

**F. No. IA3-10/7/2021-IA.III**  
Government of India  
Ministry of Environment, Forest and Climate Change  
(IA.III Section)

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Date: 12<sup>th</sup> March, 2021

To,

**Dr. Gurbinder Singh, Registrar**  
**M/s. Thapar Institute of Engineering and Technology**  
Bhadson Road,  
Patiala, Punjab-147004  
Email: [thaparinstitute20@gmail.com](mailto:thaparinstitute20@gmail.com)

**Subject: Environment Clearance for Expansion of Educational Institute namely "Thapar Institute of Engineering and Technology (Deemed to be University)" from built up area from 3,33,080.53 sq m to 4,45,678.09 sqm at Khasra No. 926(6-5), 939 (7-13), 940 (5-18), etc., Bhadson Road, Patiala, Punjab, by M/s. Thapar Institute of Engineering and Technology - Regarding**

Sir,

This has reference to your Application/ Proposal No. IA/PB/MIS/191842/2020; received on 11<sup>th</sup> January, 2021 through Parivesh Portal for grant of Environment Clearance (EC) for Expansion of Educational Institute namely "Thapar Institute of Engineering and Technology (Deemed to be University)" from built up area from 3,33,080.53 sq m to 4,45,678.09 sq m at Khasra No. 926(6-5), 939 (7-13), 940 (5-18), etc., Bhadson Road, Patiala, Punjab by M/s. Thapar Institute of Engineering and Technology.

**2.** As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006; as amended and notified under the Environment (Protection) Act, 1986 (29 of 1986), the above-mentioned project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Punjab, the proposal required appraisal at Central level by sectoral EAC.

**3.** Accordingly, the abovementioned proposal for grant of Environmental Clearance, has been examined by the Expert Appraisal Committee (Infra-2) in its 60<sup>th</sup> meeting held during 27<sup>th</sup> - 28<sup>th</sup> January, 2021.



4. The details of the project, as per the Application and documents submitted by the project proponent, and also as informed during the above-mentioned meetings of EAC (Infra-2) are as under:

- i. The project is located at Bhadson Road, Patiala, Punjab with coordinated 30°21'24.78"N Latitude and 76°21'31.05"E Longitude.
- ii. The project is an expansion.
- iii. Earlier, Environmental Clearance was obtained from SEIAA, Punjab vide Letter No. SEIAA/3777 dated 26.06.2015. Subsequently, the Environmental Clearance for expansion has also been obtained from SEIAA, Punjab vide Letter No. SEIAA/914 dated 25.01.2016. At present, 3,27,516.57sqm of construction has been done out of 3,33,080.53 sqm of built-up area as per earlier granted Environmental Clearance.
- iv. ToR was issued by SEIAA, Punjab vide Letter No. SEIAA/2019/1747 dated 29.07.2020. Point-wise ToR compliance has been submitted along with EIA report.
- v. The total plot area after expansion will remain same i.e., 10,08,194.06sqm (or 249.13 acres). However, built-up area will be increased to 3,27,516.57sqm to 4,45,678.09sqm. The proposed additional buildings are Guest house, sports center, etc. Maximum height of the building is 30m. The details of the proposed buildings are as follows:

Building Name	Floors	G.F	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor	8th Floor	Total area (sq. ft.)
Venture Lab	G+3	10,600	9,800	9,800	9,800						40,000
Guest House	G+2	12,000	9,000	9,000							30,000
Sports Center	G+1	30,750	30,750	SWIMMING POOL AREA (1,3500)							75,000
New Boys Hostel-M	G+8	38,500	38,500	29,000	29,000	29,000	29,000	29,000	29,000	29,000	2,80,000
New Boys Hostel 1250 PAX	G+8	42,000	42,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	3,15,000
New SS-7	G+1	13,000	12,000	0	0	0	0	0	0	0	25,000
Research Center	G+6	11,800	9,700	9,700	9,700	9,700	9,700	9,700			70,000
Proposed 2nd Floor of Laboratory Block II	G+2	0	0	7,000							7,000
Faculty Residences two towers	G+8	15,400	15,575	15,575	15,575	15,575	15,575	15,575	15,575	15,575	1,40,000

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FRF & FRG								5			
Faculty Offices	G+3	9,000	7,000	7,000	7,000						30,000
Lecture Theatre	G+4	22,000	19,500	19,500	19,500	19,500					1,00,000
Multi story Parking	G+2	34,000	33,000	33,000							1,00,000
<b>Total</b>											<b>12,12,000 sq. ft. or 1,12,597.56 sqm.</b>

