

No. 189/SEAC(P)/2010-IA.III
Government of India
Ministry of Environment & Forests
(IA.III Division)

Paryavaran Bhawan,
CGO Complex, Lodi Road,
New Delhi-110003

Dated: 8th October, 2010

To,
M/s. Indian Institute of Science Education & Research,
Transit Campus-MGSIPAP Complex,
Adjoining Sacred Heart School, Sector-26,
Chandigarh - 169 019

Subject: - Environmental Clearance for the Establishment of Indian
Institute of Science Education and Research at Sector-81,
SAS Nagar, Mohali, Punjab by M/s. Indian Institute of
Science Education and Research - Reg.

Sir,

This has reference to your application No: IISER/09/Reg./1148 dated 13.9.2009 and subsequent letters dated 10.11.2009, 14.11.2009, 1.12.2009, 10.12.2009, 17.12.2009, 7.8.2010 and 13.9.2010 seeking prior environmental clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per 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 Form-1 & 1A, EMP, Layout plans and the additional clarifications furnished in response to the observations of the State Expert Appraisal Committee constituted by the competent authority in its meeting held on 14.11.2009, 9.1.2010, 30.1.2010 and awarded "Silver" grading to the project.

2. It is interalia, noted that the proposal involves the Establishment of Indian Institute of Science Education and Research on a plot area of 505857 Sq.m. in two phases. The total built-up area proposed is 236140.67 sq. mts. The water requirement proposed is 765 KLD (fresh water 495 KLD). The capacity of STP is about 800 KLD. The water requirement for flushing is 306 KLD. Total solid waste generation will be 2000 kg/day. The power requirement is about 10.8 MVA. The total cost of the project is about Rs. 448.30 Crores.

3. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental Clearance for the project mentioned above. Accordingly, the Ministry hereby accord necessary Environmental Clearance for the above project as per the provisions of Environmental Impact Assessment Notification - 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:



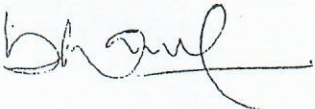
PART A- SPECIFIC CONDITIONS

I. Construction Phase

- (i) "Consent for Establishment" should be obtained from Punjab Pollution Control Board under Air and Water Act and a copy should be submitted to the Ministry before the start of any construction work at site.
- (ii) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- (iii) A First Aid Room will be provided in the project both during construction and operation of the project.
- (iv) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- (v) Provision should be made for the supply of fuel (kerosene or cooking gas); utensils such as pressure cookers etc. to the labourers during construction phase.
- (vi) All the labourers to be engaged for construction should be screened for health and adequately treated before engaging them to work at the site.
- (vii) For disinfection of waste water, use ultra violet radiation, not chlorination.
- (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 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.
- (x) Soil and ground water samples will 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 material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- (xii) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to E (P) Rules prescribed for air and noise emission standards.
- (xiii) Vehicles hired for bringing construction material to the site should be

emission standards and should be operated only during non-peak hours.

- (xiv) Ambient noise levels should conform to residential standards 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 provisions of Fly Ash Notification of September, 1999 and amended as on August, 2003.
- (xvi) Ready mixed concrete must be used in building construction.
- (xvii) Storm water control and its re-use 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 referred.
- (xix) Permission to draw ground water should be obtained from the competent Authority prior to construction/operation of the project.
- (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) Treatment of 100% grey water by decentralised treatment should be done.
- (xxii) 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.
- (xxiii) Use of glass be reduced by upto 40% to reduce the electricity consumption and load on airconditioning. If necessary, use high quality double glass with special reflective coating in windows.
- (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 keeping in mind CPCB norms on noise limits.
- (xxvi) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- (xxvii) The approval of competent authority should be obtained for structural safety of the buildings due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightning



(xxviii) Provisions should be made for 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, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.

II. Operation Phase

- i) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Discharge of treated sewage shall conform to the norms & standards of the Punjab Pollution Control Board, Patiala, Punjab.
- ii) The car washing in the complex/multiplex should not be allowed
- iii) Adequate & appropriate pollution control measures should be provided to control fugitive emissions to be emitted from the shopping and multiplex.
- iv) Adequate drinking water facility based on the Reverse Osmosis treatment technology be provided
- v) Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- vi) The solid waste generated should be properly collected & segregated before disposal to the City Municipal Facility. The In-vessel bio-conversion technique should be used for composting the organic waste.
- vii) Any hazardous waste including biomedical waste should be disposed of as per applicable Rules & norms with necessary approvals of the Punjab Pollution Control Board.
- viii) 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 landuse. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety.
- ix) The project proponent should take adequate and appropriate measures to contain the ambient air quality within the prescribed standards. The proposal regarding mitigation measures to be taken at site should be submitted to Ministry of Environment & Forests.
- x) Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.
- xi) Application of solar energy should be incorporated for illumination of

provision for solar water heating. A hybrid system or fully solar system for a portion of the apartments should be provided.

- xii) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- xiii) A Report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.
- xiv) Ozone depleting substances (Regulation & Control) Rules should be followed while designing the air conditioning system of the project.
- xv) Environment Management Cell should be formed during operation phase which will supervise and monitor the environment related aspects of the project.

RT - B. GENERAL CONDITIONS

- i) Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Chandigarh.
4. Officials from the Regional Office of MOEF, Chandigarh 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. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Chandigarh.
 5. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
 6. The Ministry 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.
 7. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the competent authorities.
 8. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/ 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.
 9. The project proponent should 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 Punjab Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 7 days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Chandigarh.

10. These stipulations would be enforced among others under the provisions of 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.

11. 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.

12. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC-conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional office of MoEF, the respective Office of CPCB and the SPCB.

13. Environmental clearance is subject to final order 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.

14. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.

Yours faithfully,

(Bharat Bhushan)
Director (IA)

Copy to: -

1. The Secretary, Department of Environment, Government of Punjab, Chandigarh
2. The Member Secretary, Punjab Pollution Control Board, Zonal Office, Patiala, Punjab.
3. The CCF, Regional Office, Ministry of Environment & Forests(NZ), Bays No.24-25, Sector 31-A, Dakshin Marg, Chandigarh - 160 030.
4. IA - Division, Monitoring Cell, MOEF, New Delhi - 110003.
5. Guard file.

(Bharat Bhushan)
Director (IA)

08.10.2010