing will be blended in the chrome refractory mortar as per the demand of the customer.

16. **Greenbelt** - There is plantation of 100 trees within the plant boundary and with the EC proposal there is the planning for three tier plantation along the boundary along with open space plantation. An area of 8903 Sq.m has been allocated for green belt development with about 2200 saplings plantation proposal.

17. **Project Cost** - Total cost of the project will be 1.75 Crores. For implementation for EMP for the project the allocated capital budget will be 32 lakhs and recurring budget will be 5 lakhs.

18. **CSR Activities** - As per the social need assessment and suggestion of village committee a CSR plan has been prepared with a proposed cost estimate of 11.5 Lakhs which will be utilized within a period of 3 years.

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

20. The SEAC in its meeting held on 02.09.2022 decided to take decision on the proposal after receipt of the certain information / documents from the proponent. The proponent has furnished the information / documents and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
i)	Process flow diagram showing re usage & storage of effluent/tailing and with capacity of tailing pond and treatment of hexavalent Chromium.	Detail process flow diagram showing usage and storage of effluent/ tailing and with capacity of tailing pond and treatment method of hexavalent chromium is attached as **Annexure 1**.
ii)	Supporting documents that Kissam of land has been converted to industrial use.	Conversion document of the land for industrial use is attached as **Annexure 2**.
iii)	Supporting documents that supports the land from road to entry and exit gate of project site belongs to the owner.	The approach road from factory boundary to NH is approximately 20mtr being used by the proponent since last 20 years. However, as per the suggestion of Hon'ble subcommittee of SEAC, PP approached the same permission to sub Collector and sub collector forwarded the same for necessary approval from Tahasildar, which is under process. Copy attached as **Annexure 3**.
iv)	Stack and its height to be made for DG set.	The existing capacity of DG set is 125 kVA. There is the proposal for

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		construction of stack of 2m for the DG set. This will be made within 3 months. Undertaking in this regard is attached **Annexure 4**.
v)	Permission from Oil and Safety Authority as petroleum installation is adjacent to the unit.	Permission has been obtained from Oil and Safety Authority stating that the filling station is opening near the project site with all the safety measures. So, there will be no objection regarding the operation of any adjacent unit. Copy of the letter attached **Annexure 5**.
vi)	Zero liquid discharge concept to be followed strictly and detailed proposal to this effect to be submitted.	Details of Zero liquid discharge for the project are attached as **Annexure 6**.
vii)	Pollution load comparative statement of hexavalent chromium in soil, water and nearby water bodies.	The soil, surface water and ground water samples has been analyzed from the surrounding for hexavalent chromium content. The test results of samples reveals that there is no presence of hexavalent chromium in the surrounding environment. Details analysis result of hexavalent chromium in various location has been summarized and attached as **Annexure 7**.
viii)	Settling pond and ETP design and capacity.	Details of Settling Pond and ETP design is attached as **Annexure 1**.
ix)	Technical write up on handling of tailings and its management.	Technical write up on handling of tailing and its management is attached **Annexure 1**.
x)	Measures taken to prevent for Leaching process of hexavalent chromium.	The tailing pond will be provided with of LDPE lining to prevent any water seepage which ensures any leaching of hexavalent chromium to surrounding.

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

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

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

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

ITEM NO. 12

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR HAZARIDANGA STONE QUARRY (I TO VIII) OVER A CLUSTER AREA OF 11.938 HECTARES/ 29.49ACRES (CONSISTING OF 8 NOS. QUARRIES) LOCATED AT VILLAGE- HAZARIDANGA, TAHASIL- KOLNARA, DISTRICT- RAYAGADA OF TAHASILDAR, KOLNARA – EC

1. The proposal is for Environmental Clearance for Hazaridanga Stone Quarry (I To VIII) over a cluster area of 11.938 hectares/ 29.49acres (consisting of 8 nos. quarries) located at Village- Hazaridanga, Tahasil- Kolnara, District- Rayagada of Tahasildar, Kolnara.
2. 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. Hazaridanga Stone Quarry (I to VIII, cluster of 8 Quarries) is located at village Hazaridanga, Tehsil Kolnara, District Rayagada of Odisha. The project is proposed by the Tahasildar, Kolnara, Rayagada.The proposed project is in cluster situation as 8 leases are within 500 m radius & total lease area becomes greater than 5 ha. The total cluster area granted under QL is 11.938 ha within 500m.
4. Detailsof8StoneQuarries undertotalclusterareaof11.938Ha.is given in Table:

