


STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB

Ministry of Environment, Forests and Climate Change, Government of India

O/O Punjab Pollution Control Board,

Vatavaran Bhawan, Nabha Road,

Patiala – 147 001

Telefax:- 0175-2215636

No. SEIAA/M.S./ 78

Dated: 07.01.18

Registered

To

 The Registrar,
 Indian Institute of Technology (IIT),
 Nangal Road, Roop Nagar

Subject: Environmental clearance under EIA Notification dated 14.09.2006 for establishment of "Indian Institute of Technology" at Bara Rupnagar, Ropar by M/s Indian Institute of Technology Ropar.

This has reference to your application and subsequent presentation given before the State Level Expert Appraisal Committee (SEAC) seeking prior environmental clearance for subject cited project (Phase-1 only), as required under the EIA Notification, 2006. The proposal has been appraised as per procedure prescribed under the provisions of EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, 1-A & conceptual plan and the additional clarifications furnished in response to the observations of the SEAC.

It is inter-alia noted that the proposal involves establishment of educational complex namely "Indian Institute of Technology" at Bara Rupnagar, Ropar by M/s Indian Institute of Technology Ropar. The total plot area of the project for phase-1 is 2,20,653.77 sqm having the total built up area 1,01,072.21 sqm. The change of land use (CLU) has been granted by the Chief Town Planner, Punjab vide letter No. 4344 CTP (Pb)/SP-432 (R) dated 05.08.2014 for an area measuring 466.69 acres. The layout plan has been approved by the Department of Town & Country Planning (CTP, Punjab) vide letter no. 6689 CTP (Pb) SR-88 dated 14.11.2014. The cost of the project is Rs.400 crores.

The total water requirement for the project will be 434 KL/day, out of which 201 KL/day will be met through own tubewell and remaining 233 KL/day will be met through recycling of treated wastewater. The total wastewater generation from the project will be 247 KL/day, out of which 245 KL/ day will be treated in a STP of capacity 300 KL/day & 2 KL/ day generated from laboratories will be treated in an ETP of capacity 5 KL/day to be installed within the project premises. The project proponent has proposed to use 85 KL/day of treated wastewater for flushing purpose, 36 KL/day will be used for irrigation of green area and 112 KL/day will be used for HVAC cooling. Treated water from ETP shall be utilized onto land for plantation/irrigation within the premises during all seasons. In winter season, 85 KL/day of treated wastewater will be used for flushing purpose, 36 KL/day will be used for irrigation of green area, 112 KL/ day will be used for HVAC cooling. In rainy season, 197 KL/day of treated wastewater will be used for flushing

& HVAC purpose and remaining 36 KL/day will be discharged onto land for irrigation/plantation.

The total quantity of solid waste generation will be 956 kg/day, which will be segregated at source as biodegradable and non-biodegradable components as per the Municipal Solid Waste (Management & Handling) Rules, 2000. The biodegradable waste would be treated by Vermi-composting. The non-biodegradable and recyclable waste will be sold to recyclers. Since the waste will be treated on the site & will not be disposed of to Municipal site, approval of MC is not required. The total load of electricity required for group housing will be 5700 KW which will be taken from the PSPCL. There is a proposal to install 7 nos. of DG sets of total 3500 KVA capacity shall be installed as stand-by arrangement. The total parking area will be provided for 2420 ECS. Green belt will be developed in an area of 30000 sqm, which will be irrigated with treated wastewater.

The e-waste will be handled and managed as per the E-waste (Management & Handling) Rules, 2011. The used oil from the D.G. sets will be stored in an isolated place and would be sold out to the approved recyclers as per the provisions of the Hazardous Waste (Management, Handling & Transboundary Movement), Rules, 2008. LED bulbs/lights will be used instead of CFL bulbs/lights.

