PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 31ST JULY 2023

The SEAC met on 31st July 2023 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri Sashi Paul. The following members were present in the meeting.

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

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

ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S ACREPLEX REALTY PVT. LTD. FOR PROPOSED A RESIDENTIAL PROJECT, AT MOUZA - UTTARMUNDAMUHAN, TAHASIL - JATANI, DISTRICT- KHURDHA; ODISHA. THE PROJECT SITE IS LOCATED AT PLOT NO. 419,437/ 1078, 425, 440, 422, 423/2294, 421, 420, 414, 441, 426/4153, 430/4152, 426/3487; 426/4139, 426, 426/1203, THE TOTAL LAND AREA IS 23,318.25M^2 (5.76 ACRES) AND THE TOTAL PROPOSED BUILT-UP AREA IS 1,77,574.76M^2 OF SRI SHASHIKANT BARIK - TOR

1. The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. This proposal is for Terms of Reference to obtain Environmental Clearance of M/s Acreplex Realty Pvt Ltd for proposed Residential Project at Mouza - Uttarmundamuhan, Tahasil - Jatani, District - Khurdha; Odisha. The project site is located at Plot No. 419,437/ 1078, 425, 440, 422, 423/2294, 421, 420, 414, 441, 426/4153, 430/4152, 426/3487; 426/4139, 426, 426/1203, The Total land area is 23,318.25 m^2 (5.76 acres) and the total proposed built-up area is 1,77,574.76m^2.
3. **Category**: The proposed project falls under category "B" of Item of Schedule to the EIA Notification, 2006 or activity 8 (b): Townships and Area Development Projects.

4. **Location and Connectivity** – The proposed project is located at Plot No. 419,437/ 1078, 425, 440, 422, 423/2294, 421, 420, 414, 441, 426/4153, 430/4152, 426/3487; 426/4139, 426, 426/1203, Mouza - Uttarmundamuhan, Tahasil - Jatani, District - Khurdha, Odisha The geographical co-ordinates of project site are 20°13'17.87"N and 85°43'28.94"E and Kisam of land is Gharabari. The nearest highway is NH-57 is 10 km towards SW direction, NH-16 is 0.20 km towards N direction, NH-316 is 13 km towards E direction, & SH-13 is 7 km towards S direction. The nearest Railway Station being Bhubaneswar Railway Station & Retang Railway Station are about 13 km (ENE) & 5 km (ESE) away from the project site. Biju Patnaik International Airport is at 10 km (ENE) from project site. Bhargavi River is 14Km (E) from project site. Daya River is 9.8 Km (SE) of project site. Daya canal is 7 Km (E) of project site. Eco sensitive Zone of Chandaka Dampara Wildlife Sanctuary is 5.90 km.
5. The site is coming under Bhubaneshwar Development Authority.
6. **Land details:** The total plot area is 23,318.25m^2/ 5.76acres. /2.33 ha. with total built-up area 1,77,574.76 sq.mt.
7. **The Building Area Details of the Project:**

S. No.	Description	Area (in m^2)
i)	Plot area	23,318.25
ii)	Permissible Ground Coverage (@ 40% of plot area)	9,327.3
iii)	Proposed Ground Coverage (@ 30.23% of plot area)	7,050.64
iv)	Permissible FAR (@ 7 of plot area)	1,63,227.96
v)	Total Proposed FAR (@ 5.35 of plot area)	1,24,826.30
vi)	Non FAR	52,748.46
vii)	**Total Built-up area**	1,77,574.76
viii)	Required Parking Area as per bye laws (@ 30% of FAR area)	37,447.89
ix)	Proposed Parking Area (@ 30.17% of FAR area)	37,665.78
x)	Required Green Area (@ 15 % of the plot area)	3497.74
xi)	Proposed Green Area (@ 17.1% of the plot area)	3977.88
xii)	Height of the tallest building (m) (up to terrace level)	113.95

8. **Water requirement:** Total water requirement is 905 KLD and freshwater requirement for the proposed project is 569KLD which will be sourced from Ground Water.

S. No.	Description	Occupancy	Rate of water demand (LPCD)		Total Water Requirement (KLD)		
A.	Domestic Water		Fresh	Flushing	Fresh	Flushing	Total
	Residents	6174	90	45	555.66	277.83	833.49

S. No.	Description	Occupancy	Rate of water demand (LPCD)		Total Water Requirement (KLD)		
	Staff (Maintenance, Club house,)	365	25	20	9.125	7.3	16.425
	Visitors (Maintenance, Club house,)	815	5	10	4.075	8.15	12.225
					569 KLD	293 KLD	862 KLD
Total Domestic Water = 862 KLD							
B.	Horticulture	3977.88m^2		4 l/sqm	16 KLD		
C.	Make Up water for Swimming Pool (453.6 sqm)	453.6 sqm x 1.2 @5% of water			27 KLD		
Grand Total (A+B+ C) = 905 KLD							

9. **Wastewater generation and management:** It is expected that the project will generate approx. 748 KLD of wastewater. The wastewater will be treated in onsite STP of 748 KLD capacity. The treated effluent will be reused for flushing & horticulture. Surplus treated effluent will be discharged to external sewer. Discharge of treated waste water quantity to nearest drain will be 379KLD.

Domestic Water Requirement	**862 KLD**
• Fresh	569 KLD
• Flushing	293 KLD
Waste water [@80% fresh + 100% flushing]	455.2 +293= **748 KLD**
STP Capacity	748 KLD

10. **Power requirement:** Power requirement for the proposed project is 4558 KVA that will be sourced from State electricity board. There is provision of 3 nos. of DG sets total 2375 kVA (1 x 1250 + 1 x 625 + 1x 500 kVA) capacity for power back up. The DG set will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion as per CPCB norms.
11. **Details of Solar Power generation:** 5% energy will be saving from total energy load (2% through solar and 3% through LED).
12. **Rain Water Harvesting:** Total storm water load is 902.809m^3. 6 Rainwater Harvesting Pits will be provided considering peak hourly rainfall has been considered as 160 mm/hr.

Type of Area	Area (m^2)	Coefficient of run-off	Peak rainfall intensity during one hour of rainfall (m)	Rainwater harvesting potential/hour (m^3/hr)
Roof top Area	7050.64	0.95	0.16	1,071.697
Green area	3977.88	0.10	0.16	63.646
Paved Area	12,289.73	0.80	0.16	1,573.085
Total storm water load on the site = 2,708.428 **m^3/hr**				
Considering 20 minutes retention time, total storm water load				902.809m^3
Capacity of Recharge pit = $\pi r^2 h$ = 3.14 × 3 × 3× 5				141.3m^3
No. of Pits required = 902.809/141.3				6.38 say 6 Pits
No. of pits proposed				6

13. **Parking Requirement:** Total parking area provided for the project is 37447.89Sq.mt. and 1082 ECS. Location of parking area to be provided is Lower Basement, Stilt and upper basement Parking.
14. **Green Belt Development:** Green belt will be developed over an area of 3 977.88 sqm which is17.1% of the total plot area. Total no. of plants to be planted is 291 trees with 3 tier plantation.
15. **Solid Waste Management:** During the operation phase, solid waste will be approx. 3403 kg/day (@ 0.5 kg per capita per day for residents, @ 0.15 kg per capita per day for visitor, 0.25 kg per capita per day for staff and landscape waste @ 0.2 kg/acre/day). A door to door collection system will be provided for collection of domestic waste in colored bins from household units.The local vendors are hired to provide separate colored bins for dry recyclable and Bio-Degradable waste.For commercial waste collection, adequate number of colored bins (Green and Blue & dark grey bins– separate for Bio-degradable and Non Bio-degradable) are being utilised at the strategic locations of the commercial area.Litter bin is also being utilized in open areas like parks etc.

S. No.	Description	Occupancy	Waste Generated (kg/capita/day)	Waste Generated (kg/day)
1.	**Domestic Solid Waste**			
	Residents	6174	0.5	3,087
	Staff (Maintenance,Club house)	365	0.25	91.25
	Visitors (Maintenance,Club house)	815	0.15	122.25
2.	Horticultural Waste (0.982acre)		@ 0.2 kg/acre/day	0.1964
3.	STP Sludge		Waste water x 0 .35 x B.O.D difference/1000	102.102
Total Solid Waste Generation = 3403 kg/day				

16. **Baseline study**: The Project proponent had mentioned that Baseline study has been collected from period March 2023 – May 2023.
17. **Project cost**: The estimated project cost is 500 crores and cost for EMP is Rs. 102.986 (capital cost) and Rs. 34.746 (recurring cost).
18. **Environment Consultant**: The Environment consultant **M/s Grass Roots Research and Creation India (P) Ltd. Noida** along with the proponent made a presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Grass Roots Research & Creation India (P) Ltd., Noida**, the SEAC prescribed the following specific ToRs in addition to standard ToRs as per **Annexure – A** for conducting detailed EIA study. The proponent may be allowed to use baseline data collected during March 2023 – May 2023 for EIA study.

i) Fire disaster management plan specially designed for topmost floors with detailed note on hydrant system pump and water storage.

ii) Detailed break-up of solar power to be generated, consumed, including capacity of PV cell capacity, connected devices and the percentage of solar energy added total power demand.

iii) Clear site layout showing all features of the project and distance from road.

