

Dr.R.ANNAMALAI,I.F.S.,
DIRECTOR OF ENVIRONMENT AND
MEMBER SECRETARY



**STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT AUTHORITY,
TAMILNADU,**

Tamilnadu Pollution Control Board Premises,
76, Mount Salai, Guindy,
Chennai- 600 032.

No.SEIAA/TN/EC/8(a)/ 043/F-181/2009/date: 29.04.2009

To

The Rector & Vice President,
M/s. Loyola College Society,
Loyola College
Nungambakkam,
Chennai - 600 034.

Sub: SEIAA - M/s. Loyola College of Engineering & Technology & Loyola College of Education & School of Commerce - Construction of college buildings at S.F.No. S.No.614/1, 614/3, 4 & 5, 615, 616/1, 2,4, 617/2 & 3, Loyola College, Nungambakkam, Chennai-34 - Environmental Clearance – Reg.

Sir,

This has reference to your application No. Nil, dated 11.11.2008 received by the State Level Environment Impact Assessment Authority, Tamil Nadu, seeking Environmental Clearance under the Environment Impact Assessment Notification, 2006. The proposal has been appraised by the State Level Expert Appraisal Committee (SEAC) in its meeting held on 19th & 20th December 2008 and 19th & 20th March 2009 as per the prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application Viz., the Application Form- I, Form-IA, Conceptual plan, and the additional clarifications furnished by the proponent.

It is noted, interalia that the project proposal involves the construction of college buildings comprising of 3 Blocks as per the applications submitted. The area of the plot is 80 Acres and the total built-up area as reported is 36411 Sq.m comprising of Ground + 3 floors of 3 blocks. Water requirement of the project is 45 KLD and daily fresh water requirement is also 45 KLD, which will be met from the supply of CMWSSB as per CMWSSB letter no. nil dated 27.04.2009. It has been proposed to discharge the sewage (3 KLD) and treated trade effluent (400 litres/week) into the existing CMWSSB sewerage line. The trade effluent generated

from the chemistry laboratory is proposed to be neutralized and settled and discharged into the CMWSSB sewerage line. Solid waste generation has been projected as 1 T/day. The power required is 300 KW with backup DG Set of 1 No of 250 KVA capacity. The total cost of the project is about Rs.40 Crores.

The project activity is covered in 8(a) of the Schedule and is of 'B2' category. It does not require Public Consultation as per Para 7 (i) III. Stage (3) (b) "Public Consultation" of EIA Notification, 2006.

The SEAC after due considerations of the relevant documents submitted by the Project Proponent and additional clarifications furnished in response to its observations have recommended to the SEIAA, Tamil Nadu to grant Environmental Clearance to this project. The proposal was considered by SEIAA, Tamil Nadu in its meeting held on 28.04.2009 and as the public consultation is not required for the project, the SEIAA hereby accords Environmental Clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 based on the recommendations of the SEAC subject to the strict compliance of the following terms and conditions.

PART A- SPECIFIC CONDITIONS

Construction Phase

- i) "Consent for Establishment" shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be submitted to the SEIAA, Tamil Nadu before taking up of any construction activity at the site.
- ii) All required sanitary and hygienic measures should be in place before starting construction activities and they have to be maintained throughout the construction phase.
- iii) A First Aid Room shall be provided in the project site during the construction of the project.
- iv) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The safe disposal of waste water and solid wastes generated during the construction phase should be ensured.

- v) All the labourers to be engaged for construction should be screened for health and adequately treated before and during their employment on the work at the site.
- vi) For disinfection of waste-water, system using ultra violet radiation shall be adopted.
- vii) For Solid-waste management, composting arrangements shall be provided for biodegradable waste at site.
- viii) All the topsoil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.
- ix) Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed of only in approved sites with the approval of competent authority with necessary precautions for general safety and health aspects of people.
- x) Soil and ground water samples shall be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- xi) Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourses. The dump sites for such materials must be secured so that they should not leach into the ground water.
- xii) Low sulphur diesel shall be used for the diesel generator sets to be used during construction phase. The air and noise emission shall conform to the standards prescribed in the Rules under the Environment (Protection) Act, 1986.
- xiii) Vehicles hired for bringing construction materials to the site should be in good condition and should conform to air and noise emission standards, prescribed by TNPCB/CPCB. The vehicles should be operated only during non-peak hours.
- xiv) Ambient air and noise level should conform to residential standards prescribed by the TNPCB both during day and night. Incremental pollution

loads on the ambient air and noise quality should be closely monitored during construction phase.

- xv) Fly ash should be used as building material in the construction as per the provision of Fly ash Notification of September, 1999 as amended in August, 2003.
- xvi) Ready mixed concrete must be used in building construction.
- xvii) Storm water control and its re-use shall be as per CGWB and BIS standards for various applications.
- xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices prevalent.
- xix) For extraction of water the applicant should obtain necessary permit/permission from the competent Authority notified under the Chennai Metropolitan Water Supply & Sewerage Board, in respect of Chennai city and the villages notified to come under its jurisdiction under the Chennai Metropolitan Area Ground Water (Regulation) Act, 1987/Central Ground Water Authority in respect of other areas of the State for the extraction of ground water for accessing supply to the project and for transportation of water to the project for domestic/other uses during the construction and occupation stages.
- xx) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- xxi) The entire grey water ie 100% shall be treated by decentralized treatment.
- xxii) Fixtures for showers, toilet flushing and drinking water should be of low flow type by adopting the use of aerators / pressure reducing devises / sensor based control.
- xxiii) Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, high quality double glass with special reflecting coating in windows shall be used.
- xxiv) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.

