MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 2402 0781 / 2401 0437

Fax: 2402 4068

Visit us at:

Website: http://mpcb.mah.nic.in

E-mail: mpcb@vsnl.net EIC No: MU-2544-11 Infrastructure Project/LSI

Consent No. MPCBHQ/ROHQ/Mumbai/CE/CC/ 65



Kalpataru Point, 2nd, 3rd & 4th floor, Opp. Cineplanet, Near Sion Circle, Sion (E), Mumbai - 400 022.

Date: 09 /12/2011

Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundry Movement) Rules 2008.

[To be referred as Water Act, Air Act and HW (M,H &TM) Rules respectively].

Consent to Establish is granted to,

M/s. Housing Developement & Infrastructure Ltd (HDIL), CTS No: 551/27, 552(pt), 551/1, 552/5 to 552/12, Village: Nahur, Mumbai.

located in the area declared under the provisions of the Water Act, Air Act and Authorization under the provisions of HW (M,H &TM) Rules subject to the provisions of the Act and the Rules and the orders that may be made further and subject to the following terms and conditions:

1. The Consent to Establish is valid up to Commissioning of the Project or 5 years whichever is earlier.

For development of land/ plot as new construction activities for construction of residential project under SRA Scheme named M/s. Housing Developement & Infrastructure Ltd (HDIL), CTS No: 551/27, 552(pt), 552/1, 552/5 to 552/12, Village: Nahur, Mumbai on total plot area of 47,762.06 sq.mtr, Proposed BUA [As per FSI] 1,85,288.24 & Total Construction BUA of 4,04,836.25 sq.mtr including utilities of construction of residential project under SRA Scheme as per construction commencement certificate issued by local body.

- 2. CONDITIONS UNDER WATER (Prevention & Control of Pollution) ACT, 1974: -
- (i) The quantity of sewage effluent from construction project shall not exceed 2468 CMD
- (ii) Sewage Effluent Treatment: The Applicant shall provide a comprehensive sewage treatment plant and treatment as is warranted with reference to influent quality and corresponding mode of disposal and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards: -

uent to the following stand	alus		
1 pH	Not to exceed	6.5 to 9.0	
2 Suspended Sol	ds Not to exceed	100	mg/l.
3 BOD 3 days 27	OC. Not to exceed	20	mg/L
4. Fecal Coli form	Not to exceed	500/100/1	ml.
5 Residual Chlori	Not to exceed	01	mg/l.
6. Detergent	Not to exceed	01	mg/l.
7. Floating matter		10	mg/l
8. COD	Not to exceed	50	mg/l
o. COD	1,0000		Ŭ

..2/-

(iii) Sewage effluent Disposal: -

The treated domestic effluent shall be 80 % recycled and reused for flushing, gardening and remaining shall be discharged into Sewer line provided by local body. In no case, effluent shall find its way to any water body directly / indirectly at any time.

[The project proponent authorities should opt environmental friendly technologies like ozonation, UV treatment etc by replacing chlorination]

(iv) Non-Hazardous Solid Waste: -

The total quantity shall be segregated and treated as follows: -

Sr	Type of Segregated solid	Quantity	Treatment	Disposal
	waste	Kg/Day)		
1,	Wet Garbage	4,690	Cananastias	
2.	STP Sludge	197	Composting	landfill site
2.	Dry Garbage	4690		

3. Other Conditions (During construction phase):-

- 1. All activities shall be in resonance with the provisions of Indian Forest Act, 1927 (16 of 1927), Forest (Conservation) Act, 1980 (69 of 1980) and Wildlife (Protection) Act, 1972 (53 of 1972), and special notification published for area wherever applicable and all the Environmental Statutes and Instruments.
- 2. This Consent to Establish is issued only for New Construction/Developing Construction Project purposes.
- 3. No quarrying activities shall be commenced in the area unless appropriate permissions are obtained for a limited quarrying material required for construction of local residential housing and traditional road maintenance work, provided that such quarrying is not done on Forest Lands and the material is not exported to the outside area.
- 4. There shall be no felling of trees whether on Forest, Government, Revenue or Private lands except as per prevailing Rules.
- 5. Extraction of Groundwater for the project shall require prior permission of the State Ground Water Authority or other relevant authorities, as applicable;
- 6. Near the activities that are related to water (like activity of water parks, water sports) and/or in the vicinity of lake, Dissolved Oxygen shall not be less than 5 mg/liter.
- 7. In order to ensure that the water from this project do not enter into outside environment, the nallas crossing the township/complex premises, shall be lined, covered and made water tight by the applicant within the premises with intermittent inspection of chambers following good engineering practices as per the regulations of local body.
- 8. The Applicant shall prepare management plan for water harvesting, roof-water reclamation, water/storm water conservation and implement the same before handling over of complex for occupation.
- 9. Applicant shall provide fixtures for showers, toilet, flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- 10. The Applicant shall draw plans for the segregation of solid wastes into biodegradable and non-biodegradable components. The biodegradable material shall be recycled through scientific inhouse composting (i.e vermi-composting facility within premises) with the approval of local body. The proper demarked area shall be identified for collection & storage of MSW properly which, shall be finally disposed off at approved Municipal Solid Waste landfill site of local body environmentally acceptable location and method. It is clarified that the term solid waste includes domestic, commercial, and garden wastes, but does not include hazardous and bio-medical wastes. The activities of bio-composting and engineered landfill shall be as per the Municipal Solid Waste (M&H) Rules, 2000.
- 11. Applicant shall be responsible to take adequate precautionary measures as detailed in this consent.