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

v) Structural Stability certificate from appropriate authority as per BDA guidelines be submitted and vetted from repute institute.

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

vii) Layout map showing the treated water fallout to nearest drain and its distance.

viii) Detailed drainage plan, internal drainage details, drainage permission with supporting documents applied for NOC for drainage from concerned authority.

ix) Reduce discharge of treated water to drain by planting more trees.

x) Detailed calculation of greenbelt with breakup and dimensions. Revised Green belt of plot area and increase minimum to 20% of the total plot area.

xi) The concept of vertical garden may also be considered apart from landscaping, potted plants, Parks & Gardens.

xii) Source of water and permission status of water drawl.

xiii) The water Treatment Plant, Waste Water Treatment Plant, STP, DG set's location to be marked in the layout plan.

xiv) Adequate overhead portable water tank to be provided as per the norms apart from Treated Waste Water tank for use in dual plumbing system for the flush in the toilet.

xv) To submit Sabik RoR with Kisam and Hal RoR with Kisam to rule out involvement of Forest and DLC land in the project.

xvi) For parking of various types of vehicle adequate provision of basement, Stilt, Open area and Mechanical parking may be considered.

xvii) Provision of lift with ventilation, lighting and AC from lowest basement to terrace roof top to be provided.

xviii) Efforts for Energy Conservation in the project as per Bureau of Energy Conservation in line with Energy Conservation Act, 2003 to be submitted for the project.

xix) Disaster Management Plan for the project may be prepared and submitted as per Disaster Management Act, 2005.

xx) Possibility of segregation of grey water and black water and its usage for plantation and car washings thereby reduce the discharge amount of treated water to drain.

xxi) Copy of all statutory clearances applied/obtained.

xxii) Certificate from concerned DFO that the proposed site doesn't come under forest land.

xxiii) Ensure that the differences between the reduced level of the bottom of rainwater harvesting pits and the reduced level of ground water during rainy season are adequate for effective recharge of collected rainwater and submit the report for the same.

xxiv) Ensure that the power demand proposed is sufficient enough to take the total load of apartments as mentioned in project.

ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S TRISHNA SKYSCRAPER LTD. FOR RESIDENTIAL PROJECT "TSL SPRING CITY" (UNDER VIOLATION CATEGORY) LOCATED AT PLOT NO.- 180/1261,181/1292, KHATA NO. - 86, PLOT NO. 183 & 202, KHATA NO. 125, PLOT NO- 154 (P) & 177 (P), KHATA NO. - 172, PLOT NO. - 178,181 & 180/1291, KHATA NO. 102, PLOT NO. 204, 624, 625/1061, 203/1360 & 182, KHATA NO. - 215. THE SITE AREA MEASURES 45,223.24 M^2 & TOTAL BUILT-UP AREA IS 1, 24,121.96 M^2. THE PP HAS ALREADY CONSTRUCTED 39,483.11 M^2 BUA (~31.81%) AT SITE WITHOUT PRIOR ENVIRONMENTAL CLEARANCE LOCATED AT MOUZA - KANTABADA, BHUBANESHWAR, TAHASIL - BHUBANESHWAR, DISTRICT – KHURDA OF SRI SATYABRATA DHIR - VIOLATION TOR

1. The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.

2. This proposal is for Terms of Reference of M/s Trishna Skyscraper Ltd. for Residential Project "TSL Spring City" (Under Violation Category) located at plot no.-180/1261,181/1292, khata No. - 86, plot no. 183 & 202, Khata no. 125, Plot no- 154 (P) & 177 (P), Khata No. - 172, plot no. -178,181 & 180/1291, Khata no. 102, plot no. 204,624,625/1061, 203/1360 & 182, Khata no. -215. The site area measures 45,223.24 m^2 & total Built-up area (BUA) is 1,

24,121.96 m^2. The PP has already constructed 39,483.11 m2 BUA (~31.81%) at site without prior Environmental Clearance located at Mouza - Kantabada, Bhubaneshwar, Tahasil-Bhubaneshwar, District – Khurda of Sri Satyabrata Dhir.

3. **Category**: As per EIA Notification, 2006 and its subsequent amendments, the proposed project falls under Item of Schedule to the EIA Notification, 2006 – category "B" or activity 8 (a): Building and Construction Projects.

4. **Violation justification:** Project Proponent started the construction work at site in 2011 without obtaining prior EC. 31.81% construction (BUA = 39,483.11 sqm) has been completed. Therefore, it is a violation of EIA Notification, 2006 and hence Environment Clearance is being sought under Violation category as per MoEFCC notification dated 14th Mar., 2017 and SoP dated 07th Jul., 2021.

5. **Location and Connectivity** – The proposed project is located at plot no.-180/1261,181/1292, khata No. - 86, plot no. 183 & 202, Khata no. 125, Plot no - 154 (P) & 177 (P), Khata No. -172, plot no. - 178,181 & 180/1291, Khata no. 102, plot no. 204,624,625/1061, 203/1360 & 182, Khata no. - 215, bearing Toposheet no. F45T11, Mouza - Kantabada, Bhubaneshwar, Tahasil - Bhubaneshwar, District – Khurda, Odisha. The geographical co-ordinates of project site are 20° 19' 12.63"N and 85° 43' 23.18"E and Kisam of land is Gharabari. The project site is well connected through Khurda Chandaka road. NH-16 is 9.0 km (ESE) away from project site. The nearest railway station is Bhubaneswar Railway Station is about 14.11 km (North East) away from the project site. The nearest Airport is Biju Patnaik International Airport at 12.5 km (East) from project site. Jhumka Reservoir is 1 Km (WNW) of project site. Kamarkhunti reservoir is 8 Km (NNE) of project site. Kajala Gnada Dam is 10 Km (S) of project site. Deras Reservoir/Dam is 3.4 Km (W) of project site. Canal near site is 0.1 Km (SE) of project site. Canal near site: 0.6 Km (N) of project site. Eco sensitive Zone of Chandaka Dampara Wildlife Sanctuary is 0.1 km. The project site is not falling within the Eco sensitive Zone of sanctuary and it is 0.5 km away. Eco sensitive Zone of Nandankanan Wildlife Sanctuary is 11.2 km.

6. The site is coming under which Development Authority is Bhubaneshwar Development Authority.

7. The total plot area is 45,223.24 m^2/11.17 acres. / 4.52 ha. with total built-up area 1,24,121.96 sq.mt.

8. **The Building Area Details of the Project:**

S. No.	Particulars	Area (m^2)
1.	Total Plot Area	45,223.24
2.	Permissible Ground Coverage (@35% of the plot area)	15,828.13
3.	Proposed Ground Coverage (@33.5 % of the plot area)	15,152.73
4	Permissible FAR (@3 of the Plot Area)	1,35,669.72

S. No.	Particulars	Area (m^2)
5.	Proposed FAR (@2.52 of the Plot Area)	1,14, 301.36
6.	Non-FAR Area	9,820.6
7.	**Total Built Up Area (5 + 6)**	**1,24,121.96**
8.	Green Area Proposed (@20 % plot area)	9,044.65
9.	Maximum Height of the Building up to terrace level (meter)	33.528 m

9. The total built-up area of the site is 1, 24,121.96 m^2 out of which 39,483.11m^2 i.e. approx. 31.81 % construction has been done.
10. **Water requirement:** Fresh water requirement for the proposed project is 651 KLD which will be sourced from Ground Water.
11. **Wastewater generation and management:** It is expected that the project will generate approx. 858 KLD of wastewater and wastewater will be treated in STP of 1030 KLD capacity. The treated effluent will be reused for flushing & horticulture. Surplus treated effluent will be discharged to municipal sewer. Discharge of treated waste water quantity to nearest drain is 431 KLD.
12. **Power requirement: Power requirement for the proposed project is 11875** KVA which will be sourced from Tata Power Central Odisha Distribution Limited (TPCODL). For backup, DG sets will be provided and it will be utilized during power failure. In the residential area, about 14 nos. 250 KVA DG sets will be installed and in the Club/retail & society (community area) area, 2 nos. 625 KVA DG sets will be installed.
13. **Details of Solar Power generation:** 10% energy will be saving from total energy load (5% through solar and 5% through LED).
14. **Rain Water Harvesting:** Total amount of rain water harvested will be in 1,278.934m^3cum/ **No. of pits:** 16numbers**.**
15. **Parking Requirement:** Total parking area provided is 28656.8 Sq.mt. / 1125 ECS. Location of parking area to be provided is Surface and Stilt Parking.
16. **Green Belt Development:** Green belt will be developed over an area of 9044.65 sqm. which is 20% of the total plot area. Total no. of plants to be planted 570 trees to be planted in 3 tier plantation.
17. **Solid Waste Management:** During the operation phase, solid waste will be approx. 3927 kg/day (@ 0.5 kg per capita per day for residents, @ 0.15 kg per capita per day for visitor, 0.25 kg per capita per day for staff and landscape waste @ 0.2 kg/acre/day).
18. **Baseline study**: The Project proponent had mentioned that Baseline study has been collected from period December 2022 – Feb 2023.