Central Public Works Department (CPWD) will be responsible for implementation of EMP during construction phase. Rs. 215 lacs of capital cost will be incurred for implementation of EMP and Rs.39.5 lacs/annum will be incurred on account of recurring charges. After construction phase, Registrar, IIT Ropar will be responsible for implementation of EMP.

Earlier, the project proponent had applied to MoEF on 21.02.2014 for obtaining environmental clearance as required under the EIA Notification dated 14.09.2006 for establishment of "Indian Institute of Technology" at Bara Rupnagar, Ropar, because the SEIAA, Punjab was not in existence. Thereafter, the application has been transferred by MoEF to SEIAA, Punjab in original vide letter dated 13.08.2014. The case was considered by the SEAC in its 101st meeting held on 18.09.2014, wherein, the Committee observed that the project proponent has provided adequate and satisfactory clarifications of the observations raised by it, therefore, the Committee awarded '**Silver Grading**' to the project proposal and decided to forward the case to the SEIAA with the recommendation to grant environmental clearance to the project proponent under EIA notification dated 14.09.2006 subject to certain conditions in addition to the proposed measures.

Thereafter, the case was considered by the SEIAA in its 74th meeting held on 24.12.2014. The SEIAA observed that the case stands recommended by SEAC and the Committee awarded '**Silver Grading**' to the project proposal. The Authority looked into all the aspects of the project proposal in detail and was satisfied with the same.

Therefore, the Authority decided to grant environmental clearance for establishment of 'Indian Institute of Technology' in an area of 2,20,653.77 sqm having total built up area of 1,01,072.21 sqm (For Phase-1) at Nangal Road, Roopnagar,

subject to the conditions as proposed by the SEAC, in addition to the proposed measures. Accordingly, SEIAA, Punjab hereby accords necessary environmental clearance for the above project under the provisions of EIA Notification dated 14.09.2006 and its subsequent amendments, subject to strict compliance of terms and conditions as follows:

PART A – Specific conditions

I. Construction Phase

- (i) The project proponent shall obtain prior permission from Govt. of India/National Board of Wild Life (NBWL) under Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972, etc. as applicable and the promoter company shall not carry out any construction activity at site till the said permission(s) are obtained and the copy of the same be submitted to the SEIAA, Punjab. The grant of environmental clearance does not necessarily imply that the forest and wildlife clearance shall be granted to the project and the proposal for grant of forest and wildlife clearance will be considered by the respective authorities on merits.
- (ii) "Consent to establish" shall be obtained from Punjab Pollution Control Board under Air (Prevention & Control of Pollution) Act, 1981 and Water (Prevention & Control of Pollution) Act, 1974 and a copy of the same shall be submitted to the Ministry of Environment & Forests / State Level Environment Impact Assessment Authority before the start of any construction work at site.
- (iii) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- (iv) A first aid room will be provided in the project both during construction and operation phase of the project.
- (v) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (vi) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed off after taking the necessary precautions for general safety and health aspects of people with the approval of competent authority.
- (vii) Construction spoils, including bituminous material and other hazardous material, 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 groundwater.
- (viii) The diesel generator sets to be used during construction phase should be of low sulphur diesel type and should conform to the provisions of Environment (Protection) Act, 1986 prescribed for air and noise emission standards.
- (ix) Vehicles hired for bringing construction material to the site and other machinery to be used during construction should be in good condition and should conform to applicable air and noise emission standards.
- (x) Ambient noise levels should conform to prescribed standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase.
- (xi) Fly ash should be used as construction material in the construction as per the provisions of Fly Ash Notification of September, 1999 and as amended on August, 2003.
- (xii) Ready mixed concrete should be used in building construction as far as possible.
- (xiii) Water demand during construction should be reduced by use of premixed concrete, curing agents, use of treated wastewater for construction and other best practices.
- (xiv) Separation of drinking water supply and treated sewage supply should be done by the use of different colours.

