PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 31ST MAY, 2022

The SEAC met on 31st May, 2022 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri B. P. Singh. The following members were present in the meeting.

1.	Sri B. P. Singh	-	Chairman
2.	Dr. K. Murugesan	-	Secretary
3.	Dr. D. Swain	-	Member
4.	Prof. (Dr.) H.B. Sahu	-	Member
5.	Sri J. K. Mahapatra	-	Member
6.	Sri K. R. Acharya	-	Member
7.	Prof. (Dr.) B.K. Satpathy	-	Member
8.	Prof. (Dr.) P.K. Mohanty	-	Member
9.	Dr. K.C.S Panigrahi	-	Member
10.	Dr. Sailabala Padhi	-	Member

Draft proceeding of the meeting was finalized by the members through e-mail and also final proceeding 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. ASHIANA REALTY LLP FOR RESIDENTIAL PROJECT ON PLOT AREA 11,938.20 M2 /2.95 AC. LOCATED AT NANDAN VIHAR, MOUZA – KALARAHANGA, BHUBANESWAR DIST – KHURDA, ODISHA OF SRI PRAFULLA KUMAR MOHANTY (AUTHORIZED SIGNATORY) (TOTAL BUILT UP AREA – 34,038.24 M2) – EC

1. The proposal is for Environmental Clearance of M/s. Ashiana Realty LLP for Residential project on plot area 11,938.20 m2 /2.95 ac. located at Nandan Vihar, Mouza – Kalarahanga, Bhubaneswar Dist – Khurda, Odisha of Sri Prafulla Kumar Mohanty (Authorized Signatory) (total built up area – 34,038.24 m2).
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. The "Residential Project" is to be developed by M/s Ashiana Realty LLP. The project site is located at Plot No. 300/6796, 300/6395 of Khata no.725/5699, 725/5698, Nandan Vihar, Mouza- Kalarahanga, Bhubaneswar, District- Khurda, Odisha.
4. **Location and Connectivity –** The proposed site is located at Mouza- Kalarahanga, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20°21'47.83"N & Longitude - 85°50'9.26"E. The site is very near to Nanadakanan Road is approx. 0.5 m in WNW direction. NH-16 is approx. 5.4 km in ESE direction. The nearest railway station is New Bhubaneswar Railway Station approx. 1.86 km in N direction from the project site and Biju Patnaik International Airport is at a distance of approx. 11.6 km in SSW direction from the project site.
5. The site is coming under Bhubaneswar Development Authority.
6. The plot area of the project site is 11,938.20 m2 (2.95 acres). and estimated built-up area of the project is 34,038.24 m2. Total population of project is 1,250 persons (including Residents + Staff + Visitors).

7. The project facilities include: Dwelling Units (S+5), Community Building & Society Assembly & Swimming pool.

8. The building details of the Project:

S. NO.	PARTICULARS		AREA (SQ.M.)
1.	Total Plot area		11,938.20
2.	Permissible Ground coverage (@50% of plot area)		5,969.10
3.	Proposed Ground coverage (@ 45.88% of plot area)		5,478.27
4.	Permissible F.A.R (@ 3 of plot area)		35,814.6
5.	Proposed F.A.R		25,762.00
	a.	Residential	24,245.30
	b.	Community Building	822.20
	C.	Other Area	694.50
6.	Non F.A.R		1,042.36
7.	Non FAR area in Stilt Area (Parking)		7,233.88
8.	Total Built-up Area (5+6+7)		34,038.24
9.	Landscape area (28.48 % of plot area)		3,400.54
10.	Maximum Height of the Building (m)		20.37

9. **Water Requirement** –The total water requirement will be 186 KLD. The fresh water requirement will be approx. 117 KLD which will be provided by Bhubaneswar Municipal Corporation. The project will generate approx. 140 KLD of wastewater. The wastewater will be treated in onsite STP of 170 KLD capacity. Treated effluent will be re-used for flushing, horticulture, floor & car washing. Surplus treated effluent will be discharged to external sewer with permission.

10. **Total no. of Rain water Harvesting pits** – 03 nos for the project.

11. **Power Requirement** - The total power requirement for the Residential Project is 850 kVA which will be provided through TCPODL. There will be provision of 2 no. of DG sets of total capacity 570 kVA (1 x 320 kVA + 1*250 kVA) 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 colored bins (green, blue & dark grey) separate for bio-degradable 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. Horticultural Waste/ Biodegradable waste will be composted by Organic Waste Converter.100 sqm area has been proposed for OWC.Spent oil from DG sets will be sold to CPCB authorised recyclers.

S. No.	Category	Kg/capita/day	Waste generated (kg/day)
1.	Residents (1,080)	@ 0.5 kg/day	540
2.	Staff (60)	@ 0.25 kg/day	15
3.	Visitors (110)	@ 0.15 kg/day	16.5
4.	Landscape waste (0.83 acre)	@ 0.2 kg/acre/day	0.166
5.	STP sludge	Waste water generated * 0.35* B.O.D difference/1000	19.24
	TOTAL SOLID WASTE GENERATED		**590.90 kg/day say 591 kg/day**

13. **Green Belt**- Total green is proposed to be 3,400.54 m2 (28.48 % of plot area). Plantation area - 2,626.5 m2 (22%) + Lawn area-773.59 m2 (6.48%). Total no. of trees proposed = 153 Nos**.**
14. **Parking Details –** Total parking area allocated to the project is 7770.60 sqm/ 282 ECS.
15. The project cost is ` 54 crores and Environmental Monitoring programme – 43.5lakhs.
16. The proponent along with the consultant **M/s Grass Roots Research & Creation India (P) Ltd. Noida** made a detailed presentation before the SEAC on the proposal.

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

i) **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, before implementation of the project, 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. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission/ 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) The proponent shall increase the capacities of DG sets and decrease the number and make a common duct for exhaust pipe.

v) Trees located within the project area shall be transplanted in green belt along boundary.

vi) Use of STP treated water shall be increased by planting more trees in green belt, car & floor washing and discharge to drain should be reduced.

vii) As proposed 3 tier green belt/tree cover over minimum 20% of the land area should be maintained meticulously.

viii) The project proponent shall obtain NOC from CGWA, Approval of Water Resource Department, Govt. Of Odisha for use of ground water.

ix) Water Treatment Plant (WTP) shall be provided if ground water is not potable. Adequate Number and Capacity of Over Head Tank for Fresh Water and treated Water shall be made. Rain Water harvesting pits should be refreshed periodically and its number be increased for greater ground water recharge.

x) Permission of Drainage Division and Sewerage Board/WATCO shall be obtained for Discharge of excess STP treated water.

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

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

xiii) Permission from WR Deptt. shall be obtained for water in case of ground water usage.

xiv) 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.

xv) Parking in terms of ECS & space, both for 4 wheelers / 2 wheelers / Bicycle for residential apartment shall be provided as per the norms considering the residents and visitors.