- 12. The applicant/generator shall be responsible for safe and scientific collection, transportation, treatment and disposal of Bio-Medical Waste as per the provisions made under the Bio-Medical Waste (Management & Handling) Rules, 1998. Any activity as defined under BMW (M&H) Rules has to obtain a separate Authorization from Maharashtra Pollution Control Board.
- 13. For disinfections of waste water ultra violet radiation shall be used in place of chlorination
- 14. Vehicles hired for construction activities should be operated only during non peak hours.
- 15. Ready mixed concrete used in building construction should apply separately for consent from the Board.
- 16. The applicant, during the construction stage shall provide
- a) Septic tank and soak pit of adequate capacity for the domestic effluent generated due to workers residing at site.
- b) Proper loading and unloading of construction material, excavated material and its proper disposal as per MSW (M&H) Rules 2000.
- c) Cutting of trees is not permitted, however in unavoidable conditions necessary permission from the local body shall be obtained.
- d) Green belt of 33% of the open space shall be developed.
- 4. The Applicant shall comply with all the provisions of, the Water (Prevention and Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules as Amended, 2003 and Rules there under: -

The daily water consumption for the following categories shall not exceed, as under

(i)	Domestic	From ULB (In CMD)	From other sources (In CMD)
a)	Domestic	3155	NA
b)	Make up water for Swimming pool	NA	NA
c)	Make up Flushing		NA -
d)	Agriculture/Gardening		NA

5. CONDITIONS UNDER AIR (Prevention & Control of Pollution) ACT, 1981: -

(I) The Applicant may install **5-no.** of diesel generating sets (DG Set) of capacity **(4 x 2500 KVA) 3000 KVA** each and shall be equipped with comprehensive control system as is warranted with reference to generations of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards: -

Standards for emissions of air Pollutants

i)	.SPM/TPM	Not to Exceed	150	mg/Nm ³
ii)	SO2 (DG set)	Not to Exceed	140	Kg/day

The following measure shall be taken.

- a) Adequate mitigation measures shall be taken to control emissions of SO₂, NOx, SPM, RSPM.
- b) Applicant shall achieve following Ambient Air Quality standards.

1	SPM	Not to Exceed (Annual Average)	140	μg/ m³
		Not to Exceed (24 hours)	200	μg/ m³
2	SO ₂	Not to Exceed (Annual Average)	60	μg/ m³
		Not to Exceed (24 hours)	80	µg/ m³
3 NO _x	NO _x	Not to Exceed (Annual Average)	60	µg/ m³
		Not to Exceed (24 hours)	80	µg/ m³
4	RSPM	Not to Exceed (Annual Average)	60	µg/ m³
		Not to Exceed (24 hours)	100	µg/ m³

(II) The Applicant shall observe the following fuel patterns

No.	Type of Fuel	Quantity
1	LDO	3700 Ltrs / D

(III) The Applicant shall erect the Chimney (s) of the following specifications

No.	Chimney attached to DG	Height above roof top of the building in which it is installed.
1	DG sets	
	(4 x 2500 KVA)	25.0 mtrs each
	3000 KVA	30.0 mtrs each

(iv) Conditions for DG Sets: -

- 1. Noise from DG Sets shall be controlled by providing acoustic enclosure or by treating the room acoustically.
- 2. Applicant should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room shall be designed for minimum 25 dB(A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB(A) shall also be provided. The measurement of insertion loss shall be done at different points at 0.5 meters from acoustic enclosure/ room and then average.
- 3. The Applicant should make efforts to bring down noise level due to DG Set, outside the premises, with ambient noise level requirements by proper setting and control measures.
- 4. Installation of DG Set must be strictly in compliance with recommendations of DG set manufacturer;
- 5. A proper routine and preventive maintenance procedure for DG Set shall be set and followed in consultation with the DG manufacturers, which would help to prevent noise levels of DG Sets from deteriorating with use.
- 6. The DG set shall be operated only in case of power failure. The applicant shall make arrangement for regular electrical power.
- 7. The Applicant shall not cause any nuisance in the surrounding area due to operation of DG sets.
- 8. In case of problems, the D.G. set shall not be operated until it is set back to satisfactory position.