19. **Project cost:** The estimated project cost is 160 crores and cost for EMP is Rs. 150.206 (capital cost) and Rs. 46.551 (recurring cost)

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

    Considering the information furnished and the presentation made by the consultant, **M/s Grass Roots Research and Creation India (P) Ltd. Noida** along with the project proponent, the SEAC recommended the following:

(A) The proponent may be asked to submit the following for further processing of violation ToRs application:

i. Copy of all statutory clearances applied/obtained.

ii. Detailed calculation of greenbelt with breakup and dimensions Green belt of plot area and needs to be increased.

iii. Exact distance of the proposed project boundary from the boundary of Eco-sensitive zone of Chandaka- Dampara Sanctuary along with map duly authenticated and certified by concerned DFO.

iv. Year of commencement of construction work of the project and extent of construction work till now.

v. Height of the building.

vi. Structural stability certificate from the concerned authority as the building has been constructed long back.

(B) The proposed site shall be visited by Sub-Committee of SEAC to verify the followings. Violation ToRs to be issued after site visit.

i) Environmental settings of the project site.

ii) Extent of Construction of the project and its present conditions in terms of structural stability and safety.

iii) Road connectivity to the project site.

iv) Drainage network at the site.

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

vi) Any other issues including local issues.

ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. DEVAVRAT HOMES PRIVATE LIMITED FOR PROPOSED RESIDENTIAL PROJECT [B+S+9] MULTI STORIED RESIDENTIAL APARTMENT WITH 2 NOS. OF BLOCKS. MIG GROUP HOUSING BLOCK OVER REVENUE PLOT NO.:- 1002/5921,1004,1005,1009,909/6301,910,911 KHATA NO.725/3514,725/5380,725/543,725/1689,725/5027,725/5019,725/4983 WITH TOTAL BUILT UP AREA OF 34992.83 SQM & TOTAL PLOT AREA - 8794.59 SQM / 2.180 AC /0.872 HA AT KALARAHANGA, BHUBANESWAR, DISTRICT : KHORDA OF SMT. SUNITA CHOUDHARY – EC

1. This proposal is for Environmental Clearance of M/s. Devavrat Homes Private Limited for proposed Residential Project [B+S+9] multi storied Residential apartment with 2 nos. of Block. MIG group Housing block over Revenue Plot No.:- 1002/5921,1004,1005,1009,909/6301,910,911 Khata No.725/3514,725/5380,725/543,725/1689,725/5027,725/5019,725/4983. The Total built up area of 34992.83 sqm & Total plot area - 8794.59 Sqm / 2.180 Ac /0.872 Ha at Kalarahanga, Bhubaneswar, District – Khorda, Odisha of Smt. Sunita Choudhary.
2. **Category:** As per EIA Notification, 2006 and its subsequent amendments, the proposed project falls under Item of Schedule to the EIA Notification, 2006 – category “B” or activity 8 (a): Building and Construction Projects.
3. **Location and Connectivity:** The proposed project is located at Plot No.: - 1002/5921,1004,1005,1009,909/6301,910,911, Khata No.: 725/3514,725/5380,725/543,725/1689,725/5027,725/5019,725/4983 at Mouza-Kalarahanga, Dist-Khurda, Odisha bearing Toposheet no: F45T15 and kissam of land is Gharabari. Geo-coordinates of project site is 20°21'56.84"N 85°50'23.75"E to 20°21'56.55"N 85°50'23.76"E. Site is flat land with average elevation of 20-25 m AMSL. Project site is well connected with New Bhubaneswar road which connects to Nandankanan Road at the distance of 1.6 km East direction. Proposed project site also connects to NH-16 (7.96-SE) to the project site. Site connects to Bhubaneswar puri Highway-316 at a distance of 7.76 km in South East direction. Bhubaneswar New railway station is 1.6 km away in North. Bhubaneswar railway station is 10.87 km away in South. Biju Patnaik International Airport 12.74 km in South South West. Chandaka RF is 9.94 km (W) And Nandankanan Zoo is 3.32 km (NNW)
4. The site is coming under Bhubaneswar Development Authority
5. The total plot area is 8794.59 Sqm / 2.180 Ac /0.872 Ha , with total built-up area 34992.83 sqm.
6. The Building Area Details of the Project in tabulated form:

Total Built Up Area	**34992.83 m^2**
Total FAR Area	**26910.68 m^2**
F.A.R	**3.059**

LULC OF PROJECT SITE	AREA IN SQM	%
Ground floor coverage area	3083.09	35.06
Area for Internal Roads	2963	33.69
Others area	873.3	9.93
Greenbelt Area	1875.2	21.32
TOTAL	8794.593	100

FLOOR WISE AREA DETAILS

Floor	MIG	Parking	Others	Total Buildng Area
Basement	197.42	3897.61	66.9	4161.93
Stilt	68.67	2899.83	114.59	3083.09
1st Floor	2960.51		122.58	3083.09
2nd Floor	2960.51		122.58	3083.09
3rd Floor	2960.51		122.58	3083.09
4th Floor	2960.51		122.58	3083.09
5th Floor	2960.51		122.58	3083.09
6th Floor	2960.51		122.58	3083.09
7th Floor	2960.51		122.58	3083.09
8th Floor	2960.51		122.58	3083.09
9th Floor	2960.51		122.58	3083.09
	26910.68	6797.44	1284.71	34992.83

Total FAR Area	26910.68 m^2
F.A.R	3.059
Maximum height of building	Block-1 (for MIG)-29.20 m (B+S+9)
Total no. of Dwelling Units	267 MIG Units
No. of Floors	(Basement1+Stilt+9)
Total no. of Dwelling Units	267 MIG Units

7. **Water requirement:** Total water requirement for the project is 187 KLD which will be sourced from Municipality Supply/ CGWA**.** Total Fresh Water requirement is 123 m^3/day. Total Flushing Water requirement is 64 m^3/day. Total Water requirement is 187 m^3/day (fresh water + flushing water).

Sl. No.+	Name of Building	No. Of Blocks	Total No. of Units	Type of unit with capacity	Occupancy	Total Water in Lpcd	Fresh water @90 LPCD	Flushing water @45 LPCD	Waste Water Generate In Ltr.			Total
									From Domestic Use	From Flushing	Total Waste Water Generated	Treated water Recovered
1	Block-A	1	267	2BHK-	225	30375	20250	10125	16200	9112.5	25312.5	20250

Sl. No.+	Name of Building	No. Of Blocks	Total No. of Units	Type of unit with capacity	Occupancy	Total Water in Lpcd	Fresh water @90 LPCD	Flushing water @45 LPCD	Waste Water Generate In Ltr.			Total
									From Domestic Use	From Flushing	Total Waste Water Generated	Treated water Recovered
				45 @5								
				3BHK-222 @5	1110	149850	99900	49950	79920	44955	124875	99900
2	Floating Population				134	6030	2680	3350	2144	3015	5159	4127.2
	Total	1	267		2629	186255	122830	63425	98264	57082.5	155347	124277
						187 KLD	123 KLD	64 KLD	99 KLD	57 KLD	156 KLD	124 KLD

8. **Waste water generation and management:** Waste water generation from the proposed project is 156 m^3/day. Treated water recovered is 124 m^3/day. Reuses of treated water 124 m^3/day in dry seasons. 50 KLD of water will be discharge to nearest drain only during rainy season. Waste water will be treated in a STP having capacity 200 KLD.

9. Presently there is no municipal (PHED) water supply system located near our project site. Hence the daily fresh water requirement will be met through ground water during the operation phase. When public supply water system is available around the project site, then supplied water will be used to meet the daily fresh water requirement. NOC from Public Health Division regarding water supply and Sewerage Connection to the proposed project VIDE LETTER NO. 18298 On dated 21.12.2022.

10. **Power requirement: Total power requirement for the proposed project is** 1500 KW /1 no of 200KVA DG sets. Source will be from TPCODL (TP CENTRAL ODISHA DISTRIBUTION LIMITED). There is provision of Power backup for the residential project will be through DG sets of total capacity 1 No. 200 KVA silent DG Set. Height of the DG Set Stack will be 32.3 m.