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

However, the Sub-Committee of SEAC will visit the site within 3 months from the date of issue of Environmental Clearance to verify the progress of the project as well as conditions stipulated in Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that stipulated conditions on which EC is granted is not in place or found otherwise, steps will be taken for revocation of EC granted.

ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S HARSHPRIYA NEELACHALA FOR RESIDENTIAL PROJECT LOCATED AT MOUZA-DUMDUMA, TEHSIL-BHUBANESWAR, DISTRICT-KHURDA OVER TOTAL BUILT-UP AREA OF 42781.70 SQM OF CHETAN KUMAR TEKARIWAL (PARTNER) – EC

1. The proposal is for Environmental Clearance of M/s. Harshpriya Neelachala for Residential Project located at Mouza-Dumduma, Tehsil-Bhubaneswar, District-Khurda over total built-up area of 42781.70 sqm of Chetan Kumar Tekariwal (Partner).
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 Neelachala aims to provide a Residential Project (2B+G+21) at Mouza-Dumduma, Tehsil-Bhubaneswar, District-Khurda, Odisha.
4. **Location and Connectivity –** The proposed site is located at Mouza-Dumduma, Tehsil-Bhubaneswar, District-Khurda, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20°15'15.97"N & Longitude - 85°47'12.42"E. The site is very well connected to NH-16, approx. 0.04 km in West direction and NH-316 approx. 7.7 km in East Direction. The nearest railway station is Lingaraj Temple Road Railway Station approx. 3.6 km in SE direction from the project site and Biju Patnaik International Airport is at a distance of approx. 2 km in East direction from the project site.
5. The site is coming under Bhubaneswar Development Authority.
6. The plot area of the project site is 5,038.33 m2 (1.24 acres). and estimated built-up area of the project is 42,781.70 m2. There is only one Towers i.e Residential having 2 BHK, 3 BHK & 4 BHK & Commercial.
7. The project facilities include: Dwelling Units-194 Nos. (2B+G+21) and Swimming Pool. There is one structure existing at the site having 75 m^2 which will be demolished as per Construction and Demolition Waste Management Rules 2016.

8. **The building details of the Project:**

S. NO.	PARTICULARS	AREA (SQ.M.)
1.	Total Plot area	5,038.33
2.	Road Affected Area	520.69
3.	Net Plot Area (Total Plot Area- Road Affected Area)	4,517.64
4.	Permissible Ground coverage (@40% of Net Plot Area)	1,807.05
5.	Proposed Ground coverage (@ 39.75% of Net Plot Area)	1,795.76
6.	Permissible F.A.R (@ 7 of Net Plot Area)	31,623.48
7.	Proposed F.A.R (@ 6.88 of Net Plot Area)	**31,091.40**
	a. Residential (@ 6.58 of Net Plot Area)	29,731.04
	b. Commercial (@ 0.30 of Net Plot Area)	1,360.36
8.	Non F.A.R	4,520.44
9.	Basement Area	**7,169.86**
	Basement-1	3,584.93
	Basement-2	3,584.93
10.	Total Built-up Area (7+8+9)	**42,781.70**
11.	Maximum Height of the Building (m) (Till Terrace T.O.S)	67.85
12.	Landscape area (36 % of Net Plot Area)	**1,626.58**
	Plantation Area (24.93 % of Net Plot Area)	1,126.45
	Lawn Area (11.07 % of Net Plot Area)	500.10

9. **Water Requirement** – The total water requirement will be met through Ground Water and Bore well which is approx. 174 KLD, out of which total domestic water requirement is 165 KLD. The total domestic water will be 165 KLD, out of which fresh water requirement is approx. 108 KLD & flushing water will 57 KLD. Makeup water for swimming pool will be 1 KLD.

10. **Waste water details**: The project will generate approx. 139 KLD of wastewater. The wastewater will be treated in an onsite STP of 170 KLD capacity. The treated water (139 KLD @ 90% of total waste water) will be reused for flushing (57 KLD), horticulture (8 KLD). Surplus treated water during dry season (60 KLD), monsoon season 67 KLD) and winter season (65 KLD) will be discharged to external sewer with the requisite permission.

11. **Total no. of Rain water Harvesting pits** – 10 nos for the project.

12. **Power Requirement** - The power supply will be supplied by State Electricity Board. The requirement load for the project will be approx. 2,502 kW or 3,127 kVA. Power Backup : There is provision of 3 nos. of DG sets total 1515 kVA (1*750 kVA+1*625 kVA+1*140kVA) capacity for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

13. **Solid waste Management** - The solid waste generated from the project shall be approx. 673 kg per day. The solid waste will be collected then segregated at source. Adequate number of colored bins (green, blue & dark grey) separate for bio-degradable 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. Horticultural Waste/ Biodegradable waste will be composted by Organic Waste Converter.150 sqm area has

been proposed for OWC. Spent oil from DG sets will be sold to CPCB authorised recyclers.

S. No.	Category	Norms (Kg/capita/day)	Waste generated (kg/day)
1.	Residents (1,140)	@ 0.5	570
2.	Staff (118)	@ 0.25	30
3.	Visitors (360)	@ 0.15	54
4.	Landscape waste (0.40 acre)	@ 0.2 kg/acre/day	0.08
5.	STP sludge	Waste water x 0.35 x B.O.D difference/1000	19
	TOTAL SOLID WASTE		**673.08 kg/day SAY 673 kg/day**

14. **Green Belt**- Total green area measures 1,626.58 m2 i.e. (36 % of the plot area) which will include Plantation area = 1126.45 m2 (24.93%) + Lawn area = 500.10 m2 (11.07%) No. of trees required = 1 tree/80 sq.m. of plot area =4,517.64/80 = 56.4 say 56 Nos. Total no. of trees proposed = 62
15. **Parking Details –** Total parking area proposed 10,096.88 m2 and 332 ECS will be required.
16. The project cost is ` 81.93 crores and Environmental Monitoring programme – 48Lakhs.
17. The proponent along with the consultant **M/s Grass Roots Research & Creation India (P) Ltd. Noida** made a detailed presentation before the SEAC on the proposal.

Considering the information furnished and the presentation made by the consultant, **M/s Grass Roots Research & Creation India (P) Ltd. Noida** 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, before implementation of the project, 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. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission/ 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) The proponent shall increase the capacities of DG sets and decrease the number and make a common duct for exhaust pipe.

v) Trees located within the project area shall be transplanted in green belt along boundary.

vi) Use of STP treated water shall be increased by planting more trees in green belt, car & floor washing and discharge to drain should be reduced.

vii) As proposed 3 tier green belt/tree cover over minimum 20% of the land area should be maintained meticulously.

viii) The project proponent shall obtain NOC from CGWA, Approval of Water Resource Department, Govt. Of Odisha for use of ground water.

ix) Water Treatment Plant (WTP) shall be provided if ground water is not potable. Adequate Number and Capacity of Over Head Tank for Fresh Water and treated Water shall be made. Rain Water harvesting pits should be refreshed periodically and its number be increased for greater ground water recharge.

x) Permission of Drainage Division and Sewerage Board/WATCO shall be obtained for Discharge of excess STP treated water.

