

**THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY**

(Deemed-to-be-University u/s 3 of the UGC Act, 1956)

Thapar Technology Campus,
Bhadson Road, Patiala - 147 004 (Punjab) India
Phone : +91-175-2393021
Email : registrar@thapar.edu
URL : www.thapar.edu

Dated:02.12.2021

To

The Joint Director,
Ministry of Environment, Forest & Climate Change,
Regional Office (North),
Government of India,
Bay No. 24-25, Sector-31A,
Chandigarh 160030.

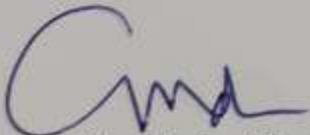
Subject: Submission of Six Monthly Compliance Report for period ending 30.09.2021 for the project namely "Thapar Institute of Engineering & Technology" located at Bhadson Road, Patiala, Punjab by M/s Thapar Institute of Engineering & Technology (Deemed to be University)

With reference to the EIA Notification & its amendments regarding submission of six monthly compliance report. We are hereby submitting the six monthly compliance report for period ending 30.09.2021 for the above said project in soft copy in compact disk (CD) of the compliance report for your perusal.

Kindly acknowledge the receipt of the same.

Thanking you.

Sincerely,



Name- Dr. Gurbinder Singh
Contact No.- 8288008118
Designation- Registrar
E-mail- registrar@thapar.edu

CC: Member Secretary, SEIAA Punjab, Directorate of Environment and Climate Change, C/o Punjab State Council for Science & Technology, MGSIPA Complex, Sector 26- Chandigarh-160019.

2021

**SIX MONTHLY COMPLIANCE
REPORT
(Period ending 30.09.2021)**

F
OR

For

**Thapar Institute of Engineering
and Technology
(Deemed to be University)**

At

**Bhadson Road,
District Patiala, Punjab**

Prepared by:



Eco Laboratories and Consultants Private Limited
E-207, Industrial Area, Phase-VIII B (Sector-74), SAS Nagar (Mohali)
Punjab.

ems@ecoparyavaran.org, www.ecoparyavaran.org

Phone: 0172-4616225, 8872043178



CONTENT

S. No.	Description	Page No.
1.	Data Sheet	1-4
2.	Compliance of Environmental Clearance conditions	5-22
Annexure		
3.	A-1: Copy of Environmental Clearance letter	23-33
4.	A-1(a): Copy of Environmental Clearance letter for expansion	34-42
5.	A-1(b): Copy of Environmental Clearance letter for further expansion	43-57
6.	A-2: Photographs of the project	58-62
7.	A-3: Test report of Ambient air, noise, water and soil	63-67
8.	A-4: Consent to Operate obtained from PPCB	68-81
9.	A-5: Structural Stability Certificate	82
10.	A-6: Permission obtained for disposal of solid waste	83
11.	A-7: PUC certificate of the vehicles used at construction site	84-93
12.	A-8: Advertisement published in the newspaper regarding grant of EC	94-97
13.	A-9: Acknowledgement for submission of EC letters in various Departments	98-99
14.	A-10: Screenshot showing uploading of EC letter	100
15.	A-11: Acknowledgement for submission of previous six monthly compliance for period ending 30.09.2020	101

**Ministry of Environment, Forest and Climate Change
Northern Regional Office,
Chandigarh-160030**

DATA SHEET

1.	Project Type	Educational Institute
2.	Name of the Project	Thapar Institute of Engineering and Technology (Deemed to be University)
3.	Clearance letter (s)/O.M No. & dates	Environment Clearance has been granted by SEIAA, Punjab vide Letter No. SEIAA/3777 dated 26.06.2015 and the copy of the same is attached along as Annexure 1 . Further institute proposed expansion for which Environment Clearance has been obtained vide Letter No. SEIAA/914 dated 25.01.16 and the copy of the same is attached along as Annexure 1(a) . Recently institute proposed further expansion for which Environment Clearance has been obtained by MoEF&CC vide File F. No. IA3-10/7/2021-IA.III dated 12.03.2021; copy of the same is enclosed as Annexure 1(b) .
4.	Location	Bhadson Road
	a) District (s)	Patiala
	b) State (s)	Punjab
	c) Latitudes/ Longitudes	30°21'24.78" N & 76°21'31.05" E
5.	Address for correspondence	Thapar University Campus, Bhadson Road, Patiala, Punjab.
6.	Salient features	
	a) of the project	As per the current Environmental Clearance letter, the total plot area after expansion will remain same i.e., 10,08,194.06 sq.m. (249.13 acres). However, overall built-up area will become 4,45,678.09 sq.m. The proposed building are Guest House, Sport Center etc.