Sl no.	Name of Quarry	Lease area (Ha.)	Land Schedule	Kissam
1	Hazaridanga Stone Quarry I	1.011	Khata No-6 Plot No -37	Pahad
2	Hazaridanga Stone Quarry II	2.024	Khata No-6 Plot No -37	Pahad
3	Hazaridanga Stone Quarry III	2.024	Khata No-6 Plot No -99	Pahad
4	Hazaridanga Stone Quarry IV	1.214	Khata No-6 Plot No - 84	Pahad
5	Hazaridanga Stone Quarry V	1.214	Khata No-6 Plot No -84(p)	Pahad
6	Hazaridanga Stone Quarry VI	2.023	Khata No-6 Plot No -98(p)	Pahad
7	Hazaridanga Stone Quarry VII	1.214	Khata No-6 Plot No -98(p)	Pahad
8	Hazaridanga Stone Quarry VIII	1.214	Khata No-6 Plot No -84	Pahad
Total		11.938		

5. The Hazaridanga Stone Quarry (I to VIII) is proposed on Khata no- 6, Plot no- 84, 37, 99, 84, 98(p), 84(p), 98(p) of PahadKissam in village - Hazaridanga in Tahasil Kolnara in Rayagada District of Odisha. The mining lease area is identified and listed in the DSR of stone and is mentioned in the DSR page no – 25, 26, 32 &34, Serial no – 1,8,2,3,6,7 & 8 of the Rayagada district . Hazaridanga Stone Quarry (I to VIII) is a minor mineral extraction project for exploitation of stone. The average production from the cluster is proposed to be 27650 cum/year and total production from the cluster will be 133332 cum during the valid lease period of 5 years.
6. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No – 65M/7, 65M/8, 65M/11 & 65M/12 and is bounded between the Latitude -19° 14' 50.00" N to 19° 15' 22.17" N , Longitude – 83° 29' 46.66" E to 83° 30' 14.85" E. The lease area

is located at a distance of 0.4km from village Hazaridanga and at a distance of 04 kms from Kolnara, 13.0 kms from the District Headquarters Rayagada and 495.0 kms from the State Capital Bhubaneswar. Rayagada Railway station is the nearest railway station located at a distance of 13 kms from the lease area. Nearest Road bridge is at a distance of 4.2 km from the mining lease area. Metal road connecting to the lease area and with the village – Hazaridanga is at distance of 0.1 km. SH – 4 is the nearest State Highway at a distance of 1.1kms. Major district road is at distance of 1.1 km. NH-43 is the nearest National Highway which is at a distance of 87 km.

7. The Mining Plan of each stone quarry (8Nos.) has been approved by the approving authority, Office of the Joint Director of Geology, Zonal Survey, Koraput.
8. TOR has been granted from SEIAA vide letter no 880/SEIAA dated 09.03.2021 for Hazaridanga Stone Quarry (I to VIII) over an Cluster area of 11.938 ha/29.49 Acre of stone in village- Hazaridanga, Tehsil - Kolnara, District- Rayagada, Odisha.
9. The public hearing was conducted on 21st September, 2021 at 11.00A.M in RMC Godown at Padalekapai village (Near Hazaridanga village) under Kolnara Tehsil, District Rayagada.
10. Baseline Study was conducted during period for post monsoon season of 2020 i.e, from October to December, 2020.
11. **Geological and Mineable Reserve**: -Reserve is calculated basing on the existing quarry/surface exposures and cross sectional area method has been taken suitably for reserve estimation. The cross sectional area of the road metal is computed for each section by graphical method. For the purpose of estimation of quantity of the road, railway and building materials, recovery factor is taken as 90% of total rock mass while remaining 10% is assumed to be waste consists of weathered rock and soil.