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

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

xiii) Permission from WR Deptt. shall be obtained for water in case of ground water usage.

xiv) 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.

xv) Parking in terms of ECS & space, both for 4 wheelers / 2 wheelers / Bicycle for residential apartment shall be provided as per the norms considering the residents and visitors.

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

However, the Sub-Committee of SEAC will visit the site within 3 months from the date of issue of Environmental Clearance to verify the progress of the project as well as conditions stipulated in Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that stipulated conditions on which EC is granted is not in place or found otherwise, steps will be taken for revocation of EC granted.

ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S S J DEVELOPERS AND HOUSING PVT. LTD. FOR RESIDENTIAL PROJECT "ROYAL COURTYARD" LOCATED IN MOUZA – RAGHUNATHPUR, BHUBANESWAR ODISHA OVER TOTAL BUILT-UP AREA OF 42781.70 SQM OF SURYA KANTA NANDA (DIRECTOR) - EC

1. The proposal is for Environmental Clearance of M/s S J Developers And Housing Pvt. Ltd. for Residential Project "Royal Courtyard" located in Mouza – Raghunathpur, Bhubaneswar Odisha over total built-up area of 42781.70 sqm of Surya Kanta Nanda (Director).
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 SJ Developers & Housing Pvt. Ltd. aims to provide a "Royal Courtyard" Residential Project at plot no.-2129, 2146, 2147, 2148, 2163, 2162, 2150, 2130, 2137, 2135, 2136, 2144, 2145, 2207, Mouza- Raghunathpur, Bhubaneswar, District-Khurda, Odisha.
4. **Location and Connectivity –** The proposed site is located at Mouza- Raghunathpur, Tehsil-Bhubaneswar, District-Khurda, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20°22'23.05"N & Longitude - 85°49'55.84"E. The site is very near to Nanadakanan Road which is in West direction. SH-60 is 6.3 km in ESE direction. The nearest railway station Bhubaneswar New Junction Station approx. 900 m in NNE direction from the project site and Biju Patnaik International Airport is at a distance of approx. 12.7 km in SSW direction from the project site.
5. The site is coming under Bhubaneswar Development Authority.
6. The plot area of the project site is 16,330.438 m2 (4.03 acres) and estimated built-up area of the project is 81,790.36 m2. The total population of project after proposed will be 5506 persons.
7. The project facilities include - Dwelling Units-354 Nos. (2B+G+20), Commercial (G+1), Club house/community hall.
8. **The building details of the Project:**

S. NO.	PARTICULARS		AREA (SQ.M.)
1.	Total Plot area		16,330.438
2.	Road affected area		875.805
3.	Net Plot area		15,454.633
4.	Permissible Ground coverage (@50.00%)		7,727.317
5.	Proposed Ground coverage @ 49.92 **%** of plot area)		7,715.360
6.	Permissible F.A.R (@ 6 of plot area)		92,727.798
7.	Proposed F.A.R (@ 3.54 of plot area)		**54,699.44**
	a.	Residential F.A.R	40,952.06
	b.	Commercial	13,747.38
8.	Non F.A.R		**2,637.02**
9.	Basement Area		**24,453.90**

	Basement 1	12,051.97
	Basement 2	12,401.93
10.	**Total Built-up Area (7+8+9)**	**81,790.36**
11.	Maximum Height of the Building (m) (2B+G+20)	71.40
12.	Landscape area (28.7% of net plot area)	4,435.439

9. **Water Requirement** – The total water requirement will be met through Ground Water and Bore well which is approx. 454 KLD, out of which total domestic water requirement is 288 KLD, fresh water requirement is approx. 226 KLD & flushing water will 116 KLD. Makeup water for swimming pool will be 10 KLD.
10. **Waste water details:** The project will generate approx. 254 KLD of wastewater.The wastewater will be treated in an onsite STP of 305 KLD capacity. The treated Water (228 KLD @ 90% of total waste water) will be reused for flushing (116 KLD), Horticulture (26 KLD).
11. **Total no. of Rain water Harvesting pits** – 26 nos for the project.
12. **Power Requirement**: The power supply will be supplied by State Electricity Board. The requirement load for the project will be approx. 3310 kVA.Power Backup : There is provision of 5 nos. of DG sets total 4,215 kVA (1*1250kVA+1*1010 kVA+1*625 kVA & 1*320 kVA) capacity for power back up in the project. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.
13. **Solid waste Management** - The solid waste generated from the project shall be approx. 1472 kg per day. The solid waste will be collected then segregated at source. Adequate number of colored bins (green, blue & dark grey) separate for bio-degradable 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. Horticultural Waste/ Biodegradable waste will be composted by Organic Waste Converter.100 sqm area has been proposed for OWC. Spent oil from DG sets will be sold to CPCB authorised recyclers.

S. No.	**Category**	**Kg/capita/day**	**Waste generated (kg/day)**
1.	Residents (1,449)	@ 0.5 kg/day	725
2.	Staff (1033)	@ 0.25 kg/day	258
3.	Visitors (3024)	@ 0.15 kg/day	454
4.	Landscape waste (1.1 acre)	@ 0.2 kg/acre/day	0.3
5.	STP sludge	Waste water generated * 0.35* B.O.D difference/1000	35
	TOTAL SOLID WASTE GENERATED		**1472 kg/day**

14. **Green Belt**- Total green area measures 4,435.439 m2 i.e. (28.7 % of the net plot area) which will include Plantation area-3400.00 m2 (22%) + Lawn area-1,035.439 m2 (6.7%) Evergreen tall and ornamental trees have been proposed to be planted inside the premises. No. of trees required = 1 tree/80 sqm. of net plot area =15,454.633/80 = 193.2 say 194 Nos.Total no. of trees proposed = 200 nos.
15. **Parking Details –** Total parking area requirement will be 17,784.57 m2 and provision will be 25,622 m2. And Total Parking i.e., 820 ECS (683 ECS + 137 Visitor parking) will be provided.
16. The project cost is ` 110.42 crores and Environmental Monitoring programme – 102lakhs.
17. The proponent along with the consultant **M/s Grass Roots Research & Creation India (P) Ltd. Noida** made a detailed presentation before the SEAC on the proposal.