	b) of the environmental management plans	<p>As per the Environmental Clearance, the total water requirement for the project will be 1,279 KLD out of which fresh water requirement will be 826 KLD, which will be met through 4 existing installed tube well.</p> <p>The total wastewater generation from the project will be 945 KLD which will be treated in already installed STP of 2.3 MLD capacity within the project premises.</p> <p>926 KLD of treated wastewater will be re-used for flushing (355 KLD) and for green area demand & Excess to 10 acres of land under Karnal Technology.</p> <p>Total solid waste generation from the project will be 5.36 TPD.</p> <p>The total power requirement will be 8,600 KW which will be taken from Punjab State Power Corporation Ltd.</p>
7.	Break-up of the project area	
	a) Submergence area: Forest and Non-forest	Not applicable
	b) Others	Not applicable
8.	Break-up of project affected population with enumeration of those losing houses/ dwelling units only, agricultural land only both dwelling units and agricultural land and landless labourers/artisans.	Not applicable
	a) SC/ST/Adivasis	Not applicable
	b) Others <i>(Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures. If a survey has been carried out give details and year of survey)</i>	Not applicable
9.	Financial details:	
	a) Project cost as originally planned and subsequent revised estimates and the year of price reference.	As per EC letter, total cost of the project is Rs. 1097.4 Crores.

	<p>b) Allocations made for environmental management plans with item wise and year wise break up.</p>	<p>Allocations made for environmental management plan are listed below:</p> <p>During Construction Phase:</p> <table border="1" data-bbox="852 320 1385 891"> <thead> <tr> <th>Description</th> <th>Capital Rs. Lakhs</th> </tr> </thead> <tbody> <tr> <td>Waste water Management</td> <td>100</td> </tr> <tr> <td>Air & Noise Pollution Management</td> <td>5</td> </tr> <tr> <td>Landscaping</td> <td>50</td> </tr> <tr> <td>Rainwater Recharging</td> <td>50</td> </tr> <tr> <td>Environmental Monitoring</td> <td>5</td> </tr> <tr> <td>Solid Waste Management</td> <td>10</td> </tr> <tr> <td>Miscellaneous</td> <td>10</td> </tr> <tr> <td>Total</td> <td>Rs. 230 Lakhs</td> </tr> </tbody> </table> <p>During Operational Phase:</p> <table border="1" data-bbox="852 931 1385 1496"> <thead> <tr> <th>Description</th> <th>Recurring Cost/Annum Rs. Lakhs</th> </tr> </thead> <tbody> <tr> <td>Waste water Management</td> <td>15</td> </tr> <tr> <td>Air & Noise Pollution Management</td> <td>1</td> </tr> <tr> <td>Landscaping</td> <td>10</td> </tr> <tr> <td>Rainwater Recharging</td> <td>10</td> </tr> <tr> <td>Environmental Monitoring</td> <td>2</td> </tr> <tr> <td>Solid Waste Management</td> <td>5</td> </tr> <tr> <td>Miscellaneous</td> <td>2</td> </tr> <tr> <td>Total</td> <td>Rs. 45 Lakhs</td> </tr> </tbody> </table>	Description	Capital Rs. Lakhs	Waste water Management	100	Air & Noise Pollution Management	5	Landscaping	50	Rainwater Recharging	50	Environmental Monitoring	5	Solid Waste Management	10	Miscellaneous	10	Total	Rs. 230 Lakhs	Description	Recurring Cost/Annum Rs. Lakhs	Waste water Management	15	Air & Noise Pollution Management	1	Landscaping	10	Rainwater Recharging	10	Environmental Monitoring	2	Solid Waste Management	5	Miscellaneous	2	Total	Rs. 45 Lakhs
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	<p>c) Benefit cost ratio/internal rate of return and the year of assessment</p>	<p>Will be calculated and submitted.</p>																																				
	<p>d) Whether (c) includes the cost of environmental management as shown in b) above.</p>	<p>Yes</p>																																				
	<p>e) Actual expenditure incurred on the project so far.</p>	<p>The actual expenditure done on the project till 30th September'2021 is Rs. 822.51 crores.</p>																																				
	<p>f) Actual expenditure incurred on environmental management plans so far.</p>	<p>Approx. Rs. 8.06 crores has been spent on environmental management plans till 30th September'2021.</p>																																				
<p>10.</p>	<p>Forest land requirement:</p>																																					

	a) the status of approval for diversion of forest land for non-forestry use	Not Applicable
	b) the status of clear felling, if any	Not Applicable
	c) the status of compensatory afforestation, if any.	Not Applicable
	d) Comments on the viability & sustainability of compensatory Afforestation programme in the light of actual field experience so far.	Not Applicable
11.	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach road) if any, with quantitative information.	Not applicable
12.	Status of construction:	Photographs showing the status of construction are attached along as Annexure 2.
	a) Date of commencement (actual and/or planned)	March, 1956
	b) Date of completion (actual and/or planned)	1 st Phase: 30.12.2017 2 nd Phase: Completed 3 rd Phase: December, 2024
13.	Reasons for the delay, if the project is yet to start	Not applicable