- xxv) Adequate measures to reduce air and noise pollution during construction shall be adopted, conforming with norms prescribed by the TNPCB on noise limits.
- xxvi) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is mandatory for all air conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- xxvii) The Project proponent is requested to indicate the probable date of commissioning of the project supported with necessary bar charts.
- xxviii) The construction of the project and commissioning of the project should be so phased as to coincide with the readiness of the CMWSSB scheme to provide water supply and sewerage connections.
- xxix) The project proponent is directed that for water supply and sewerage, the facilities of CMWSSB should be utilized.

Operation Phase

- i) The installation of the sewage treatment plant (STP) shall be certified by an independent expert and a report in this regard shall be sent to the SEIAA before the project is commissioned for operation. Discharge of treated sewage shall conform to the norms & standards prescribed by the Tamil Nadu Pollution Control Board.
- ii) For disinfection of waste-water, system using ultra violet radiation shall be adopted.
- iii) The project proponent is directed that for water supply and sewerage, the facilities of CMWSSB should be utilized.
- iv) Rain water harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment with screens, settlers etc. must be done to remove suspended matter, oil and grease.
- v) Permission to draw water for operation should be obtained from the competent authority prior to operation of the project.
- vi) A First Aid Room shall be provided during operation of the project.

- vii) The domestic solid waste generated shall be properly collected, segregated & composted within the premises with respect to organic waste.
- viii) The STP sludge shall be composted along with other biodegradable solid waste and used as manure.
- ix) The Plastic wastes shall be segregated and disposed through recyclers.
- x) Any hazardous waste including biomedical waste shall be disposed off as per applicable rules & norms with necessary approval of the Tamil Nadu Pollution Control Board.
- xi) The acoustic enclosures shall be installed at all noise generating equipments such as DG sets, air conditioning systems, etc. and the noise level shall be maintained as per MoEF/CPCB /TNPCB guidelines/norms both during day and night time.
- xii) The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot shall be suitably landscaped and covered with vegetation of suitable variety.
- xiii) Incremental pollution loads on the ambient air quality, noise and water quality shall be periodically monitored after commissioning of the project.
- xiv) Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. A hybrids system or fully solar system for a portion of the apartments shall be provided.
- xv) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site shall be avoided. Parking shall be fully internalized and no public space should be utilized.
- xvi) A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc and submitted to the SEIAA in three month's time.

PART-B. GENERAL CONDITIONS

1. It is mandatory for the Project proponent to furnish to the SEIAA, Half yearly compliance report in Hard and Soft copies on 1st June and 1st December of each calendar year in respect of the conditions stipulated in the prior Environmental Clearance.
2. In the case of any change(s) in the scope of the project, a fresh appraisal by the SEIAA shall be obtained.
3. The SEIAA reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the Environmental Clearance under the provisions of the Environment (Protection) Act,1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
4. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire and Rescue Services Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wild Life (Protection) Act, 1972, State / Central Ground Water Authority, Coastal Regulatory Zone Authority, other statutory and other authorities as applicable to the project shall be obtained by project proponent from the competent authorities.
5. 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 the public that
 - i) The project has been accorded Environmental Clearance.
 - ii) Copies of clearance letters are available with the Tamil Nadu Pollution Control Board.
 - iii) Environmental Clearance may also be seen on the website of the SEIAA.

The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same shall be forwarded to the SEIAA.
6. All the stipulations stated under Part A and Part B above would be enforced in addition to 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 EIA Notification, 2006.

7. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that Construction of the project has been started without obtaining Environmental Clearance, and for action for any violation of any condition stipulated in Part – A & Part – B of the Environmental Clearance.
8. This Environmental Clearance is subject to final orders of the Hon'ble Supreme Court of India in the matter of Goa foundation Vs. Union of India in Writ Petition (civil) No.460 of 2004 as may be applicable to this project.
9. This Environmental Clearance is valid for five years from the date of issue.

**Member Secretary,
State Level Environment Impact
Assessment Authority,
Tamil Nadu.**

Copy to:-

1. The Secretary to Government, Environment & Forests Dept,
Govt. of Tamil Nadu, Fort St. George, Chennai-9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan,
CBD Cum-Office Complex, East Arjun Nagar, New Delhi 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board,
76, Mount Salai, Guindy, Chennai-600 032.
4. The CCF, Regional Office, Ministry of Environment & Forest (SZ),
Kendriya Sadan, IV floor, E&F wings, 17th Main Road,
Koramangala II Block, Bangalore - 560034.
5. Monitoring Cell, I A Division, Ministry of Environment & Forests,
Paryavaran Bhavan, CGO Complex, New Delhi 110003.
6. The Commissioner, Chennai Corporation, Chennai.
7. Stock File.