Considering the information furnished and the presentation made by the consultant, **M/s Grass Roots Research & Creation India (P) Ltd. Noida** 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, before implementation of the project, 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. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission/ 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) The proponent shall increase the capacities of DG sets and decrease the number and make a common duct for exhaust pipe.

v) Trees located within the project area shall be transplanted in green belt along boundary.

vi) Use of STP treated water shall be increased by planting more trees in green belt, car & floor washing and discharge to drain should be reduced.

vii) As proposed 3 tier green belt/tree cover over minimum 20% of the land area should be maintained meticulously.

viii) The project proponent shall obtain NOC from CGWA, Approval of Water Resource Department, Govt. Of Odisha for use of ground water.

ix) Water Treatment Plant (WTP) shall be provided if ground water is not potable. Adequate Number and Capacity of Over Head Tank for Fresh Water and treated Water shall be made. Rain Water harvesting pits should be refreshed periodically and its number be increased for greater ground water recharge.

x) Permission of Drainage Division and Sewerage Board/WATCO shall be obtained for Discharge of excess STP treated water.

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

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

xiii) Permission from WR Deptt. shall be obtained for water in case of ground water usage.

xiv) 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.

xv) Separate Entry and Exit Gate for Residential and Commercial building shall be implemented

xvi) Parking in terms of ECS & space, both for 4 wheelers / 2 wheelers / Bicycle for residential apartment shall be provided as per the norms considering the residents and visitors.

xvii) 40% parking for commercial and 30% parking for residential and 10% of total parking for visitors shall be maintained minimum with separate area for residential and commercial parking

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

However, the Sub-Committee of SEAC will visit the site within 3 months from the date of issue of Environmental Clearance to verify the progress of the project as well as conditions stipulated in Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that stipulated conditions on which EC is granted is not in place or found otherwise, steps will be taken for revocation of EC granted.

ITEM NO. 04

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S SRI JAGANNATH PROMOTERS & BUILDERS FOR RESIDENTIAL APARTMENT PROJECT OF B+S1+S2+20 STORIED & G+3 CLUB HOUSE OVER AN AREA AN PLOT AREA – 11,408.16 M2 AND TOTAL BUILT UP AREA – 62,835.59 M2 LOCATED IN MOUZA-SANKARPUR & AIGINIA, DISTRICT - KHURDA, BHUBANESWAR, ODISHA OF SRI. PRADIPTA KUMAR BISWASROY (MANAGING PARTNER) - EC

The project proponent did not attend the meeting. The proposal is deferred to next meeting.

ITEM NO. 05

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED FOR CONSTRUCTION OF MULTILEVEL CAR PARKING PROJECT [LGF+UGF+1F+2F] ON KHATA NO. - 252 OVER AN BUILT UP AREA - 29641.52SQM AT MOUZA - PURI TOWN, UNIT NO.-21, BALAGANDI, NEAR JAIL ROAD, TAHASIL - PURI, DIST - PURI, ODISHA OF SRI PRABHAT KUMAR PANIGRAHY (GENERAL MANAGER) - EC

1. The proposal is for Environmental Clearance of M/s Odisha Bridge & Construction Corporation Limited for Construction of Multilevel Car Parking project [LGF+UGF+1F+2F] on Khata no. - 252 over an built up area - 29641.52sqm at Mouza - Puri Town, Unit no.-21, Balagandi, near Jail Road, Tahasil - Puri, Dist - Puri, Odisha of Sri Prabhat Kumar Panigrahy (General Manager).
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. The Multilevel Car Parking Center is one of the projects to be implemented under the ABADHA (Augmentation of Basic Amenities and Development of Heritage and Architecture scheme) scheme. The project is envisioned as a mix of multi-level parking, vending space. The project site is located near to the Govt. Hospital Puri .
4. **Location and Connectivity –** The proposed site is located at Mouza - Puri Town, Unit no.-21, Balagandi, near Jail Road, Tahasil - Puri, Dist - Puri, Odisha. The Geographical co-ordinate of the project site is: Latitude: 19°48'54.93"N and Longitude: 85° 49'48.57" E. The nearest airport is Biju Pattanaik Airport which is 43 km away from the project site towards N direction. Puri railway station is about 1.086 km away from the project site towards SSE direction. Proposed site is well connected to Badadanda and Puri Balanga Road through an approach Road of with 24 m. Puri Bus stand is at 0.86 Km. Puri Balanga Road- 0.20 km.
5. The site is coming under developmental Plan of Puri Konark Development Authority and Puri Municipal Corporation. The building plan has been approved by Directorate of Design, Odisha and Odisha Bridge and Construction Corporation Limited. Odisha
6. Total land acquired for this project is 14265.18 sqm/ 3.52Ac or say 1.426 Ha. Proposed Total Built up Area: 29,641.52 sqm. The proposed project will have following facilities: Commercial Shops, Multilevel parking for 504 nos. of 4 wheelers and 504 nos. of two wheelers and Other necessary facilities.
7. **The building details of the Project:**

PROPOSED CONSTRUCTION OF MULTILEVEL CAR PARKING AT JAIL ROAD PURI (ODISHA)				
	TOTAL PLOT AREA		**14265.18 m^2**	
	NET PLANNING AREA		**14265.18 m^2 or 3.52 acre**	
	PERMISSIBLE FAR (ACCORDINF TO EXISTING ROAD WIDTH)		**2.25**	
	PERMISSIBLE BUILTUP AREA		**32096.66 m^2**	
STATEMENT OF AREAS				

a	FLOOR	AREA (m^2)		TOTAL AREA (m^2)	PARKING (No.)		SHOP(No.)
		BUILTUP AREA (INCLUDED IN FAR)	BUILTUP AREA (NOT INCLUDED IN FAR)		BIKE/2 WHEELER	CAR/4 WHEELER	
1	LOWER GROUND FLOOR	3315.52	4172.48	7488.00	504.00	-	122.00
2	UPPER GROUND FLOOR	6402.10	1119.18	7521.28	-	-	228.00
3	FIRST FLOOR	0.00	7454.86	7454.86	-	252.00	-
4	SECOND FLOOR	0.00	7022.63	7022.63	-	252.00	-
5	TERRACE FLOOR	0.00	154.75	154.75	-	-	-
	TOTAL	**9717.62**	**19923.90**	**29641.52**	**504.00**	**504.00**	**350.00**
b	**GROUND COVERAGE**			**7279.00**	**m^2**		
c	**GROUND COVERAGE ACHIEVED**			**51.03%**			
d	**TOTAL AREA UNDER F.A.R**			**9717.62**			
e	**F.A.R** (F.A.R. TOTAL BUILTU/TOTAL PLOT AREA)	**9717.62/14690.78**		**0.68**			
f	**AREA UNDER PARKING**			**18649.97**			
g	**AREAUNDER COMMERCIAL**			**10836.80**			

8. **Water Requirement** – Water will be sourced from Public Health Department.Total Fresh Water requirement will be 41 m3/day, whereas Flushing Water requirement will be 65 m3/day. Therefore, Total water requirement will be 106 m3/day.The quality of water is good conforms to the desirable drinking water standards as per IS 10500.Raw water will treat & recycle the waste water generated from this project. Recycled water will be used within the project area. The treated water recovered from STP will be (76 KLD) recycled and will be used for toilet flushing, for horticulture in the project site and excess 11 KLD of water will be discharged into the Drai only during monsoon season.
9. **Total no. of Rain water Harvesting pits** – 5 nos for the project.