Power Requirement	**1500 KW**
Power backup	**200 KVA**
Renewable energy	**75 KW**

11. **Solar generation details**: The Solar Power Demand For Campus area Light , Main Gate Light will be 75 KW (5% of total demand)

12. **Rain Water Harvesting:**

Rain Intensity		**120**	**MM/Hr**	
Retention Time		**15**	**Min**	
Sl No	**Location**	**Area**	**Run off Co-efficient**	**Run Off Per Hr**
1	**Roof Top**	**3,083**	**0.9**	**333**
2	**Road (Paver Block)**	**2,963**	**0.7**	**249**

Sl. No.	Location	Area	Run off Co-efficient	Run off per Hr.
3	**Others**	**873**	**0.3**	**31**
4	**GREEN BELT**	**1,875**	**0.3**	**68**
	TOTAL	**8794.59**		**613**
	Run Off For 15 Min			**153**
	Volume			**24.7**
	No. of Recharge pit REQUIRED			**9.22**
	No. of Recharge pit Proposed			**16**

13. **Parking Requirement:** FAR Area is 26910.68 sqm. Parking required is 25% of total FAR Area i.e., 6727.66 sqm. Parking area provided=8075 sqm (more than 30 % of total FAR Area) Total ECS provided -328 nos. For 4 wheelers-273 nos. & 2 wheelers-270 nos.

FLOOR AREA			
	F.A.R AREA	Parking (As approved in BMC PLAN) SQM	PARKING PROVIDED AREA
BASEMENT FLOOR	197.42 SQM	3897.61 SQM	4042.00 SQM
STILT FLOOR	68.97 SQM	2899.83 SQM	4051.00 SQM
	TOTAL	6797.44 SQM	8075.0 QM

14. **Green Belt Development**: Green belt will be developed over an area of 1875.32 sqm which is 21.32% of the total plot area. Total no. of plants to be planted - 160 numbers, spacing between plants. –Approx. 2-3m & 2 tier plantation.

15. **Solid Waste Management:** Total solid waste generation will be 1.183 Ton/day. The solid waste generated from project will be mainly domestic in nature and the quantity of the waste will be 0.808 Ton/day. Solid wastes generated will be segregated into biodegradable 294 T/Day. The biodegradable organic wastes will be treated inside the premises by OWC (Organic Waste Converter).having capacity of 300 kg/day. Recyclable and non-recyclable wastes will be disposed through Govt. approved agency.

16. **Project cost**: The estimated project cost is 60 crores and cost for EMP is capital cost is 94 Lakhs Annually and recurring cost 5.55 Lakhs.

Source	Capital Cost (In Lacs)	Recurring Cost (In lacs)
Landscaping	**10**	**1**
Rain Water Harvesting	**11**	**0.3**
Solid Waste Management	**10**	**0.5**
STP	**50**	**2.5**
Acoustic Enclosure & DG Set Stack	**10**	**0.5**
Environmental Monitoring	**3**	**0.75**
Total	**94**	**5.55**

17.

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

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

i) Details of road connectivity to the project site with layout.

ii) Possibility of segregation of grey water and black water and its usage for plantation and car washings thereby reduce the discharge amount of treated water to drain.

iii) Revised water balance with revised calculation of waste water and STP details. Quantity of sludge generation to be calculated.

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

v) Detailed drainage plan, internal drainage details, drainage permission with supporting documents applied for NOC for drainage from concerned authority.

vi) Copy of all statutory clearances applied/obtained.

vii) Detailed calculation of greenbelt with breakup and dimensions.

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

ix) Copy of fire recommendations.

x) Detailed break-up of solar power to be generated, consumed, including capacity of PV cell capacity, connected devices and the percentage of solar energy added total power demand.

xi) Ensure that the differences between the reduced level of the bottom of rainwater harvesting pits, STP bottom and the reduced level of ground water during rainy season and summer season are adequate for effective recharge of collected rainwater, to avoid contamination of waste water with recharge rain water. Submit details of water table level, basement reduced level, and reduced level of STP bottom. Layout plan to be submitted.

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

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

i) Environmental settings of the project site.

ii) Construction activity, if any started at the site.

iii) Road connectivity to the project site.

iv) Drainage network at the site.

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

vi) Any other issues including local issues.

ITEM NO. 04

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BANGARISINGHA MAHANADI SAND QUARRY OVER AN AREA OF 17.00 ACRES OR 6.88 HA HAVING KHATA NO. 903(A.A.A), PLOT NO. 7388/7570 IN VILLAGE BANGARISINGHA UNDER BARAMBA TAHASIL OF CUTTACK DISTRICT OF SRI HARA SENAPATI - EC

1. This proposal is for Environmental Clearance for Bangarisingha Mahanadi Sand Quarry over an area of 17.00 Acres or 6.88 Ha having Khata No. 903(A.A.A), Plot No. 7388/7570 in village Bangarisingha under Baramba Tahasil of Cuttack District of Sri Hara Senapati.
2. **Category**: As per EIA Notification, 2006 and its subsequent amendments, the proposed project falls in category B1 under **Item 1**(a)-Mining of Minerals.
3. Mining Lease has been granted to Sri Haraprasad Senapati, S/o- Jadumani Senapti, by Tahasildar, Baramba for 5 years vide letter no. 01 dated 01/01/2021.
4. The mining plan was approved by Md. Q Jamal Khan, DDG with letter no.GXVII(g)-863/19/7425/DG and date.12.11.2020.
5. Mining lease is an identified sairat source in the DSR page No.55, Sl.no.93, Annexure.II. The proposed mine is an Existing Mine.
6. **TOR details**: Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No.-SIA/OR/MIN/61279/2021 vide letter no. 1343/SEIAA on 24/05/2021.
7. **Public Hearing details:** Public Hearing was conducted on 16.09.2022 at Mandap near Maa Anantakumari Mandir of village Bangarisingha under Baramba Tahasil of .Cuttack District, Odisha at 11.30 AM. Plantation, widening of roads, cleaning of deposited sand on transportation route, movement of transportation vehicles in a controlled speed limit were the main issues in Public Hearing. The budget incurred for the action plan of public hearing are kept under CER Budget is Rs. 30,000.

S.no	Particulars	Capital Cost	Annual Recurring cost
1	Pollution Control	55,000	11,000
2	Pollution Monitoring	25,000	5,000
3	Afforestation along Approach road	40000	8,000
4	Occupational health and safety	30,000	6,000
5	Reclamation /Rehabilitation of mined out area	-	-
Total		1,50,000	30,000

8. **Location and Connectivity –**

Village	Bangarisingha
Tahasil	Baramba
District	Cuttack
Khata No. & Plot No.	903 & 7388/7570
Kisam	Nadi
Latitude	Latitude: N20°23'20.7" to N20°23'27.0"
Longitude	Longitude :E85°27'59.9" to E85°28'17.5"

Nearest village	BangarisinghaVillage, 2.11km in W from the lease area.
Nearest Town/City	Cuttack at a distance 44k.m.
Nearest Railway Station	NarajMarthapur RailwayStation 33.5km.
Nearest Airport	BijuPatnaikInternationalAirport,Bhubaneswaris at about 40 km in ESE.
Nearest Highway	SH-65 at a distance of 6.2 .
Nearest NH	NH-224 at a distance 20k.m
Ecology Sensitive Zone	No national parks and sanctuary within 10 km radius
Reserve Forest	Kumaranga Reserve Forest- 1.5 Km in N
Sesmic Zone	Zone – III as per IS: 1893 (Part-I): 2002
Survey of India Topo-Sheet no.	73H/7
Nearest distance of Approach Road	2k.m
Nearest water body	Mahanadi River
Nearest road Bridge / Railway Bridge	Mahanadi River bridge-0.6k.m
River embankment	0.5k.m
Electric transmission Pole	2.1k.m
Village road	Bangarisingha village road-2k.m
Nearest Habitation	Bangarisingha village-2.1k.m
	Chandaka Dampada Sanctuary at a distance 29k.m.

9. **Total Reserves and Proposed Production** –As per MGQ certificate given by Competent Authority the proposed production is 7000cum/Year.

Mining Lease	Year	Surface Area in m^2	Thickness in m	Production (m^3)
	A	B	C	D=B*C
Bangarisingha Mahanadi Sand Quarry	1st Year	7000	1	7000
	2nd Year	7000	1	7000
	3rd Year	7000	1	7000
	4th Year	7000	1	7000
	5th Year	7000	1	7000
Total				35000 cum

As per Approved Mining Plan		**As per Replenishment Study Report**	
Geological	**Mineable**	**Geological**	**Mineable Reserve**

Reserve	Reserve	Reserve	
42804	37551	47110	36320

10. **Replenishment Report details (in case of sand)** – Replenishment Study Report has prepared by Drone method. Date of Premonsoon Survey.-18.05.2022. Date of Post Monsoon Survey-05.12.2022. 36320cum of sand has been replenished annually.