S no.	Name of the Quarry	Geological reserve (cum)	Mineable reserve (cum)
1	Hazaridanga Stone Quarry I	2,19,745	84,625
2	Hazaridanga Stone Quarry II	2,87,562	1,77,973
3	Hazaridanga Stone Quarry III	1,34,078	93,252
4	Hazaridanga Stone Quarry IV	2,73,167	1,15,684
5	Hazaridanga Stone Quarry V	3,15,057	1,12,417
6	Hazaridanga Stone Quarry VI	5,16,684	2,55,888
7	Hazaridanga Stone Quarry VII	3,19,938	1,48,230
8	Hazaridanga Stone Quarry VIII	1,47,735	88,717
	8 nos.	22,13,966	10,76,786

12. **Method of Mining** - Mining will be done by Opencast semi-mechanized method with adopted of drilling & blasting. There is practically no OB at proposed site as it is already broken. The excavation in ore zone will be carried out by HEMM. In order to prevent haphazard excavation of pits and suitable blending of ore, the excavation has been proposed at one place. Sorting and sizing will be done manually also. The working has been proposed bench will be of height 6m and width 6m.

13. Total Production of the Hazaridanga Stone Quarry (I to VIII) Under Cluster Approach

Sl.No.	Name of Quarry	Useable Rock (cum)	Waste (cum)
1	Hazaridanga Stone Quarry	13034	686
2	Hazaridanga Stone Quarry II	24348	2704
3	Hazaridanga Stone Quarry III	24402	2704
4	Hazaridanga Stone Quarry IV	10854	1205
5	Hazaridanga Stone Quarry V	22842	2538
6	Hazaridanga Stone Quarry VI	11360	2840
7	Hazaridanga Stone Quarry VII	11372	599
8	Hazaridanga Stone Quarry VIII	15120	1680
Total	8 Nos.	**133332**	**14956**

14. The waste generated from the cluster is expected to be 14956 Cu.m. and volume of top soil is 19090 Cum. during the plan period are not useable for construction purpose, so these materials will be dumped in the temporary dump of 3 – 8 m height which will be utilized for approach road developers and maintenance purposes. The top soil available will be used for plantation activity and the waste material, which is normally in the form of weathered material, is used for filling, road making and maintenance within the lease hold area only.
15. **Employment Potential** - Total number of employment will be around 101numbers. including Management, Supervisory personnel, Skilled, Semiskilled and Unskilled.
16. **Water Requirement** - 87 KLD of water will be required for drinking, domestic purpose and for dust suppression. Water will be withdrawn from tube wells from nearby village through water tankers.
17. **Plantation** - Green belt shall be developed along the Safety zone of the lease area with the native tree species. The plantation proposal has been given to plant around 9870 saplings over safety zone of whole cluster and both sides of approach road. Species likely to be planted are Teak, Acasia Neem, Jamun etc as per the availability. Spacing between the saplings will be kept 2.5 meters x 2.5 meters only. (Plantation has been given 2500 Plants/hac.).
18. The estimated project cost is ` 2.4 crores and EMP cost is Rs. 57,54,000 lakhs and recurring cost is Rs. 56,80,000.
19. The project proponent along with the consultant **M/s P&M Solution., Noida -201301 – U.P** made a detailed presentation on the proposal.
20. The SEAC in its meeting held on 05.08.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of Sub-Committee of SEAC.
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

Proceedings of the SEAC meeting held on 13.01.2023 (Old proposals – compliance received)

Environmental Scientist, SEAC

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
1.	Installation of STP of adequate capacity and requisite design.	This is not applicable as the domestic waste water will be treated by septic tank.
2.	Proposed mitigation measures/ SOP for flying rock.	Mitigation measures for the fly rock during blasting have been given below: • Parking all vehicles and equipment a safe distance from the blasting area whenever possible. • Staying behind a blast shield or blast mats for fly rock protection during blasting • Making sure everyone has evacuated the blast area before proceeding. • Always following the supervisor's instructions. • Scrupulously guarding the access roads to the blast area and otherwise maintaining good blast site control.
3.	Sketch map showing Dump management, garland drain and silt management and photographs of that area.	Detail has been attached as **Annexure I**.
4.	Risk involved and measures to be taken for Dump stablization and dump management.	Retaining wall will be provided all along the perimeter of the dump to prevent hazardous situation and wash up of the dump and garland drain will be constructed side by of the retaining wall for proper drainage of rain water, so that dump floor area should not be damage by the rain water. Before letting the garland drain water outside the lease, it will be passed through the settling tank for settlement of the mud carried from the dump area.
5.	Green belt in safety zone of each mine and all-round the clusters to be confirmed with details.	Plantation will be done all along the safety zone of each mine site and all around the clusters. Detail has been given in **Annexure II**.
6.	Arrangement of pipeline sprinkling (permanent water line) to be explored and confirmed.	Undertaking has been attached as **Annexure III**.
7.	Silt management and detailed plan for the same to arrest /remedy of silt ingress to surrounding agricultural lands.	Management of silt management will be managed by the construction of settling tank and garland drain at a direction of water flow from the mining lease area (Settling tank and Garland Drain detail has been attached as **Annexure I**.
8.	Safety measures during blasting including provision of warning to be submitted.	Preparation of charging and stemming of holes will be done by a qualified blaster. Before a shot is charged, stemmed or fired, sufficient warnings by signal is given over the entire area falling within the danger zone and ensure that all persons within such area have taken proper shelter. • During blasting, controlled blasting will be done to prevent flying fragments which may cause injury to local inhabitants within danger zone.