10. **Power Requirement**: Maximum Demand in KVA = 951 KVA and DG sets required = 2 no of 500KVA. Recommended Transformer Capacity = (2NOS x 1250KVA) Recommended stack height is = 17 m.

11. **Solid waste Management** - The solid waste generated from project will be mix of organic and inorganic in nature and the quantity of the waste will be 415 kg/day. Solid wastes generated will be segregated into biodegradable 207.5 Kg/Day (waste vegetables and foods etc.) and Non-biodegradable or recyclable 207.5 Kg/day. (papers, cartons, thermo-cool, plastics, glass etc.).Components will collected in separate bins. Solid waste &. Recyclable and non-recyclable wastes will be disposed through Govt. approved agency.
12. **Green Belt**- Total green area measures 3067 m2 i.e. (21.5 % of the net plot area) which will include plantation of 180 nos. of trees.
13. **Parking Details –** There is a two entry and exit point for the proposed site. For effective movement of vehicles and persons the dimension of peripheral road has been considered as more than 6m.

	FLOOR	**AREA (m^2)**		**TOTAL AREA (m^2)**	**PARKING (No.)**		**SHOP(No.)**
		BUILTUP AREA (INCLUDED IN FAR)	BUILTUP AREA (NOT INCLUDED IN FAR)		BIKE/2 WHEELER	CAR/4 WHEELER	
1	LOWER GROUND FLOOR	3315.52	4172.48	7488.00	504.00	-	122.00
2	UPPER GROUND FLOOR	6402.10	1119.18	7521.28	-	-	228.00
3	FIRST FLOOR	0.00	7454.86	7454.86	-	252.00	-
4	SECOND FLOOR	0.00	7022.63	7022.63	-	252.00	-
5	TERRACE FLOOR	0.00	154.75	154.75	-	-	-
	TOTAL	**9717.62**	**19923.90**	**29641.52**	**504.00**	**504.00**	**350.00**

14. The project cost is ` 68 crores and Environmental Monitoring programme – 57lakhs.

15. The proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd. Bhubaneswar** made a detailed presentation before the SEAC on the proposal.

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

(i) Undertaking by PP that no construction has been carried out.
(ii) More trees to be planted in greenbelt zone and disaster resistant tress to be planted.

ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR GUNUPUR SAND BED-I OVER AN AREA OF 15.00 ACRES/ 6.070 HA LOCATED AT- GUNUPUR, TAHASIL- GUNUPUR, DISTRICT- RAYAGADA OF SRI J. VENKATE RAO (LESSEE) - EC

1. The proposal is for Environmental Clearance for Gunupur Sand Bed-I over an Area of 15.00 Acres/ 6.070 Ha located at- Gunupur, Tahasil- Gunupur, District- Rayagada of Sri J. Venkate Rao (Lessee).
2. The project falls under category "B1" or activity 1 (a) – Mining of Minerals projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. Gunupur Sand Bed I Quarry is on Banshadhra River situated at Village Gunupur under Gunupur Tahasil of Rayagada District, Odisha, over an area of 6.07 Ha or 15.00 Acres.
4. The mining lease of Gunupur Sand Bed I Quarry has been granted in favour of Sri J. Venkate Rao, the successful bidder of the lease vide Letter of Intent No. 3814/2019 dated 19-10-2019 for a period of five years from Tahasildar,Gunupur Odisha.
5. The mining plan has been approved by Office of the Joint Director Geology Zonal Survey, Koraput, Odisha; vide memo no.956/KZ on dated 01.06.2020.
6. The TOR issued by SEIAA vide letter no. 665/SEIAA dated 26.02.2021 by SEIAA, Odisha.
7. The public hearing has been conducted on Dtd.15/09/2021 at 11:00 A.M. at Town Hall, Gunupur under Gunupur Municipality, Rayagada district, Odisha. The major issues are Disturbance due to transportation, loss of crop, Development of village road, increase in height of river embankment and health camp etc.
8. **Location and Connectivity** – The lease area is located on Govt. Land, Khata No 330, Plot No 522, Kisam- Nadi comes under E44F16 survey of India, Topo sheet. The coordinates of lease area are latitude of 19°04'48.75"N to 19°04'57.66"N and longitudes of 83°48'01.46" E to 83°48'15.42" E. Nearest road is SH 4 which is located at a distance of 1.5 Km. No WLS/ Biosphere reserve, wild life corridor or other Eco sensitive zone present within 10 Km radius of lease area. There is no other mines located within 500m radius of the present lease area..
9. **Reserves and Proposed Production** – The total geological reserves is 60700 cu.m and mineable reserves is 52113 cu.m. The proposed production is 15050 cum /year or 75250 TPA of Sand.
10. **Basic Requirements For The Project**
11. **Manpower**: About 13 persons will be given employment to the people of nearby villages.
12. **Water Requirement**: Water requirement for the project will be 6.43 KLD which will be sourced by tanker.
13. **Mining Method:** The method of excavation of sand from Gunupur Sand Bed I quarry will be Manual open cast mining. The mode of the deposits, geomorphology of the area and its hydrological condition are some of the factors that favor the open cast method of mining. In this deposit, the mining is done by dry-pit method i.e. Sand will be excavated within the active channel on dry intermittent or ephemeral stream beds. The excavator is used for removal of sand from the pits. The sands are extracted, loaded and transferred from pits to the users through trucks and tractors. The mining is done on single shift basis. The local man power has

been engaged in the mine. Benching will not feasible in case of sand mining as the maximum depth of mining will be only 1 m. The total excavated material is sellable as no waste will be generated from the mining process. So there is no provision of dumping within the quarry.