Pre-Monsoon Reserve	Post-Monsoon Reserve
Geological Reserve:-30008m^3 Total cross-sectional area X Length of Influence=Volume of sand.	**Geological Reserve:-47110m^3** Total cross-sectional area X Length of Influence=Volume of sand
Mineable Reserve:-20114m^3 MR (**m^3**) of sand excluding all safety zone area and water covered area.	**Mineable Reserve:-36320 m^3** MR (**m^3**) of sand excluding all safety zone area and water covered area.

11. **Mining Method** –The proposed project will carry out Open cast manual mining, with capacity is 7000 m^3/year.

12. **Water Requirement** –Total water required for the proposed project is 5 KLD.

S. No.	Particulars	Quantity (KLD)	Source
	Dust Suppression (on haul roads etc.)	1.0	Water will be sourced from nearest available source.
	Green Belt Development/ Plantation	2.0	
	Drinking/Domestic & Sanitation	2.0	
Total		5.0	

13. **Baseline Study details:–** Baseline study of the study area was conducted during pre-monsoon from 1st March 2022 to 31st May 2022 for Bangarisingha Sand Quarry.

a) Air quality: PM10 levels were ranging from 52.3 to 82.4 µg/m3. PM2.5 levels were ranging from 22.0 to 37.1 µg/m3. SO2 levels were ranging from 6.7 to 16.5 µg/m3. NOx levels were found ranging from 9.9 to 16.5 µg/m3.

b) Noise study: The noise levels varied in the study area during day time from 42.6 dB (A) Leq at Airi to 50.6 Leq dB (A) at T-Point where Vehicle Movement is Higher which is increase the noise level. The night time noise level in the study area is in the range of 37.2 (A) Leq at Khuntal to 46.2 Leq Db (A) at T-Point because, because Due to surrounding activities of Project site.

c) Ground water monitoring results: pH ranges from 7.63 to 7.82. TDS in samples ranges from 426 mg/l to 675 mg/l. Total Hardness in the water ranges from 285 mg/l to 452mg/l. Calcium content in the water ranges from 51.6 mg/l to 81.7 mg/l, Magnesium content in

the water ranges from 14.0 mg/l to 19.5 mg/l. Total alkalinity in the water samples ranges from 97 mg/l to 200 mg/l. Chlorides range from 125.4 mg/l to 245.5 mg/l.

d) Surface water monitoring results: All samples were colourless meeting desirable norms (<5 Hazen). All samples meet the desirable standards (pH ranges from 7.26 – 7.97). TDS in samples ranges from 297 mg/l to 511 mg/l. Total hardness in the water ranges from 199.0 mg/l to 342.3 mg/l. Calcium content in the water ranges from 35.9 mg/l to 61.8 mg/l, Magnesium content in the water ranges from 16.1 mg/l to 27.7 mg/l, Total alkalinity in the water samples ranges from 71.6 mg/l to 123.1 mg/l. Chloride ranges from 152 mg/l to 262 mg/l.

e) Soil monitoring results: All the samples showed pH in the range from 7.34 - 8.12. Conductivity of the samples were in the range from 196 µs/cm – 340 µs/cm. Moisture were in the range from 4.7% to 9.2%. Organic Carbon ranges from 0.52% - 0.85%. Organic Matter ranges from 0.90% - 1.47%. Phosphorus in the samples ranges from 17 mg/kg- 49 mg/kg. Total Nitrogen ranges from 49 mg/kg- 110 mg/kg. Potassium in the samples ranges from 95 mg/kg - 146 mg/kg. Calcium in the samples ranges from 136 mg/kg - 246 mg/kg. Magnesium ranges from 58.4 mg/kg – 86.4 mg/kg. Chloride ranges from 83 mg/kg- 210 mg/kg.

14. **Greenbelt Development–** 50 trees per year.

Year	Number of saplings purposed	Location	Type of saplings
1st Year	50	Plantation is carried out safety zone of the lease area(river bank areas)	Teak, Mango, Jammu, Jhaun, Neem etc.
2nd Year	50		
3rd Year	50		
4th Year	50		
5th Year	50		
Total	250		

15. **Manpower-**Total number of manpower required for the project is 13 persons**.**

Designation	Bangarisingha
Supervisory Personnel/ Statutory Personnel	1
Skilled laborers (Operator and Helper)	2
Unskilled Laborer	10
Total	13

16. **Project Cost & EMP cost** –Estimated cost of the project is Rs. 20 Lakhs, EMP cost bars a Capital Cost of Rs. 1, 50,000 and Recurring Cost of Rs. 30,000.

17. **Environment Consultant**: The Environment consultant **M/s Green Circle Inc., Gujarat** along with the proponent made a presentation on the proposal before the Committee.

Considering the information furnished and the presentation made by the consultant, **M/s Green Circle Inc., Gujarat** with the project proponent, the SEAC decided to take the decision on the proposal after receipt of the following from the proponent

a) Details of road connectivity with layout.

b) Certificate/Clarification from Tahasildar for exact distance of River bridge, river embankment, and electric transmission line from the project site.

c) Revised replenishment study report as difference in Pre Monsoon RL and Post Monsoon RL is unrealistically high. Sufficient details of drone survey not provided. Also the calculation of reserve is not done in proper manner.

d) Complete details of the compliance of Specific TOR 1.

ITEM NO. 05

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BHATAKUMARADA STONE QUARRY OVER AN AREA OF 15.805 HA. BEARING KHATA NO. 1769, PLOT NO. 4877, UNDER TOTAL CLUSTER AREA OF 17.423 HA. IN BHATAKUMARADA VILLAGE OF PURUSHOTTAMPUR TEHSIL, IN GANJAM DISTRICT OF SRI KRUPASINDHU MUDULI - EC

1. This proposal is for Environmental Clearance for Bhatakumarada Stone Quarry over an area of 15.805 ha. bearing Khata No. 1769, Plot No. 4877, under total cluster area of 17.423 ha. in Bhatakumarada village of Purushottampur Tehsil, in Ganjam District of Sri Krupasindhu Muduli.
2. **Category**: As per EIA Notification 2006 and its subsequent amendments, the proposed project falls under Schedule in Item 1(a)-Mining of Minerals.
3. Mining Lease granted by vide letter no 1631date 04/05/2022. Successful Bidder is Sri Krupasindhu Muduli S/o- Jhuriya Muduli, At- Ramakrushna Nagar, 2nd Lane, Lochapada, Berhampur.The proposed land doesn't fall in DLC land
4. The Mining Plan of Bhatakumarada Stone Quarry has been approved by Deputy Director of Geology, O/o The Joint Director of Geology, South Zone, Berhampur on dated 29.03.2022.
5. Mining lease is an identified sairat source in the DSR page no.69 sl.no. 37.
6. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No 5079/SEIAA, Dated 02.08.2022.
7. Public hearing was conducted on 10.01.2023 at Bhatakumarada village, under Purushottampur Tahasil of Ganjam District, Odisha. Issues raised during public hearing are protection of temple and other structures in locality, dust and noise pollution shall be controlled ,controlled blasting should be done, damage of roads due to transportation, local employment and livelihood, speed of transportation vehicles, safety of villagers and free health camp. Budget incurred for the action plan is Rs.1,90,000.

Table:CER Budget

Sl. No.	Activity	Capital Cost (in Rs.)/Annum
1.	Financial aid for medical camp in Bhatakumarada village. @ Rs. 15,000/ camp (4 camp in a year).	60,000
2.	Skill development program camps like computer learning, sewing etc. in Bhatakumarada village. @Rs 20,000/trainer (4 trainer)	80,000
3.	Construction of separate (for boys & girls) toilets in school of Bhatakumarada village (25,000/toilet)	50,000
TOTAL		**1,90,000**

8. **Location and connectivity**: The mine lease area is located in Village - Bhatakumarada, Tahasil- Purushottampur, District - Ganjam, Odisha, is on Khata no- 1769, Plot no- 4877 covered in the Survey of India Topo Sheet No –E45A15 and is bounded between the Latitude -19°25'26.86" N to 19°25'45.47" N and Longitude – 84°52'07.95" E to 84°52'24.55" E. Kissam of land is Parbat. Nearest water bodies are - Bhatakumarada Water Reserve, approx. 1.60 km in N direction, Sahi Bandha Water Reserve, approx. 4.0 km in NE direction. Nearest town is Purushottampur, approx. 9.80 km in North direction. Nearest Railway station is Narsimhapur Railway station, approx. 8.50 km in SE direction. Nearest National Highway - SH 32, approx. 0.18 km E direction. Nearest Airport - Biju Patnaik International Airport is approx. 130 km towards NE direction.

