

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 24020781 / 24010437

Fax : 24024068 / 24044532

Email : mpcb@vsnl.net

Visit At : <http://mpcb.gov.in>



Kalpataru Point, 2nd, 3rd & 4th Floor,
Opp. Cineplanet, Near Sion Circle,
Sion (E), Mumbai-400022.

EIC No: Mu-5424-13

Infrastructure Project/Orange/LSI

Consent No. MPCB/RO (HQ)/Mumbai/CE/CC/ - ¹⁰¹²⁹ Date: 10/12/2013

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 / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2008

.....
CONSENT is hereby granted to,

M/s. Tata Institute of Social Science,
on CTS No.414,414/1 to 48,
at T.I.S.S. Main Campus, Village: Deonar,
off Sion- Trombay Road, Mumbai-400 088.

the Water Act, Air act and Authorization under the provisions of HW(M&H) Rules and amendments thereto 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 proposed expansion and modernization of Educational Institution named as M/s. Tata Institute of Social Science, on plot bearing CTS No.414,414/1 to 48, at T.I.S.S. Main Campus, Village: Deonar, off Sion- Trombay Road, Mumbai-400 088 on Total plot area of 43,753.90 Sq. mtrs and Total Construction BUA of 71,600.36 Sq. mtrs (as per Environmental Clearance) including utilities of construction Project as per construction commencement certificate issued by local body.

2. **CONDITIONS UNDER WATER ACT:**

- (i) The daily quantity of sewage effluent from construction project shall not exceed 330 M³.
- (ii) **Sewage Effluent Treatment:** The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards.

1	pH	Not to exceed	6.5 to 9.0
2	Suspended Solids	Not to exceed	100 mg/l.
3	BOD 3 Days 27 degree C	Not to exceed	100 mg/l.
4	Fecal Coliform	Not to exceed	500/100/1 mg/l.
5	Residual Chlorine	Not to exceed	01 mg/l.
6	Detergent	Not to exceed	01 mg/l.
7	Floating matters	Not to exceed	10 mg/l
8	COD	Not to exceed	250 mg/l

- (iii) **Sewage Effluent Disposal:** The treated domestic effluent shall be 80% recycled and reused for flushing, fire fighting and gardening and remaining shall be discharged to Municipal sewer. 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 Wastes:**

Sr.No	Type of Segregated solid waste	Quantity Kg/D	Treatment	Disposal
1.	Wet Garbage	795	Treated in Organic Waste Converter	Use as Manure
2.	Dry Garbage	818	..	send to Authorized party.
3.	STP Sludge	50		Use as Manure

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 in-house 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. 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.
 17. E-Waste shall be disposed to authorized re processor.
4. **The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and amendment Rules, 2003 there under,**

The daily water consumption for the following categories is as under:

(i) Domestic	...	453.00 CMD
(ii) Water gets Polluted & Pollutants are Biodegradable CMD
(iii) Water gets Polluted, Pollutants are not Biodegradable & Toxic CMD
(iv) Industrial Cooling, spraying CMD

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

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

- (i) The Applicant may install **1-no** of diesel generating sets (DG Sets), of capacity **500 KVA** 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:

a. **Standards for Emissions of Air Pollutants:**

- (i) SPM/TPM Not to exceed 150 mg/Nm³
- (ii) SO₂ (DG Set) Not to exceed -- Kg/day

(ii) **The following measures shall be taken:**

- a. Adequate mitigation measures shall be taken to control emissions of SO₂, NO_x, SPM, and 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. SO₂ Not to Exceed (Annual Average) 60 µg/ m³
Not to Exceed (24 hours) 80 µg/ m³
 3. 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

(iii) The applicant shall observe the following fuel pattern:-

Sr. No.	Type Of Fuel	Quantity
1.	Diesel	82 Kg/Hr

(iv) The applicant shall erect the chimney(s) of the following specifications:-

Sr. No.	Chimney Attached To	Height above the roof of building in which it is installed
2	DG Set (500 KVA)	5 mtrs each

(v) Conditions for D.G. Set:

1. Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
2. Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should 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 will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
3. The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 75 dB(A) during day time and 70 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
4. Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
5. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
6. A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
7. D.G. Set shall be operated only in case of power failure.
8. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

(vi) Other Conditions:

- a) The applicant shall provide ports in the chimney/(s) 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 chimney(s) vents attached to various sources of emission shall be designated by numbers such 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.

(vii) 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.

(viii) 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.

(ix) Construction equipments generating noise of less than 65/90 db(A) are permitted.

(x) No construction work is permitted during nighttime.

6. CONDITIONS UNDER HAZARDOUS WASTE (MANAGEMENT, HANDLING & TRANSBOUNDRY MOVEMENT) RULES, 2008:

(i) The applicant shall handle hazardous wastes as specified below.

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. 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.
8. The applicant shall comply with the guidelines for High rise building stipulated in office memorandum of MoEF, GOI issued vide no:21-270/2008-IA.III, dt: 07/02/2012.
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. Energy conservation measures like installation of solar panels for lighting the area outside the building should be integrated part of the project design.
12. 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.
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 obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.

15. 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.
16. The applicant shall submit **Bank Guarantee of Rs. 10 Lakhs** at Regional Office, MPCB, Mumbai within 15-days towards compliance of consent conditions.
17. **The applicant shall comply with the conditions stipulated in Environment Clearance granted by GOM, vide no: SEAC-2013/CR-155/TC.1 dt. 8/04/2013.**
18. This is issued pursuant to the decision of **Consent Committee of the Board in its meeting held on 21st September, 2013.**
19. **The Capital investment of the Project is Rs. 245.94 Cr.**


 (Rajeev Kumar Mital, IAS)
 Member Secretary

To,
 M/s. Tata Institute of Social Science
 on CTS No.414,414/1 to 48,
 at T.I.S.S. Main Campus, Village: Deonar,
 off Sion- Trombay Road, Mumbai-400 088.

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 III, MPCB.
3. Chief Accounts Officer, Mumbai, MPCB.

Received consent fee of:-

Sr. No.	Amount	DD. No.	Date	Drawn On
1.	Rs.4,91,980/-	229443	16/05/2013	SBI Bank

4. Cess Branch, MPCB, Mumbai.
5. Master file.