Proceedings of the SEAC meeting held on 13.01.2023 (Old proposals – compliance received)

Environmental Scientist, SEAC

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		Proper inspection after shot firing will be done by the blaster. The number of shots which exploded shall be counted by the blaster to assess misfire. All necessary precautions as enumerated under 106(2) (b) of MMR 1961 will be followed.

After detailed discussion, the SEAC decided to take decision on the proposal after site visit of the Sub-Committee of SEAC.

Member Secretary, SEAC

ANNEXURE - A

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S RIVER FRONT DEVELOPERS PVT. LTD FOR PROPOSED RESIDENTIAL CUM COMMERCIAL APARTMENT [INTEGRATED ENVELOPE 3B + GF (COMMERCIAL) UPPER STILT +FIRST FLOOR (AMENITY FLOOR)+ SF (SERVICE FLOOR)+ 4 TOWERS OF 22 MULTI STORIED RESIDENTIAL APARTMENT BUILDING OVER CDA ALLOTTED DRAWING PLOT NO. 713,714,715,716,717,718,719 CORRESPONDING TO REVENUE PLOT NO. 94/2145, 95 (P), 98 (P) OVER AN BUILT-UP AREA 98706.93SQM OF MOUZA BIDAYDHARPUR UNDER SECTOR-8, BIDANASI PROJECT AREA IN FAVOUR OF SRI MANOJ KUMAR SAHOO - 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 224 KLD.
10. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
11. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha along with six monthly Monitoring reports.
12. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
13. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
14. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
15. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
16. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits of 30 nos. shall be provided.
17. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.
18. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

SOLID WASTE MANAGEMENT

19. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
20. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
21. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area

shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

22. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

23. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

SEWAGE TREATMENT PLANT

24. Sewage shall be treated in STP of capacity 300 KLD. The treated effluent from STP shall be reused for flushing, horticulture & Filter backwash.

25. Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.

26. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point.

27. Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.

28. No sewage or untreated effluent water would be discharged through storm water drains.

29. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

30. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

31. The proponent shall obtain permission from the concerned authority to discharge the liquid waste to any drain i.e. the competent authority of the drain and “Nala” before commencement of any activity at the project site.

ENERGY

32. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC

specifications.

33. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

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

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

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

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

AIR QUALITY AND NOISE

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

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

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

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

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

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

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 1969.87 sqm which is 20.02% of plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

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

TRANSPORT

46. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

    - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    - Traffic calming measures
    - Proper design of entry and exit points.
    - Parking norms as per local regulation

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

48. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in

this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

49. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
50. A dedicated entry/exit and parking shall be provided for commercial activities.
51. Barricades shall be provided around project boundary.
52. Speed of the vehicles shall be restricted upto 15 kmph by erecting speed bumps at regular intervals at project site and proper signage shall be provided for guided vehicular movement and speed restrictions.
53. Parking shall be prohibited on the access road to the proposed project site.
54. Footpath shall be seamless with sufficient width.
55. No vehicles shall be allowed to stop and stand in front of the gate on main access.
56. A buffer of minimum 10 m shall be maintained between the entry/exit gate and the road to avoid traffic congestion.
57. The Traffic Management Plan prepared by the proponent shall be duly validated and certified by the State Concerned Competent Authority and shall have also their consent before implementation.

ENVIRONMENT MANAGEMENT PLAN

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

OTHERS

59. Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
60. A First Aid Room shall be provided in the project both during construction and operations of the project.
61. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.