9. **Total Reserves and Proposed Production**: As estimated, Geological Reserves is 47,05,691 Cum (Proposed Mine) and 3,15,900 Cum (Existing Mine) ; Mineable Reserves is 38,94,937 Cum (Proposed Mine) and 1,74,150 Cum (Existing Mine) ; Proposed Production is 1,03,320 Cum /Annum (Proposed Mine) and 2664 Cum /Annum (Existing Mine).

Year	Total Production in cum
1st	103320
2nd	103320
3rd	103320
4th	103320
5th	103320
Total	**516600**

10. **Mining method**: Mining will be done by opencast semi-mechanized method. Proposed Mining Depth is 35m. Transportation of minerals will be done by an approach road of approx.0.25 km which further connects to SH 32.

11. **Waste generation and management**: Total 57400 Cum waste generated in the proposed project.

Year	Waste /Rejects in cum
1st Year	11480

2nd Year	11480
3rd Year	11480
4th Year	11480
5th Year	11480
Total	**57400**

12. **Water requirement**: Total Water Requirement will be 6.0 KLD for proposed project and 8.00 KLD for Cluster.

Activity	**Calculation**	**Round off Figure in KLD**
Drinking	@ 10 lpcd per labor 10*106/1000= 1.06 KLD	1.06
Dust Suppression	**Total approach road to be water sprinkled** = 500 m 500 m*6m*0.5 *2 times/1000= 3.0 KLD	3.0
Plantation	1742 plant (during plan period) @ 2 L/per plant= 1742*2lts= 3484/1000= 3.48 KLD	3.48
Total		**7.54 ~ 8.00**

13. **Power requirement**: Electrical power will be required only for site office and will be obtained from Solar energy.
14. **Greenbelt**: 1580 plants has been proposed for the project and 1742 for Cluster.

Year	**Green belt Nos.** **In Safety Zone, Approach road & at other place in village after consulting local authorities**
1st	--
2nd	1580
3rd	Maintenance
4th	
5th	
Total	**1580**

Year	**Green belt Nos.** **In Safety Zone, Approach road & at other place in village after consulting local authorities**
1st	--
2nd	1742
3rd	Maintenance
4th	
5th	
Total	**1742**

15. Baseline study details: Baseline Study conducted during March, 2022 to May, 2022.

a) Air quality: Ambient Air Quality Monitoring reveals that the minimum & maximum concentrations of PM10 for all the 8 AQ monitoring stations were found to be 40.24 to 63.79 µg/m3 with the 98th percentile ranging between 54.35 µg/m3 to 63.57 µg/m3 . The minimum & maximum concentrations of PM2.5 were found to be 20.28 µg/m3 to 32.42 µg/m3 with the 98th percentile ranging between 26.02 µg/m3 to 32.41 µg/m3 . As far as the gaseous pollutants SO2 and NOx are concerned, the prescribed CPCB limit of 80µg/m3 for residential and rural areas has never surpassed at any station. The minimum & maximum concentrations of SO2 were found to be 7.23 to 14.28 µg/m3 with the 98th percentile ranging between 11.55 µg/m3 to 13.24 µg/m3 . The minimum & maximum concentrations of NOX were found to be 9.68 µg/m3 to 21.70 µg/m3 with the 98th percentile ranging between 15.10 µg/m3 to 21.23 µg/m3.

b) **Water quality**: The pH limit fixed for drinking water samples as per IS-10500 Standards is 6.5 to 8.5 beyond this range the water will affect the mucus membrane or water supply system. During the study period, the pH was varying for ground waters from 7.24 to 7.86 & in Surface water from 7.24 to 7.56. The pH values for all the samples collected in the study area during study period were found to be within the limits. The desirable limit for total dissolved solids as per IS-10500 Standards is 500 mg/l whereas the permissible limit in absence of alternate source is 2000mg/l. In ground water samples collected from the study area, the total dissolved solids are varying from 322 mg/l to 405 mg/l. Hardness of ground water varies from 219 mg/l to 265 mg/l. The desirable limit for Hardness is 200 mg/l whereas the permissible limit is 600mg/l. Concentration of Fluorides varied from 0.21 mg/l to 0.40 mg/l.

c) **Noise study**: The values of noise observed in some of the areas are primarily owing to vehicular traffic. Assessment of hourly night time Leq (Ln) varies from 36.5 to 44.3 dB (A) and the hourly daytime Leq (Ld) varies from 45.8 to 59.2 dB (A) within the study area. The status of noise quality within the 10 km zone of the study area is, therefore, within the MoEF& CC standards.

d) **Soil study**: Physical characteristics of soil were characterized through specific parameters viz bulk density, porosity, water holding capacity, pH, electrical conductivity and texture. Soil pH plays an important role in the availability of nutrients. Soil microbial activity as well as solubility of metal ions is also dependent on pH. In the study area, variations in the pH of the soil were found to be slightly alkaline (7.23 to 7.64). Electrical conductivity (EC) is a measure of the soluble salts and ionic activity in the soil. In the collected soil samples the conductivity ranged from 274- 320 µmhos/cm.

16. **Manpower**: 102 nos of persons are required for proposed project and 106 nos of persons for Cluster.

17. **Project Cost** –Total estimated cost for the proposed project is 60 Lakhs and 100 Lakhs for Cluster. (For Proposed Mine Bhatakumarada Stone Quarry) Capital cost is 3.785 Lakhs and Recurring cost is 4.01 Lakhs/annum; (For Cluster) Capital cost is 4.734 Lakhs and Recurring cost is 7.02 Lakhs/annum.

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)

1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 20,000 10,000
3.	Green belt development	3,16,000	1,00,000
4.	Maintenance of approach road	62,500	81,000
Total		**3,78,500**	**4,01,000**

S. No.	**Measures**	**Capital Cost (In Rs.)**	**Recurring Cost (In Rs.)**
1.	Pollution Control Dust Suppression /Water Sprinkling	--	2,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	1,00,000 80,000 40,000 20,000
3.	Green belt development	3,48,400	1,00,000
4.	Maintenance of approach road	1,25,000	1,62,000
Total		**4,73,400**	**7,02,000**

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

Considering the information furnished and the presentation made by the consultant, **M/s P & M Solution, Noida** along with the project proponent, the SEAC decided to take the decision on the proposal after receipt of the following from the proponent

a) Cluster details along with revised KML showing all the quarries in the cluster.

b) Status of other mines in cluster and their present operation status. As informed other mines have already closed due to forest land involved in the lease area. Name of such mines and an undertaking from the concerned Tahasildar that they are not in operation due to involvement of Forest land in the lease area and will not be put into auction in future.

c) The lessee informed that only two quarries in operation and one has already obtained Environmental Clearance in 2021. The proponent has to clarify along with copy of Environmental Clearance of other mine as to why this will not be treated as cluster approach.

d) Copy of Environment Clearance, Consent to Establish and Consent to Operate obtained for existing quarry.

e) Proposal for Fly Rocks Management and safety measures.

f) Certified document from Tahasildar regarding the distance of nearest habitation from the blasting site as well as lease boundary.

g) An undertaking that they will explore to use liquid explosives as the habitational area is nearby.

h) Compliance to the specific ToR-5 about how much waste/rejects will be used in construction & maintenance of haulage road.

i) Detailed proposal for Surface Run-off Treatment System (SRTS) to be followed. Zero discharge of waste water/surface run – off from mining lease area to nearby public pond shall strictly be followed.

j) Reduced level of water level in pre-monsoon and post monsoon and reduced level of mining pit to be submitted.

k) Detail proposal for issues raised in Public Hearing with special reference towards protection and renovation of temple and haulage road.

l) Detailed management plan on waste generated in mines and Crusher unit.

m) Note on blasting management and engagement of expert for guiding in blasting in mining area as habitation is very close to the lease area.

n) The proponent shall not resort to deep hole blasting without due approval from DGMS.

ITEM NO. 06

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BALANDA STONE QUARRIES CLUSTER (7,9,14,15,16) OVER AN AREA OF 44.05 ACRES OR 17.823 HECTARES BEARING KHATA NO. 504, 506 AND PLOT NO. 2473/P, 1899/P, 2008/P & 2009/P, 2473/P, 2473/P & 2010/P AND 1893/P & 2010/P IN VILLAGE BALANDA, TAHASIL-LATHIKATA, DISTRICT- SUNDARGARH OF SRI BIJAY AGARWAL (SUBMITTED UNDER CLUSTER APPROACH WITH CONSISTING OF 5 STONE QUARRIES) – TOR

The SEAC decided to defer the proposal to the next meeting and will consider it after receipt of the following from the proponent

(i) Details of total number of quarries present in the Balanda Stone Quarries Cluster (including existing and proposed mines) in tabulated form.