14. **Replenishment study** was carried out during pre monsoon (May 2021) and post monsoon period (October 2021). Replenished quantity of sand available in each year within the sand bed = 60700 x 1.45 = 88,522.5Cum and annual excavation is 15050cum.
15. **Greenbelt Development:** Plantation will be done in safety zone on the eastern side of lease area. About 500 numbers of trees will be planted with consultation with the local authorities.
16. **Project Cost Estimation**: The estimated cost of the project is Rs. 40.0 lakh and EMP budget 4lakh.
17. The Environment consultant **M/s Kalyani Laboratories Pvt. Ltd. Bhubaneswar** along with the proponent has 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 Kalyani Laboratories Pvt. Ltd. Bhubaneswar**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – D** in addition to the following specific conditions**.**

1. Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - E**. Lay out of Progressive Mine Closure Plan shall also be incorporated in the Revised Mining Plan.
2. Replenishment study to be carried out periodically and any revised mining plan/production based on the study to be submitted with an action plan.
3. Provision of Bio-toilet shall be made at the site.
4. Avenue plantation and plantation on both sides of the haulage road in consultation with/ on the advice of concerned Forest Department, Government of Odisha & W.R. Department Government of Odisha as well.
5. Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.
6. In view of the likely revision of DSR for Rayagada District in future the details of this Minor Mineral reserve to be ascertained in the revised DSR.
7. In view of the difference commonly found in sand deposits, the determination of Mining lease by local Tahasildar considering the Dimensions like average length, breadth and hight of the deposit to be re-ascertained by the Revenue Department and RQP for final exploitation of sand and higher revenue for the state of Odisha.
8. All the provisions of Sand Policy of Govt. Of Odisha Dtd 2.09.2021 to be followed for this sand mining project.
9. CSR activities to be made with consultation with district administration.

ITEM NO. 07

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF PARSURAMPUR DECORATIVE STONE DEPOSIT OVER AN AREA OF 10.513 HA. /25.978 AC. LOCATED IN VILLAGE PARSURAMPUR, TAHASIL- PARALAKHEMUNDI, DISTRICT - GAJAPATI, ODISHA OF SRI K. SAPTAGIRI – TOR

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

During the presentation, the Committee observed that the proposed quarry is 04km away from the Inter-State boundary of Andhra Pradesh and hence, general condition applies. This project will be treated as Category A and will be appraised at Central level.

After detailed discussion, the SEAC decided to return the proposal to SEIAA, Odisha with a request to ask the proponent to apply as category A project to MoEF&CC, Govt. of India.

ITEM NO. 08

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S BC CONSTRUCTIONS FOR RESIDENTIAL PROJECT AT MOUZA BOMIKHAL RASULGARH SQUARE BHUBANESWAR KHURDA ODISHA OVER AN TOTAL BUILT-UP AREA OF 1,15,568.68 M2 OF CHETAN KUMAR TEKARIWAL (PARTNER) - EC

1. The proposal is for Environmental Clearance of M/s BC Constructions for Residential Project at Mouza Bomikhal Rasulgarh Square Bhubaneswar Khurda Odisha over an total built-up area of 1,15,568.68 m2 of Chetan Kumar Tekariwal (Partner).
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 BC Constructions aims to provide a Residential Colony Project at Mouza- Bomikhal, Rasulgarh Sqaure, District-Khurda, Bhubaneswar, Odisha.
4. **Location and Connectivity –** The proposed site is located at Mouza- Bomikhal, Rasulgarh Sqaure, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20°17'29.46"N & Longitude - 85°51'33.95"E. The site is very near to Cuttack Road is approx. 100 m in West direction. NH-16 is approx. 400 m in NW direction. The nearest railway station is Bani Vihar Railway Station approx. 500 m in West direction from the project site and Biju Patnaik International Airport is at a distance of approx. 5.7 km in SW direction from the project site.
5. The site is coming under Bhubaneswar Development Authority.
6. The plot area of the project site is 14,144.85 m2 (3.49 acres). and estimated built-up area of the project is 1,15,568.68 m2.
7. The project facilities include: Dwelling Units (438 nos.)(2B+G+31), Club (Ground, 1st, 2nd and 3rd) and Swimming pool.
8. The building details of the Project:

S. NO.	PARTICULARS		AREA (SQ.M.)
1.	**Total Plot area**		**14,144.85**
2.	Permissible Ground coverage (@40%)		5,657.94
3.	Proposed Ground coverage @ 29.53 % of plot area)		4,176.74
4.	Permissible F.A.R (@ 6 of plot area)		84,869.10
5.	Proposed F.A.R (@ 5.98 of plot area)		84,656.69
	a.	Residential F.A.R	80,885.77
	b.	Club House	3,438.16
6.	Non F.A.R		10,360.76
7.	Basement Area		20,551.23
	Basement 1		10,275.61

	Basement 2	10,275.62
8.	**Total Built-up Area (5+6+7)**	**1,15,568.68**
9.	Maximum Height of the Building (m) (2B+G+31)	106.2 m
10.	Landscape area (35.7% of plot area)	5,055.35
	Plantation area (25%)	3,536.21
	Lawn area (10.7%)	1,513.49

9. **Water Requirement** – The total water requirement will be 417 KLD. Out of which fresh water will be 260 KLD will be met through Ground water and Bore well.

   Wastewater Generation & Treatment - It is expected that the project will generate approx. 332 KLD of wastewater. The wastewater will be treated in an onsite STP of 400 KLD capacity based on SBR Technology. The treated effluent will be reused for flushing & horticulture. Surplus treated effluent will be discharged to external sewer with requisite permission.

10. **Total no. of Rain water Harvesting pits** –33 nos for the project.

11. **Power Requirement** - The power supply will be supplied by State Electricity Board. The requirement load for the project will be approx. 3773 kW. There is provision of 3 nos. of DG sets total 2875 kVA (3*750 kVA+1*625 kVA) capacity for power back up.

12. **Solid waste Management** - The solid waste generated from the project shall be approx. 1553 kg per day. The solid waste will be collected then segregated at source. Adequate number of colored bins (green, blue & dark grey) separate for bio-degradable 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. Horticultural Waste/ Biodegradable waste will be composted by Organic Waste Converter.100 sqm area has been proposed for OWC. Spent oil from DG sets will be sold to CPCB authorised recyclers.

S. No.	**Category**	**Kg/capita/day**	**Waste generated (kg/day)**
1.	Residents (2655)	@ 0.5 kg/day	1328
2.	Staff (259)	@ 0.25 kg/day	65
3.	Visitors (768)	@ 0.15 kg/day	115
4.	Landscape waste (1.25 acre)	@ 0.2 kg/acre/day	0.3
5.	STP sludge	Waste water generated * 0.35* B.O.D difference/1000	45
	TOTAL SOLID WASTE GENERATED		**1553.3 kg/day say 1553 kg/day**

13. **Green Belt** - Total green area measures 5,055.35 m2 i.e. (35.7 % of the plot area) which will include Plantation area-3,536.21 m2 (25%) + Lawn area-1,513.49 m2 (10.7%).
14. **Parking Details –** Total parking area allocated to the project is 29496.34 sqm/ 888 ECS.
15. The project cost is ` 328 crores and Environmental Monitoring programme – 113lakhs.
16. The proponent along with the consultant **M/s Grass Roots Research & Creation India (P) Ltd. Noida** made a detailed presentation before the SEAC on the proposal.