- vi. During construction phase, total water requirement is expected to be 20 KLD, which shall be met by treated water from already installed STP. During the construction phase, mobile toilets shall be provided. The wastewater generated from the toilets shall be treated in already installed STP.
- vii. During operational phase, total water requirement of the project is expected to be 1,279 KLD and the same will be met by 826 KLD fresh water from 4 existing tube wells and 453 KLD of recycled water from the existing onsite STP. Wastewater generated (945 KLD) will be treated in already installed STP of 2.3 MLD capacity. 926 KLD of treated wastewater will be recycled and re-used (355 KLD for flushing and rest for green area demand and excess to 10 acres of land under Karnal Technology).
- viii. About 5.36 TPD of solid waste will be generated in the project. The biodegradable waste (2.416 TPD) will be processed in installed Mechanical Composter of 7 Ton capacity and the non-biodegradable/domestic hazardous waste generated (2.944 TPD) will be handed over to authorized local vendor.
- ix. The total power requirement during construction phase and operation phase is 150 KW and 8600 KW respectively, which will be met from Punjab State Power Corporation Limited (PSPCL).
- x. Overall, 31 Rain water harvesting (RWH) pits have been proposed. As per previous EC dated 25.01.2016, 20 RWH pits were proposed, out of which, 15 RWH pits have been constructed. Additional 11 no. of RWH pits with dual bore will be provided for proposed buildings for artificial rain water recharge within the project premises.
- xi. Total Parking area proposed is 45,503 sqm out of which, 9,290 sqm. area has been reserved for multi-story parking.
- xii. Proposed energy saving measures would save about 35% of power.
- xiii. Comparative analysis of existing /envision pollution load is as follows:

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S. No.	Description	As per EC Accorded dated 25.01.2016	Proposed	Total (After Expansion)
1.	Total Plot Area	249.13 acres		
2.	Built up Area	3,33,080.53 sqm	1,12,597.56sq.m.	4,45,678.09sqm
3.	Estimated Population	15,724 Persons	500 Persons	16,224Persons (Residential: 10,614 Persons Floating: 5,610 Persons)
4.	Domestic Water Demand	1,700 KLD	-519 KLD	1,181 KLD*
5.	Wastewater generated	1300 MLD	-355 KLD	945 KLD
6.	STP capacity	Existing STP of 1 MLD capacity & additional 500 KLD	Upgraded STP of 2.3 MLD capacity	Already installed STP of 2.3 MLD capacity
7.	Solid waste generation	4,900 kg/day	468 kg/day	5,368 kg/day
8.	Rain water recharging Pits	20Recharge Pits (out of these 15 pits have been constructed)	Additional 11 Recharge pits	Total 31 Recharge Pits
9.	Power Load	Existing load 4600 KW	4000 KW	8600 KW
10.	DG sets	As per EC accorded, 17 DG sets (7 of 750 KVA capacity, 1 of 500 KVA, 3 of 400 KVA, 2 of 380 KVA, 1 of 320 KVA, 1 of 120 KVA, 1 of 180 KVA)	4 DG Sets of 750 KVA	18 DG sets (9 of 750 capacity, 1 of 500 KVA, 3 of 400 KVA, 2 of

*20*



		KVA and 1 of 115 KVA) were proposed.  But, 14 DG sets i.e. 5 of 750 KVA, 1 of 500 KVA, 3 of 400 KVA, 2 of 380 KVA, 1 of 320 KVA and 2 of 325 KVA have already been installed.	capacity	380 KVA, 1 of 320 KVA and 2 of 325 KVA capacity)
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Note: Water requirement has been reduced as compared to earlier EC due to usage of water efficient fixtures; (-) indicates a decrease in value.

- xiv. The project is not located in Critically Polluted area.
- xv. Bir Moti Bagh Wildlife Sanctuary at distance of 5.5 km from project location. However, eco-sensitive zone of the Bir Moti Bagh Wildlife Sanctuary is only up to an area of 100 m all around the boundary of the sanctuary comprising an area of approx. 111.10 hectares. NBWL clearance is not required as project is outside the eco-sensitive zone of the Bir Moti Bagh Wildlife Sanctuary.
- xvi. Forest Clearance is not required for the project.
- xvii. No court case is pending against the project.
- xviii. Total Green area is 2,36,885 sqm. No tree felling is proposed.
- xix. Expected timeline for completion of the project is December, 2024.
- xx. Investment/Cost of the project is Rs. 1097.4 crores.
- xxi. Employment potential: 100 persons during construction phase and 1020 persons during operation phase.
- xxii. Benefits of the project: Providing better educational facility and other curricular activities to the students and staff.