(IV) Other Conditions:

- a) The Applicant shall provide ports in the chimney and facilities such as ladder, platform etc for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's staff. The chimneys shall be numbered, as S-1, S-2 etc and these shall be painted/displayed to facilitate identification.
- b) Water spraying shall be done on ground to avoid fugitive emissions.
- c) Construction material shall be carried in enclosed vehicles during construction activities.

(V) Conditions for Utilities like Kitchen, Eating Places etc: -

- 1. The kitchen shall be provided with exhaust system chimney with oil catcher connected to chimney through ducting.
- 2. The toilet shall be provided with exhaust system connected to chimney through ducting.
- 3. The air conditioner shall be vibration proof and the noise shall not exceed 68 dB (A).
- 4. The exhaust hot air from A.C. shall be attached to Chimney at least 5 mtrs. higher than the nearest tallest building through ducting and shall discharge into open air in such way that no nuisance is caused to neighbors.
- (VI) The Applicant shall take adequate measures for control of noise levels from its own sources within the complex (residential cum Commercial) in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Daytime is reckoned as between 6 a.m. to 10 p.m. and Nighttime is reckoned between 10 p.m. to 6 a.m.
- (VII) Construction equipments generating noise of less than 65/90 db(A) are permitted.
- (VIII) No construction work is permitted during nighttime.

6. CONDITIONS UNDER HW (MH &TM) RULES, 2008:

The applicant shall handle hazardous wastes as specified below:

Sr.No.	HW as per Schedule-I	Type of Waste	Quantity	Disposal
	Industry	Shall not generate any type	e of Hazardous Was	ste

- (ii) The authorization is hereby granted to operate a facility for collection, storage, transport and disposal of hazardous waste.
- 7. The applicant shall certify that the bricks used in construction are manufactured using the ash from Thermal Power stations if it is within a radius of 100 km. from Thermal Power Plant and submit the names of bricks manufacturer.
- 8. The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.
- 9. The applicant shall adopt environment friendly technology in development of the project.
- 10. The applicant shall take the proper remediation measures to ensure that the ground water and soil contamination is prevented and follow due diligence at the construction stage.
- 11. The applicant shall use fly ash based material/products as per the provisions of fly ash Notification of 14.09.1999 and as amended on 27.08.2003.
- 12. Energy conservation measures like installation of solar panels for lighting the area outside the building should be integrated part of the project design.
- 13. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant.
- 14. The applicant shall provide Environmental friendly road transportation by adopting mechanical type closed trucks for transportation of minerals & metals / construction debris with effect from 1/04/2012.
- The applicant shall comply with the conditions stipulated in 'Environment Clearance' granted by GOM, vide no: SEAC-2010/CR.591/TC.2, dt: 24/05/2011 & LOI Granted by SRA.
- 16. This is issued pursuant to the decision of <u>Consent Committee</u> of the Board in its meeting held on 4th November 2011 and approval of the Chairperson of the Board.
- 17. The applicant shall submit **Bank Guarantee of Rs. 10.0 Lakhs** towards the compliance of consent conditions at Regional Office, MPCB, Mumbai within 15-days.

18. The capital investment of the project is **Rs. 483.0 Cr.**

(Milind Mhaiskar) Member Secretary

To,

M/s. Housing Developement & Infrastructure Ltd (HDIL),

CTS No: 551/27, 552(pt), 551/1, 552/5 to 552/12,

Village: Nahur, Mumbai.

Copy to-

- 1. Regional Officer, MPCB, Mumbai He is directed to obtain necessary Bank Guarantee from the applicant and ensure compliance of consent conditions
- 2. Sub Regional officer, Mumbai IV, MPCB,
- 3. Chief Accounts Officer, Mumbai, MPCB,

Received consent fee of:-

Amount	DD No.	Date	Drawn on	
Rs. 4,83,100/-	318750	26/04/2011	Axis Bank	
Rs. 4,83,000/-	324245	11/11/2011	Axis Bank	

Cess Branch MPCB Mumbai 5 Master