(ii) Details of status of existing mines & proposed mines with name of lessee.

(iii) Copies of Environment Clearance, CTE & CTO of existing mines in cluster.

(iv) A detailed notes giving reason why the EIA study undertaken and ToRs issued earlier does not contain all quarries i.e. Balanda Stone Quarries 1 to 16 and presently another proposal has been submitted for issue of ToRs in cluster approach.

ITEM NO. 07

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

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

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

Table: The land details as per the previous ToR

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

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

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

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

AREA SUMMARY OF KOIRA IOBP -REVISED			
SL. NO	PROPOSED FACILITIES	AREA (ACRE) old	AREA (ACRE) New
i)	RMHS	20	7
ii)	TRUCK PARKING AREA	3	2.5
iii)	GRINDING AND BENIFICIATION UNIT	4	3.5
iv)	CONCENTRATE THICKNER & PUMP HOUSE	2.5	1.5
v)	SLURRY TANK	1.5	0.5
vi)	SLURRY PUMP HOUSE	1.5	1
vii)	RWTP	2	0.5
viii)	WATER RESERVOIR	3	2
ix)	TAILING THICKNER & PUMP HOUSE	2	1
x)	TAILING FILTRATION UNIT	1.5	0.8
xi)	TAILING FILTER CAKE DUMP	25	50
xii)	CONCENTRATE FILTRATION PLANT	1.5	0.8
xiii)	CONCENTRATE FILTER CAKE DUMP	12	5
xiv)	MRSS & SWITCHYARD	2	2
xv)	BUILDING & SHED	9	8
xvi)	ROAD DRAIN &BUILDING	12.98	6.7
xvii)	PLANT AREA	103.48	92.8
xviii)	GREEN BELT	51	45.725
xix)	TOTAL AREA	154.48	138.525

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

Considering the information furnished and the presentation made by the consultant, **M/s Pollution and Ecology Control Services,** along with the project proponent, the SEAC decided to take the decision on the proposal after receipt of the following from the proponent:

a) DGPS of the boundary along with Cadastral map.

b) Engineering details behind optimisation of lease area (by reducing the area allocated to different parts like Slurry Tank, Slurry Pump House, Tailing filteration unit, Tailing filter cake dump etc. without reducing capacity of the plant) under each proposed facility category along with the justification (as it was stated that by engineering interventions area has been reduced for various facilities/category keeping the plant capacity at the same level).

c) Details of Forest Clearance application and current status.

ITEM NO. 08

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S JATIA STEEL LTD. FOR GREENFIELD PROJECT FOR PRODUCTION OF 750,000 TPA ROLLED PRODUCTS AT KALINGANAGAR INDUSTRIAL COMPLEX, VILLAGE – JAKHAPURA, TEHSIL – DANAGADI, DISTRICT – JAJPUR, ODISHA OF SRI SIDDARTH SHARMA (SENIOR PROJECT MANAGER) - EC

1. This proposal is for Environmental Clearance of M/s Jatia Steel Ltd. for Greenfield project for Production of 750,000 TPA Rolled Products at Kalinganagar Industrial complex, Village – Jakhapura, Tehsil – Danagadi, District – Jajpur, Odisha of Sri Siddarth Sharma (Senior Project Manager).
2. **Category**: This is a Category – B project which falls under schedule 3(a), Metallurgical Industries (ferrous & nonferrous) for Rolling Mill plant as per the EIA Notification 2006 and amendments thereafter.
3. **TOR Details:** The proposal for ToR was presented before the State Expert Appraisal Committee (SEAC) on 23.12.2022 and ToR was granted by the concerned authorities vide F. No. SIA/OR/IND1/404835/2022, dated: 15th February, 2023 for the proposed project.
4. **Public hearing details:** Public Hearing meeting was held on 29.04.2023 (at 11:00 A.M.) at Danagadi bhavan, Danagadi of Jajpur district proposed by Sri Siddartha Sharma for Environmental Clearance in respect of M/s Jatia Steel Limited. Greenfield project for production capacity of 7, 50,000 TPA Rolled Products at Kalinganagar Industrial Complex in Village Jakhapura under Danagadi tehsil of Jajpur district.Issues raised during public hearing are employment, local area development, plantation,drink water, women empowerment and environment protection.
5. **Location and Connectivity:** M/s Jatia Steel Limited located at Kalinganagar Industrial complex, Village – Jakhapura, Tehsil – Danagadi, District – Jajpur, Odisha. The nearest railway station is the Jakhapura Junction (1.74 km, SE) from the site. The nearest airport is at Bhubaneswar International Airport (79.50, SSW) from the site. The site is approx. 3.5 Km away from nearest town Danagadi. Brahmani River is at 4.73 Km south from the project site. The National Highway i.e., NH 200 runs at 4.46 Km WSW of the site.
6. **Topography:** The coordinates of the plant area are 20°55'48.90"N to 20°56'5.68"N & 86° 3'4.63"E to 86° 3'24.66"E. It is situated at Kalinganagar Industrial complex, Village – Jakhapura, Tehsil – Danagadi, District – Jajpur, Odisha. The topography of the plant area is flat in and the slope is downward towards the South direction. The average elevation of site is 45 m AMSL. Range between: 42 m AMSL to 47 m AMSL. The perennial river Brahmani flows about 4.73 km in the South direction of the lease area and forms the main drainage system of the vicinity.
7. Seismicity: The project is under very feeble to Zone – III (moderate damage risk zone) [as per IS 1893 (Part-I): 2002]
8. **Status of Statutory Clearances –**The total land has been acquired from IDCO to M/s Jatia Steel Limited vide letter No_024/ALO/JRD, Dated 11/10/2022. No forest land clearance is obtained from Cuttack Forest Division vide letter No- 3716/6F, dated 16/05/2023.

9. **Project Details:**

Project Configuration

Sl. No.	Equipment	Configuration	Capacity (TPA)
i)	Re-Heating furnace	1 x 115 TPH	7,74,000
ii)	Roughing Mill 1	4 x 660 x 480 mm	7,50,000
iii)	Roughing Mill 2	4 x 660 x 480 mm	
iv)	Inter Mill	4 x 600 x 400 mm	
v)	Continues Mill (Pre Finishing)	4 x 480 x 320 mm	
vi)	Continues Mill (Finishing)	6 x 400 x 270 mm	
vii)	Cooling Tower (TMT)	2 x 100 TR	200 TR
		2 x 250 TR	500 TR
		2 x 350 TR	700 TR
viii)	Crane	2 x 5 + 3 x 10 + 3 x 15 Ton	85 T
ix)	Transformer	1 x 12,000 KVA + 1 x 2000 KVA	14,000 KVA
x)	UTM Machine	1000 KN	1000 KN
xi)	Lathe machine	-	5 nos.
xii)	Shaper machine	-	1 nos.
xiii)	Drilling machine	50 mm	1 nos.
xiv)	Air compressor	1 x 132 KW/7 BAR + 1 x 132 KW/ 8 BAR	132 KW/7 BAR
xv)			132 / 8 BAR

10. The land utilization plan: In total 17.806 Ha. (44.00 Acres) of land will be adequate to accommodate the entire planned facilities. The land utilization plan is given below.

Sl. No.	Particulars		Total Area		
			Acres	Hectares	%
i)	Admin Block		0.074	0.03	0.166
ii)	Generator Area		0.03	0.012	0.066
iii)	H.T Power Supply Area		0.432	0.175	0.968
iv)	Temple		0.048	0.02	0.108
v)	Fire Fighting Room		0.099	0.04	0.221
vi)	Water Reservoir		0.445	0.18	0.996
vii)	Rain Water Storage		0.198	0.08	0.443
viii)	Security Room 1		0.003	0.001	0.007
ix)	Security Room 2		0.003	0.001	0.007
x)	**Plant Area**		**10.651**	**4.312**	24.207
	A	Stock yard & Dispatch bay	2.663	1.078	
	B	Cooling & Finish storage of TMT	2.663	1.078	
	C	TMT Rebar Mill	2.663	1.078	
	D	Billet Storage bay & Reheating Furnace	2.663	1.078	
xi)	**Utility Buildings**		**3.718**	**1.505**	8.450
	A	Guest House	0.473	0.191	
	B	Portable WTP	0.578	0.234	
	C	Cooling Tower & CA Station	0.777	0.314	