Considering the information furnished and the presentation made by the consultant, **M/s Grass Roots Research & Creation India (P) Ltd. Noida** 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 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, before implementation of the project, 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. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission/ 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) The proponent shall increase the capacities of DG sets and decrease the number and make a common duct for exhaust pipe.

v) Trees located within the project area shall be transplanted in green belt along boundary.

vi) Use of STP treated water shall be increased by planting more trees in green belt, car & floor washing and discharge to drain should be reduced.

vii) As proposed 3 tier green belt/tree cover over minimum 20% of the land area should be maintained meticulously.

viii) The project proponent shall obtain NOC from CGWA, Approval of Water Resource Department, Govt. Of Odisha for use of ground water.

ix) Water Treatment Plant (WTP) shall be provided if ground water is not potable. Adequate Number and Capacity of Over Head Tank for Fresh Water and treated Water shall be made. Rain Water harvesting pits should be refreshed periodically and its number be increased for greater ground water recharge.

x) Permission of Drainage Division and Sewerage Board/WATCO shall be obtained for Discharge of excess STP treated water.

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

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

xiii) Permission from WR Deptt. shall be obtained for water in case of ground water usage.

xiv) 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.

xv) Parking in terms of ECS & space, both for 4 wheelers / 2 wheelers / Bicycle for residential apartment shall be provided as per the norms considering the residents and visitors.

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

However, the Sub-Committee of SEAC will visit the site within 3 months from the date of issue of Environmental Clearance to verify the progress of the project as well as conditions stipulated in Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that stipulated conditions on which EC is granted is not in place or found otherwise, steps will be taken for revocation of EC granted.

ITEM NO. 09

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S Z ENGINEERS CONSTRUCTION PVT. LTD. FOR RESIDENTIAL PROJECT Z PADMANABHA MOUZA PAHAL BHUBANESWAR ODISHA OVER AN TOTAL BUILT-UP AREA OF 96470.412 M2 OF TAPAN KUMAR MOHANTY (DIRECTOR) - EC

1. The proposal is for Environmental Clearance of M/s Z Engineers Construction Pvt. Ltd. for Residential Project Z Padmanabha Mouza Pahal Bhubaneswar Odisha over an total built-up area of 96470.412 m2 of Tapan Kumar Mohanty (Director).
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 Z Engineers Construction Pvt. Ltd. aims to provide a Residential at Plot No. 94, 114, 115 & 116 and Khata no. 352/124, 352/122 & 352/123 in Mouza- Pahal, Bhubaneswar, District-Khurda, Odisha on a land measuring 3.0 acres or 12,140.5 m2.
4. **Location and Connectivity –** The proposed site is located at Mouza- Pahal, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - : 20°20'11.75"N & Longitude - 85°52'56.37"E. The site is very near to village Haridaspur 0.6 KM in West direction, village Jayapur 0.8 KM in East direction, village Pahala 1 KM in North direction. NH-16 is approx. 40 m in W direction, NH-316 is approx. 3.2 KM in SSW direction, NH-55 is approx. 14.8 KM in E direction and SH-60 is approx. 2.4 KM in NE direction. The nearest railway station is Mancheswar Railway Station approx. 4 KM in WSW direction from the project site and Biju Patnaik International Airport is at a distance of approx. 11.2 km in SW direction from the project site.
5. The site is coming under Bhubaneswar Development Authority.
6. The plot area of the project site is 12,140.5 m2 (3.0 acres). and estimated built-up area of the project is 96,470.412 m2.

7. The project facilities include: Dwelling Units-468 no. (2B+Stilt+31), Community Hall (Stilt, 1st and 2nd), Convenient shopping (Stilt and 1st).

8. The building details of the Project:

S. NO.	PARTICULARS	AREA (SQ.M.)
1.	Total Plot area	12,140.5
2.	Area under proposed Road	1847.60
3.	Net Plot area	10,292.90
4.	Permissible Ground coverage (@40% of Net Plot Area)	4,117.16
5.	Proposed Ground coverage (@ 38.65 **%** of net plot area)	3,979.203
6.	Permissible F.A.R (@ 7 of Net Plot Area)	72,050.30
7.	Proposed F.A.R (@ 6.96 of plot area)	**71,644.242**
	Residential FAR	70,227.152
	Community Hall/Convenient shopping	1,417.09
8.	Non F.A.R	**7477.998**
9.	Basement Area	**17,348.176**
	Basement 1	8,674.088
	Basement 2	8,674.088
10.	**Total Built-up Area (7+8+9)**	**96,470.412**
11.	Maximum Height of the Building (m) (2B+G+31)	106 m
12.	Landscape area (23 % of net plot area)	2,368.02

9. **Water Requirement :**The total water requirement will be met through Ground Water and Bore well which is approx. 412 KLD, out of which total domestic water requirement is 390 KLD. The total domestic water will be 390 KLD, out of which fresh water requirement is approx. 257 KLD & flushing water will 133 KLD. Makeup water for swimming pool will be 10 KLD.

10. **Waste water details: The** project will generate approx. 339 KLD of wastewater. The wastewater will be treated in an onsite STP of 410 KLD capacity. The treated water (305 KLD @ 90% of total waste water) will be reused for flushing (133 KLD), horticulture (12 KLD). Surplus treated water during dry season (160 KLD), monsoon season 171 KLD) and winter season (168 KLD) will be discharged to external sewer with the requisite permission.

11. **Total no. of Rain water Harvesting pits** – 12 nos for the project.

12. **Power Requirement:** The power supply will be supplied by State Electricity Board.. The requirement load for the project will be approx. 3586.89 kVA.**Power Backup :** There is provision of 3 nos. of DG sets total 1500 kVA (3*500 kVA) capacity for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

13. **Solid waste Management** - The solid waste generated from the project shall be approx. 1524 kg per day. The solid waste will be collected then segregated at source. Adequate number of colored bins (green, blue & dark grey) separate for bio-degradable 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. Horticultural Waste/ Biodegradable waste will be composted by Organic Waste Converter.100 sqm area has been proposed for OWC. Spent oil from DG sets will be sold to CPCB authorised recyclers.

S. No.	Category	Kg/capita/day	Waste generated (kg/day)

1.	Residents (2764)	@ 0.5 kg/day	1382
2.	Staff (201)	@ 0.25 kg/day	50
3.	Visitors (526)	@ 0.15 kg/day	79
4.	Landscape waste (0.58 acre)	@ 0.2 kg/acre/day	0.116
5.	STP sludge	Waste water generated * 0.35* B.O.D difference/1000	12
	TOTAL SOLID WASTE GENERATED		**1523.116 kg/day SAY 1524 kg/day**

14. **Green Belt** - Total green area measures 2368.02 m^2 i.e. (23 % of the net plot area) which will include Plantation area-1854.94 m^2 (18.02%) + Green Pavers-513.08 m^2 (4.98%).No. of trees required = 1 tree/80 sq.m. Of Net Plot Area =10,292.90/80 = 128.6 say 129 Nos. **Total no. of trees proposed = 131 nos.**

15. **Parking Details –** Total parking area requirement will be 21,493.27 m^2 and provision will 21521.29 m2. And Total Parking i.e. 822 ECS will be provided.