- (xv) 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.
- (xvi) Adequate steps shall be taken to conserve energy by taking adequate measures such as proper building design and orientation, use of LED & CFL lightening fixtures, use of solar photo voltaic light for street lightening, energy efficient electrical equipments, limiting the use of glass, provision of proper thermal insulation and taking measures as prescribed under the Energy Conservation Building Code.
- (xvii) The approval of competent authority shall 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.
- (xviii) Provision 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, disposal of waste water & solid waste in an environmentally sound manner, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xix) The project proponent shall provide a 15m green buffer zone towards the air polluting industry, if any, to attenuate the noise as well as air pollution being generated from the air polluting industry adjacent to the project site.
- (xx) The project proponent shall provide holding tanks of sufficient capacity (at least 24 hours storage) for treated as well as untreated wastewater for handling any emergency situation which may arise due to failure of STP/no demand for irrigation etc.

II. Operation Phase

- i) The project proponent shall ensure that the natural flow of run-off water be continued without any disturbance/obstruction. The Institute will not hinder the natural flow of drainage water passing through the campus. The project proponent shall further comply with all the conditions as imposed by Water Management & Investigation Division, Roop Nagar vide letter no. 1175 dated 26.06.2014.
- ii) The installation of sewage treatment plant (STP) and effluent treatment plant (ETP) and adequacy of disposal system should be certified by Punjab Pollution Control Board and a report in this regard should be submitted to the Ministry of Environment & Forests and State Level Environment Impact Assessment Authority before the project is commissioned for operation. The project proponent shall use 85 KL/day of treated wastewater for flushing purpose, 36 KL/day for irrigation of green area and 112 KL/day for HVAC cooling. Treated water from ETP shall be utilized onto land for plantation/irrigation within the premises during all seasons. In winter season, 85 KL/day of treated wastewater shall be used for flushing purpose, 36 KL/day for irrigation of green area, 112 KL/day for HVAC cooling. In rainy season, 197 KL/day of treated wastewater shall be used for flushing & HVAC purpose and remaining 36 KL/day for onto land for irrigation/plantation.
- iii) The project proponent will construct rainwater harvesting reservoir/water retention body for storm water management as proposed.
- iv) The project proponent shall provide electromagnetic flow meter at the outlet of the water supply, outlet of the STP and any pipeline to be used for re-using the treated wastewater back into the system for flushing and for horticulture purpose/green etc. and shall maintain a record of readings of each such meter on daily basis.
- v) Adequate & appropriate pollution control measures should be provided to control fugitive emissions to be emitted within the complex.
- vi) Adequate treatment facility for drinking water shall be provided, if required.
- vii) The solid waste generated should be properly collected and segregated. The recyclable solid waste shall be sold out to the authorized vendors and inerts shall be sent to disposal facility. The Bio-degradable solid waste shall be adequately

be sent to disposal facility. The Bio-degradable solid waste shall be adequately treated as per the scheme submitted by the project proponent. Prior approval of competent authority should be obtained, if required.

- viii) Hazardous waste/E-waste should be disposed off as per Rules applicable and with the necessary approval of the Punjab Pollution Control Board.
- ix) The green belt 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 should be suitably landscaped and covered with vegetation of indigenous species/variety.
- x) 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 the Ministry of Environment & Forests/ State Level Environment Impact Assessment Authority within three months.
- xi) Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.
- xii) 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.
- xiii) 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 even for parking of visitor's vehicles.
- xiv) A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about machinery of air conditioning, lifts, lighting, building materials, R & U Factors etc. and submitted to the respective Regional office of MoEF, the Zonal Office of CPCB and the SPCB/SEIAA in three months time.
- xv) Environmental Management Cell shall be formed during operation phase which will supervise and monitor the environment related aspects of the project.