**5.** The EAC also noted that the PP has obtained certified compliance report from MOEFCC Northern Regional Office, Chandigarh dated 29.09.2020. As per the report, no major non compliances were observed during the site visit dated 10.09.2020. However, implementation of solar energy with other conservation measures and taking authorization hazardous waste from SPCB are yet to be implemented and as such on this PP has committed to comply.

**6.** The EAC, based on information and clarifications provided by the project proponent and detailed discussions held on the issues, has recommended granting environment clearance to the project. The aforesaid recommendation of EAC (Infra-2) is subject to certain specific conditions, as stipulated during its 60th meeting held during 27th - 28th January, 2021.

**7.** Based on recommendations of EAC (Infra-2), the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the



project for 'Expansion of Educational Institute namely "Thapar Institute of Engineering and Technology (Deemed to be University)" from built up area from 3,33,080.53 sq m to 4,45,678.09 sqm at Khasra No. 926(6-5), 939 (7-13), 940 (5-18), etc., Bhadson Road, Patiala, Punjab, by M/s. Thapar Institute of Engineering and Technology', under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the following specific and standard conditions:

**A. Specific Conditions:**

- i. As committed, PP shall develop solar power generation capacity of 3MW and implement the condition of existing EC with regard to energy conservation.
- ii. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 2,36,885 sqm. As proposed, at least 27,634 trees shall be maintained during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA) and ground water recharge shall conform to CGWA norms or norms prescribed by the local authorities. Fresh water requirement shall not exceed 826 KLD during operational phase
- iv. As proposed, waste water shall be treated in an onsite STP of total 2.3 MLD capacity. Atleast 926 KLD of treated wastewater shall be recycled and re-used (355 KLD for flushing and rest for green area demand and excess to 10 acres of land under Karnal Technology).
- v. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- vi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 31 RWH pits shall be provided for rain water harvesting after filtration as per the CGWB norms.
- vii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be composted by use of Composter. Inert





- waste shall be dumped to authorized site. The recyclable waste shall be sold to resellers.
- viii. The PP shall provide electric charging points in the parking areas for e-vehicles as committed.
- ix. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.

**I. Statutory compliance:**

- i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- ix. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
- x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

**II. Air quality monitoring and preservation:**

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.



- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub>) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xii. For indoor air quality the ventilation provisions as per National Building Code of India.

### **III. Water quality monitoring and preservation:**

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban





- drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
  - iii. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
  - iv. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
  - v. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
  - vi. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
  - vii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - viii. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
  - ix. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - x. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
  - xi. All recharge should be limited to shallow aquifer.
  - xii. No ground water shall be used during construction phase of the project.
  - xiii. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
  - xiv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

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- xv. No sewage or untreated effluent water would be discharged through storm water drains.
- xvi. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xvii. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xviii. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

#### **IV. Noise monitoring and prevention:**

- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

#### **V. Energy Conservation measures:**

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii. Outdoor and common area lighting shall be LED.
- iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.



- v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

#### **VI. Waste Management:**

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall 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.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

#### **VII. Green Cover:**





- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- ii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iii. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

### **VIII. Transport**

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

### **IX. Human health issues:**

- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or





working in any area with dust pollution shall be provided with dust mask.

- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. 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, 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.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

#### **X. Miscellaneous:**

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.



- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report
- viii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- ix. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- x. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xi. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.
- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xviii. Any appeal against this EC 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.

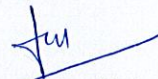
**8. The Environmental Clearance is being granted to M/s. Thapar Institute of Engineering and Technology for Expansion of Educational Institute namely**





“Thapar Institute of Engineering and Technology (Deemed to be University)” from built up area from 3,33,080.53sqm to 4,45,678.09 sqm at Khasra No. 926(6-5), 939 (7-13), 940 (5-18), etc., Bhadson Road, Patiala, Punjab.

9. This issue with the approval of the Competent Authority.

  
(Lalit Bokolia)  
Director

**Copy to:**

1. Secretary, Department of Science & Technology and Environment, Government of Punjab, Punjab Civil Secretariat-2, 9A, Sector-9, Chandigarh-160009
2. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office (Northern Zone), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh – 160030
3. Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. Member Secretary, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala- 147001, Punjab
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
6. Guard File/ MoEF&CC website.

  
(Lalit Bokolia)