62. As per the MoEF&CC, Govt. of India Office Memorandum F.No.22-65/2017-IA.III dated 1st May 2018, the project proponent is required to prepare and implement Corporate Environment Responsibility (CER) Plan. As per para 6(ll) of the said O.M. appropriate funds shall be earmarked for the activities such as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

PART B – GENERAL CONDITIONS

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

Clearance letter and a copy of the same shall be forwarded to the Regional Office of MoEF&CC, Bhubaneswar.

9. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
10. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
12. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.

Environmental Scientist, SEAC

ANNEXURE - B

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR CONSTRUCTION OF PROPOSED FIVE BLOCKS OF (S+10) AND THREE BLOCKS OF (S+9) STOREYED APARTMENT BLOCKS AND ONE STOREYED (G+2) CLUB CUM SOCIETY BUILDING WITH BUILT UP AREA 42746.84 M^2 AT KESURA, BHUBANESWAR BY M/S STATE BANK OF INDIA STAFF ASSOCIATION (S.B.I.S.A.) (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 151.6 KLD.
10. A certificate shall be obtained from the local body supplying water, specifying the total

annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

11. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha along with six monthly Monitoring reports.
12. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
13. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
14. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
15. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
16. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits of adequate nos. shall be provided.
17. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.
18. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

SOLID WASTE MANAGEMENT

19. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
20. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
21. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
22. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

23. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

SEWAGE TREATMENT PLANT

24. Sewage shall be treated in STP of capacity 200 KLD. The treated effluent from STP shall be reused for flushing, horticulture & Filter backwash.
25. Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.
26. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point.
27. Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.
28. No sewage or untreated effluent water would be discharged through storm water drains.
29. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
30. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
31. The proponent shall obtain permission from the concerned authority to discharge the liquid waste to any drain i.e. the competent authority of the drain and "Nala" before commencement of any activity at the project site.

ENERGY

32. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
33. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

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

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

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

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

AIR QUALITY AND NOISE

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

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

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

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

pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

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

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

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 3719.40 m^2 (21 %) of plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

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

TRANSPORT

46. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

    - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    - Traffic calming measures
    - Proper design of entry and exit points.
    - Parking norms as per local regulation

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

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

49. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise

emission standards be operated only during non-peak hours.

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

ENVIRONMENT MANAGEMENT PLAN

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

OTHERS

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

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

PART B – GENERAL CONDITIONS

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

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

11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
12. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.

Environmental Scientist, SEAC

ANNEXURE - C

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S STALWART PROJECT PVT LTD FOR PROPOSED B1+B2+G+6(BLOCK-A) COMMERCIAL, B1+B2+S+31(BLOCK-B) RESIDENTIAL BUILDING, B1+B2+S+13 (BLOCK-C) RESIDENTIAL BUILDING & G+3 CLUB HOUSE (BLOCK-D) OVER BUILT-UP AREA OF 63560.91 SQM STORIED RESIDENTIAL COM COMMERCIAL BUILDING AT MOUZA- PATIA, BHUBANESWAR, DIST – KHORDHA OF SRI SARAT KUMAR SAHU – 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 217 KLD.
10. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the

quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

11. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha along with six monthly Monitoring reports.
12. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
13. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
14. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
15. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
16. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits of 44 nos. shall be provided.
17. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.
18. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

SOLID WASTE MANAGEMENT

19. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
20. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
21. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
22. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

23. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

SEWAGE TREATMENT PLANT

24. Sewage shall be treated in STP of capacity 350 KLD. The treated effluent from STP shall be reused for flushing, horticulture & Filter backwash.
25. Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.
26. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point.
27. Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.
28. No sewage or untreated effluent water would be discharged through storm water drains.
29. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
30. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
31. The proponent shall obtain permission from the concerned authority to discharge the liquid waste to any drain i.e. the competent authority of the drain and "Nala" before commencement of any activity at the project site.

ENERGY

32. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
33. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

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

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

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

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

AIR QUALITY AND NOISE

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

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

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

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

pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

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

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

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 2218.45 sqm (22.42 %) of plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

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

TRANSPORT

46. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

    - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    - Traffic calming measures
    - Proper design of entry and exit points.
    - Parking norms as per local regulation

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

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

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emission standards be operated only during non-peak hours.