16. The project cost is ` 339.66 crores and Environmental Monitoring programme – 92.5lakhs.

17. The proponent along with the consultant **M/s Grass Roots Research & Creation India (P) Ltd. Noida** made a detailed presentation before the SEAC on the proposal.

Considering the information furnished and the presentation made by the consultant, **M/s Grass Roots Research & Creation India (P) Ltd. Noida** along with the project proponent, the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – G** 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, before implementation of the project, 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. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission/ 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) The proponent shall increase the capacities of DG sets and decrease the number and make a common duct for exhaust pipe.

v) Trees located within the project area shall be transplanted in green belt along boundary.

vi) Use of STP treated water shall be increased by planting more trees in green belt, car & floor washing and discharge to drain should be reduced.

vii) As proposed 3 tier green belt/tree cover over minimum 20% of the land area should be maintained meticulously.

viii) The project proponent shall obtain NOC from CGWA, Approval of Water Resource Department, Govt. Of Odisha for use of ground water.

ix) Water Treatment Plant (WTP) shall be provided if ground water is not potable. Adequate Number and Capacity of Over Head Tank for Fresh Water and treated Water shall be made. Rain Water harvesting pits should be refreshed periodically and its number be increased for greater ground water recharge.

x) Permission of Drainage Division and Sewerage Board/WATCO shall be obtained for Discharge of excess STP treated water.

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

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

xiii) Permission from WR Deptt. shall be obtained for water in case of ground water usage.

xiv) 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.

xv) Parking in terms of ECS & space, both for 4 wheelers / 2 wheelers / Bicycle for residential apartment shall be provided as per the norms considering the residents and visitors.

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

However, the Sub-Committee of SEAC will visit the site within 3 months from the date of issue of Environmental Clearance to verify the progress of the project as well as conditions stipulated in Environmental Clearance. However, either during the visit of the SEAC Sub-committee and/or at any time, if it is noticed that stipulated conditions on which EC is granted is not in place or found otherwise, steps will be taken for revocation of EC granted.

Secretary, SEAC

Approved

06.06.2022

Chairman, SEAC

Environmental Scientist, SEAC

ANNEXURE - A

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S. ASHIANA REALTY LLP FOR RESIDENTIAL PROJECT ON PLOT AREA 11,938.20 M2 /2.95 AC. LOCATED AT NANDAN VIHAR, MOUZA – KALARAHANGA, BHUBANESWAR DIST – KHURDA, ODISHA OF SRI PRAFULLA KUMAR MOHANTY (AUTHORIZED SIGNATORY) (TOTAL BUILT UP AREA – 34,038.24 M2) – EC.

PART A - SPECIFIC CONDITIONS:

1. Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
3. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
4. The project proponent shall ensure that the guidelines for building and construction projects issued vide this Ministry's OM NO.19-2/2013-IA.III dated 9th June, 2015, are followed to ensure sustainable environmental management.
5. The proponent shall obtain prior clearance from the Standing Committee of the National Board for Wild Life if the project will be located within any Eco-Sensitive Zone of Wild Life Sanctuary.

TOPOGRAPHY AND NATURAL DRAINAGE

6. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape and other Sustainable Urban Drainage Systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
7. The permission from competent authority will be obtained to discharge the excess storm water to drain if any. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially.
8. Permission for construction of drain alongside the adjacent NH under construction for allowing the proponent to discharge the treated waste water as well excess runoff water during monsoon from NH Authority shall be obtained. The construction of drains shall be synchronized with the completion of the construction of the Housing Project.

WATER REQUIREMENT, CONSERVATION, RAIN WATER HARVESTING, AND GROUND WATER RECHARGE

9. As proposed, fresh water requirement from ground water shall not exceed 117 KLD.
10. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring

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 03 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 170 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 approx. 3,400.54 m^2 (28.48 % 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, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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

Environmental Scientist, SEAC

ANNEXURE - B

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S HARSHPRIYA NEELACHALA FOR RESIDENTIAL PROJECT LOCATED AT MOUZA-DUMDUMA, TEHSIL-BHUBANESWAR, DISTRICT-KHURDA OVER TOTAL BUILT-UP AREA OF 42781.70 SQM OF CHETAN KUMAR TEKARIWAL (PARTNER) – 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 108 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 10 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 170 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 approx. 1,626.58 m^2 i.e. (36 % of the 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, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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

Environmental Scientist, SEAC

ANNEXURE - C

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S S J DEVELOPERS AND HOUSING PVT. LTD. FOR RESIDENTIAL PROJECT "ROYAL COURTYARD" LOCATED IN MOUZA – RAGHUNATHPUR, BHUBANESWAR ODISHA OVER TOTAL BUILT-UP AREA OF 42781.70 SQM OF SURYA KANTA NANDA (DIRECTOR) - 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 226 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 26 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 305 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 approx. 4,435.439 m^2 i.e. (28.7 % of the net 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, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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

Environmental Scientist, SEAC

ANNEXURE- D

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

Stipulated Conditions:

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

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

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

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

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

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

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

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

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

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

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

19. Since NH200, Kuccha Road and temple are only at a distance of 800 mtr, 570 mtr and 500 mtr respectively, all traffic safety measures shall be taken to avoid any kind of accidents.

20. Bio - toilet provision shall be made.

21. As raised during public Hearing and committed by PP, Loknathpur Sasan village road shall not be used for transportation of sand.

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

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

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

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

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

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

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

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

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

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

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

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

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

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Annexure - E

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

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

ANNEXURE - F

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S BC CONSTRUCTIONS FOR RESIDENTIAL PROJECT AT MOUZA BOMIKHAL RASULGARH SQUARE BHUBANESWAR KHURDA ODISHA OVER AN TOTAL BUILT-UP AREA OF 1,15,568.68 M^2 OF CHETAN KUMAR TEKARIWAL (PARTNER) – 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 260 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 33 nos. shall be provided.
17. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.
18. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

SOLID WASTE MANAGEMENT

19. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
20. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
21. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
22. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
23. A certificate from the competent authority handling municipal solid wastes, indicating the 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 260 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 approx. 5,055.35 m^2 i.e. (35.7 % of the 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, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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

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ANNEXURE - G

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S Z ENGINEERS CONSTRUCTION PVT. LTD. FOR RESIDENTIAL PROJECT Z PADMANABHA MOUZA PAHAL BHUBANESWAR ODISHA OVER AN TOTAL BUILT-UP AREA OF 96470.412 M2 OF TAPAN KUMAR MOHANTY (DIRECTOR) - 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 257 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 12 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 410 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 approx. 2368.02 m^2 i.e. (23 % of the net 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, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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

Environmental Scientist, SEAC