	D	Water Storage & Pimp House	0.473	0.191	
	E	Oil Storage Electric Control Room	0.473	0.191	
	F	Electrical Control Room	0.473	0.191	
	G	Transformer, DB & PCB	0.473	0.191	
xii)	Greenbelt Area		14.997	6.071	34.084
xiii)	Truck Parking & Weighment Area		0.309	0.125	0.692
xiv)	Admin Building		0.096	0.039	0.216
xv)	Car Parking Area		0.074	0.03	0.166
xvi)	Roads		5.237	2.12	11.902
xvii)	Assembly Point		0.022	0.009	0.050
xviii)	Future Expansion Area		7.589	3.071	17.248
TOTAL AREA			**44.00**	**17.806**	**100**

11. Production and Waste Generation details:

Input	Specific consumption	Quantity in TPA	Output	Specific consumption	Quantity in TPA
	T/T of product			T/T of product	
Billet	1.032	7,74,200	Rolled Products	1	7,50,000
-		-	Scrap & End cuttings	0.025	18,750
			Mill scale	0.001	750
			Other Losses	0.006	4,700
Total	1.032	7,74,200	Total	1.032	7,74,200

12. **Manufacturing Process:** Rolling Mill will be used for Production of Rolled products (TMT Rebars & Wired Rod): Proposed (750,000 TPA); 100% will b sold in market. Rolling is a process used to shape metal into a thin long layer by passing it through a gap of two rollers rotating in different directions. At first billet from yard send it to reheating furnace where LSHS fuel used for heating and then processed to roughing mill than it passes to intermediate mill and finishing mill respectively. From there it will send it to QTB system for pinch roll & dividing shear and then to cutting with cold shear and bundle it for final dispatch.

13. Waste Generation and Management:

Solid Waste					
Rolling Mill	Scrap	-	-	18,750 TPA	Will be disposed through trucks & sold to SMS Plant.
	Mill scale	-	-	750 TPA	Will be disposed through trucks & sold to Sinter Plant.
Hazardous Waste					

Used oil	Cat. 5.2	-	-	3.60 TPA	Storage in containers over impervious floor under well ventilated covered shed followed by disposal through actual users having valid authorization from SPCB, Odisha

14. **Water requirement:** The total water required is 373 KLD. The source of water will be Brahmani River. The pickup point is estimated to be approximately 4.73 km aerial distance from the plant boundary. The length of the water pipeline will be approximately 8 km. During Monsoon the total requirement of water will be changed. The total water requirement in Monsoon is 267 KLD from Surface water and Rain water harvesting pond and re-circulating water from ETP respectively.

15. Wastewater management: The sewage & sanitary wastewater from toilets, washrooms and canteen shall be treated in septic tank and waste water, if any shall be used for horticulture. STP of 20KLD with MBBR technology will be used to treat 16 KLD of domestic sewage. Primary Effluent Treatment Plant of capacity 200 KLD will be installed to treat the 168 KLD effluent.

16. Power Requirement: Total power requirement for proposed project is 14 MW per hour and it will be sourced from TPNODL.

17. **Flora/Fauna:** The area is sparsely populated and is undulated and interspersed with small hillocks and hilly terrain. The forest in the region is tropical dry deciduous forest but excessive biotic influences have caused retrogression to tropical Thorny scrubs. Agriculture is produced at large scale with major products grown here are Maize, pulses and a little amount of vegetables like brinjal, ladies finger, tomato etc. for household consumption. The dominant ground vegetation are *Shorea robusta, Aegle marmelos, Cassia tora, Tectona gradis, Delonix regia, Parthenium hysterophorus, Sida rhombifolia, Tridax procumbens etc. Grasses like Saccharum spontaneum, Cynodon dactylon* and *Heteropogon contortus* are generally found in the area. There is no national park, Wildlife sanctuary or wildlife corridors present in the study area of the proposed project. However, the project site is surrounded by protected forests. The nearest is Danagadi protected forest which is 4.50 km, where the dominant species is Sal, babul and Gandho palas.

18. **Green belt:** In the proposed project of M/s Jatia Steel Limited Green belt shall be developed at least in 33% of total plant area in and around the plant premises for environmental protection as per CPCB/OPCB guidelines. In the proposed project 14.52 Acres of land i.e., 33% of total land proposed plant area of 44 Acres shall be provided a natural barrier for attenuation of noise and air pollution.

19. Baseline study details: Baseline data was collected during winter season from March to May 2022.

a) Ambient Air Quality: The monitored results show PM10 levels were in the range of 57.2 µg/m3 to 93.4 µg/m3, PM2.5 levels were in the range of 28.7 µg/m3 to 49.6 µg/m3, SO2 levels were in the range of 9.6 µg/m3 to 21.6 µg/m3, NOx levels were in the range of 19.4 µg/m3 to 31.4 µg/m3& CO remained below detection level which are well within the prescribed limit of Central Pollution Control Board.

b) **Noise Quality:** The noise levels were measured at eight stations in core and buffer zone located in residential areas. The noise levels observed during day time varies from 35.4 to 69.3 dB(A) and at night time varies from 32.4 to 52.3 dB(A). All the noise values observed are well within the limits prescribed by National Ambient Air Quality Standards for Noise.

c) **Surface water quality:** The physico-chemical characteristics of surface water were analysed. In fresh water, the pH values of are varies from 7.15 to 7.81, Colour below5 Hazen, Dissolve Oxygen 6.7 to 7.7 mg/l, BOD is 2.3 to 3.7 mg/l and COD is 11.5 to 18.5 mg/l.

d) **Ground water quality:** The physico-chemical characteristics of ground water samples were analysed. The levels of total dissolve solids varied from 178 to 198 mg/l, total hardness from 97 to 138.4 mg/l, chloride from 27.5 to 33.6 mg/l and alkalinity from 52-64 mg/l.

e) **Soil quality:** Top soil samples were collected from core & buffer zone, from 7 locations. From the above analysis report, it is found that the bulk density ranges between 1.26 to 1.47 gm/cm3. The soil texture is almost sandy & clayey. The soil is very much fertile for agriculture purpose.

20. **Manpower:** Total man power required during the construction phase will be 60, out of which 5 persons will be on permanent basis and the rest on contractual basis. The estimated manpower requirement is 150 numbers. Locals will be given preference in employment as per their qualification and experience. The indirect employment generation will be above 250.

21. **Project Cost:** The expected cost of the project is Rs. 220 crores. EMP cost includes a capital cost of 7.95 crores and a recurring cost of 1.27 crores.

22. Environment Consultant: The Environment **M/s Visiontek Consultancy Services, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.

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

a) Plot No. 858 and 860 of the land proposed for the project is coming under “Sal Jungle and Jhati Jungle”, Certificate along with supportive documents from the concerned DFO as well as IDCO that forest land involved in the project area has already been diverted and will be utilized as per conditions of Forest Clearance.

b) Details of stack height along with the calculation according to CPCB norms and other details with composition of emission.

c) Timeline to use Natural gas replacing LSHS.

d) Quantity of mill scale generation and its end use.

e) Details of Air Pollution Control Measures.

f) Traffic study report vetted by Institute of repute.

ITEM NO. 09

PROPOSAL OF ENVIRONMENTAL CLEARANCE OF M/S TRISHNA SKYSCRAPER LTD FOR DEVELOPMENT OF A TOWNSHIP "TSL SPRING CITY " OVER AN BUILT UP AREA 284708.84 SQM LOCATED AT VILLAGE - KANTABADA, TEHSIL – BHUBANESWAR, DISTRICT – KHURDHA OF SRI SATYABRATA DHIR – VIOLATION TOR

The Project Proponent has requested to reject the TOR proposal, as revised proposal has been submitted for Terms of Reference (TOR) under violation category.

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

ITEM NO. 10

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. DEVAVRAT HOMES PRIVATE LIMITED FOR RESIDENTIAL BUILDING (B+S+11STORIED) WITH TOTAL BUILT UP AREA 56689.34 SQM. LOCATED AT KALARAHANGA, BHUBANESWAR, DISTRICT – KHORDA, ODISHA OF SMT. SUNITA CHOUDHARY - EC

The Project Proponent has requested to reject the EC proposal, as revised proposal has been submitted for Environmental Clearance.

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

14/8/23

MEMBER SECRETARY, SEAC

ANNEXURE-A

STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR TOWNSHIP/ AREA DEVELOPMENT PROJECTS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

1) Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.

2) Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.

3) Examine baseline environmental quality along with projected incremental load due to the project.

4) Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.

5) Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project

6) Submit the details of the trees to be felled for the project.

7) Submit the present land use and permission required for any conversion such as forest, agriculture etc.

8) Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.

9) Ground water classification as per the Central Ground Water Authority.

10) Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.

11) Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.

12) Examine soil characteristics and depth of ground water table for rainwater harvesting.

13) Examine details of solid waste generation treatment and its disposal.

14) Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.

15) DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.

16) Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.

17) A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.

18) Examine the details of transport of materials for construction which should include source and availability.

19) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.

20) Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

21) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

22) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

23) **The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP report.**

Environmental Scientist, SEAC