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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.
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54. Footpath shall be seamless with sufficient width.
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56. A buffer of minimum 10 m shall be maintained between the entry/exit gate and the road to avoid traffic congestion.
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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.
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proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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

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

11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
12. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.

Environmental Scientist, SEAC

ANNEXURE - D

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR EXPANSION WITH MODIFICATION OF "ARIANA", MULTISTORIED RESIDENTIAL COMPLEX OVER AN BUILT UP AREA-58788.51 SQM AT MOUZA- SANKARPUR, BHUBANESWAR, ODISHA AT MOUZA- PATIA, OF BHUBANESWAR MUNICIPAL CORPORATION IN THE DEVELOPMENT PLAN AREA OF BHUBANESWAR DISTRICT KHORDA FOR M/S.KRIDAY REALTY PRIVATE LIMITED OF SRI SIDDHARTHA ROY – 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 895 KLD.
10. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the

quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

11. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha along with six monthly Monitoring reports.
12. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
13. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
14. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
15. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
16. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits of 08 nos. shall be provided.
17. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.
18. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

SOLID WASTE MANAGEMENT

19. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
20. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
21. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
22. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

23. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

SEWAGE TREATMENT PLANT

24. Sewage shall be treated in STP of capacity 860 KLD. The treated effluent from STP shall be reused for flushing, horticulture & Filter backwash.
25. Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.
26. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point.
27. Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.
28. No sewage or untreated effluent water would be discharged through storm water drains.
29. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
30. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
31. The proponent shall obtain permission from the concerned authority to discharge the liquid waste to any drain i.e. the competent authority of the drain and "Nala" before commencement of any activity at the project site.

ENERGY

32. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
33. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

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

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

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

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

AIR QUALITY AND NOISE

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

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

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

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

pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

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

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

GREEN COVER

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 18192.88 sqm (37.5 %) of plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

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

TRANSPORT

46. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

    - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    - Traffic calming measures
    - Proper design of entry and exit points.
    - Parking norms as per local regulation

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

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

49. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise

emission standards be operated only during non-peak hours.

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

ENVIRONMENT MANAGEMENT PLAN

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

OTHERS

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

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

PART B – GENERAL CONDITIONS

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

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

11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
12. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.

Environmental Scientist, SEAC

ANNEXURE -E

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR DECORATIVE STONE MINES

A. Specific conditions

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

B. Standard conditions

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

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

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

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

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

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

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

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

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

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

parameters and allows only species adopted to that micro climate.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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ANNEXURE- F

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF ADDITIONAL INSTALLATION OF CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA WITHIN THE EXISTING CAMPUS OVER AN AREA OF 7.76 ACRE OR 3.14 HA. IN PLOT NO. 30/301, AT VILLAGE: JAMINIBANDHA, P.O: BHANDARI FOR M/S SHREE MONOLITHICS PVT. LTD OF SRI CHANDRA SEKHAR SAMAL – EC

I. Statutory compliance:

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

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

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

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

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

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

II. Air quality monitoring and preservation

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

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

(iii) Appropriate Air Pollution Control (APC) system shall be provided for all the dust

generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

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

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

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

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

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

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

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

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

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

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

III. Water quality monitoring and preservation

(i) The project proponent shall monitor regularly ground water quality at least twice a year

(pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

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

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

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

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

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

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

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

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

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

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

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

(xiii) Adhere to “Zero Liquid Discharge”.

(xiv) Regular monitoring of water quality for surface water sources as well as ground water sources shall be carried out. The groundwater shall be monitored downstream of beneficiation plant as well as tailing pond upto groundwater table and record of monitoring data should be maintained and submitted on six monthly basis to the Ministry of Environment and Forests, its Regional Office, Bhubaneswar, the Central Ground Water Authority, the Regional Director Central Ground Water Board and the State Pollution Control Board.

(xv) Suitable rainwater harvesting measures on long term basis shall be planned and

implemented in consultation with the Regional Director, Central Ground Water Board.

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

IV. Noise monitoring and prevention

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

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

V. Energy Conservation measures

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

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

VI. Waste management

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

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

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

VII. Green Belt and EMP

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

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

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

VIII. Human Health Issues

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

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

the norms of Factory Act.

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

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

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

IX. Corporate Environment Responsibility

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

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

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

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

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

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

X. Miscellaneous

(i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by

prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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