PART B – General Conditions :

- i) This environmental clearance will be valid for a period of five years from the date of its issue or till the completion of the project, whichever is earlier.
- ii) The environmental safeguards contained in the application of the promoter / mentioned during the presentation before State Level Environment Impact Assessment Authority/State Expert Appraisal Committee should be implemented in letter and spirit.
- iii) The entire cost of the environmental management plan (i.e. capital cost as well as recurring cost) will continue to be borne by the project proponent. CPWD will be responsible for implementation of EMP during construction phase and after the lapse of the period (construction phase) the project proponent will be responsible for the implementation of EMP.
- iv) 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 mail) to the respective Regional office of MoEF, the Zonal Office of CPCB and the SPCB/SEIAA.
- v) Officials from the Regional Office of Ministry of Environment & Forests, Chandigarh / State Level Environment Impact Assessment Authority / State Level Expert Appraisal Committee / Punjab Pollution Control Board 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 State Environment Impact Assessment Authority should be forwarded to the CCF, Regional Office of Ministry of Environment & Forests, Chandigarh/State Level Environment Impact Assessment Authority.

- vi) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority.
- vii) Separate distribution pipelines be laid down for use of treated effluent / raw water for horticultural/gardening purposes with different colour coding.
- viii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, etc. shall be obtained, by the project proponent from the competent authorities including Punjab Pollution Control Board and from other statutory bodies, as applicable.
- ix) 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. The advertisement should be made within seven days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office, Ministry of Environment & Forests, Chandigarh.
- x) These stipulations would be enforced among others under the provisions of Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, Environmental (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- xi) 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 and decisions of any competent court, to the extent applicable.
- xii) The project proponent shall comply with the conditions of CLU granted by the Chief Town Planner, Punjab vide Memo No. 4344 CTP (Pb)/SP-432 (R) dated 05.08.2014.
- xiii) The project proponent shall obtain permission from CGWA for abstraction of 201 KLD groundwater.
- xiv) 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.
- xv) The proponent shall upload the status of compliance of the stipulated EC 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, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x, CO, Pb, Ozone (ambient air as well as stack emissions) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xvi) The project proponent shall adhere to the commitments made in the Environment Management Plan. During construction phase, Rs. 215 lacs of capital cost will be incurred for implementation of EMP and Rs.39.5 lacs/annum will be incurred on account of recurring charges. After the lapse of the period (construction phase) for which CPWD is responsible, IIT Ropar will be responsible for implementation of EMP.
- xvii) The project proponent shall undertake the activities under Corporate Social Responsibility programme and shall spend 1% of total project cost or atleast minimum required to be spent under the provisions of the Companies Act 1956, whichever is higher.
- xviii) The State Environment Impact Assessment Authority reserves the right to add additional safeguards/ measures subsequently, if found necessary, and to take action including revoking of the environmental clearance under the provisions of

the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguards/ measures in a time bound and satisfactory manner.

- xix) 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.


Member Secretary (SEIAA)

REGISTERED

Endst. No. _____

Dated _____

A copy of the above is forwarded to the following for information & further necessary action please.

1. The Secretary to Govt. of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-office Complex, East Arjun Nagar, New Delhi.
3. The Chairman, Punjab State Power Corporation Ltd, the Mall, Patiala.
4. The Deputy Commissioner, Roopnagar.
5. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.
6. The Director (Environment), Ministry of Environment and Forest, Northern Regional Office, Bays No.24-25, Sector-31-A, Chandigarh. The detail of the authorized Officer of the project proponent is as under:
 - a) Name of the applicant : Sh. A. Palanivel, Registrar
 - b) Contact Number : 01881-227079
 - c) Email : registrar@iitrpr.ac.in
7. The Chief Town Planner, Department of Town & Country Planning, 6th Floor, PUDA Bhawan, Phase-8, Mohali
8. Monitoring Cell, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
9. The Environmental Engineer (Computers), Punjab Pollution Control Board, Head Office, Patiala for displaying this document on the web site of the State Level Environment Impact Assessment Authority.


Member Secretary (SEIAA)