Compliance Report on conditions imposed in Environmental Clearance as per MoEF&CC for Period ending 30.09.2021

Specific Conditions:

S. No.	Conditions	Reply
i.	As committed, PP shall develop solar power generation capacity of 3MW and implement the condition of existing EC with regard to energy conservation.	Agreed. Solar power plant of capacity 3 MW has been proposed. Presently, process for taking quotations has been initiated for installation of 1 MW solar power plant as phase I. Vendors are being finalized considering technical and commercial aspects.
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 sq. m. 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 sq.m 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.	Agreed. The same will be complied. However, adequate green area has been provided within the project premises. Photographs showing the same is enclosed as Annexure 2 .
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	The ground water approval has been obtained from DC, Patiala. Further, as per the latest guidelines, CGWB is not processing the ground water application for Punjab state. Thus, fresh application will be submitted to PWRDA.
iv.	As proposed, waste water shall be treated in an onsite STP of total 2.3 MLD capacity. At least 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).	Agreed. STP of capacity 2.3 MLD has already been installed with the campus and treated water is being reused for flushing & horticulture purpose and excess to area under Karnal Technology. Photographs showing dual plumbing lines and area under Karnal

		Technology is enclosed as Annexure 2.
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.	Agreed. 3 rd party study will be conducted related to water quality and its uses. Although, ground water monitoring has been done by NABL accredited laboratory and results are within the prescribe limit. Test reports are enclosed as Annexure 3.
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.	Agreed. The same will be complied. Presently, 17 nos. of rain water recharging pits have already been constructed for groundwater recharging.
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.	Institute is complying with the Solid Waste Management Rules, 2016. Solid waste is being duly segregated into biodegradable and non-biodegradable components. Biodegradable waste is being composted by use of Mechanical composter having 7 Ton/day capacity. Inert waste is being dumped to authorized dumping site. The recyclable waste is being sold to resellers.
viii.	The PP shall provide electric charging points in the parking areas for e- vehicles as committed.	Agreed. The electric charging points will be provided in proposed buildings.
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.	Agreed. All the required approvals are being obtained as and when required. • Ground water approval has been obtained from DC, Patiala. Further,

		<p>fresh application will be submitted to PWRDA.</p> <ul style="list-style-type: none"> • Consent to Operate has been obtained from PPCB which is valid upto 31.03.2022 and the copy of the same is attached along as Annexure 4. • Structural Safety certificate has been obtained; copy of the same is attached along as Annexure 5. • Permission for solid waste disposal has been obtained; copy of the same is attached along as Annexure 6.
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Standard Conditions:

I. Statutory Compliance:

S. No.	Conditions	Reply
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.	<p>Agreed. All statutory clearances are being obtained as and when required.</p> <ul style="list-style-type: none"> • The ground water approval has been obtained from DC, Patiala. Further, fresh application will be submitted to PWRDA. • Consent to Operate has been obtained from PPCB which is valid upto 31.03.2022 and the copy of the same is attached along as Annexure 4. • Structural Safety certificate has been obtained; copy of the same is attached along as Annexure 5. • Permission for solid waste disposal has been obtained; copy of the same is attached along as Annexure 6.
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	Structural Safety certificate has been obtained; copy of the same is attached along as Annexure 5.

	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.	Not applicable, as no forest land is involved.
iv.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	The project falls outside of the eco-sensitive zone of Bir Bhadson wildlife sanctuary. Thus, permission from National Board of Wildlife is not 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.	Consent to Operate has been obtained from PPCB which is valid upto 31.03.2022 and the copy of the same is attached along as Annexure 4 .
vi.	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.	Agreed. The ground water approval has been obtained from DC, Patiala. Further, as per the latest guidelines, CGWB is not processing the ground water application for Punjab state. Thus, fresh application will be submitted to PWRDA.
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.	Agreed.
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.	Agreed. All statutory clearances are being obtained as and when required. Structural Safety certificate has been obtained; copy of the same is attached along as Annexure 5 .
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.	The Institute is complying with the Solid Waste Management Rules, 2016. The solid waste is being duly segregated into biodegradable and non-biodegradable components. Biodegradable waste is being

		composted by use of Mechanical composter having 7 Ton/day capacity. Inert waste is being dumped to authorized dumping site. The recyclable waste is being sold to resellers.
x.	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.	Agreed. Adequate measures are being taken to conserve energy as efficient external wall, insulated roof, double glazed units, high COP chillers, high efficiency (Effl) motors, use of LED lighting and occupancy sensors, use of low flow fixtures prescribed under the Energy conservation Building Code.

Air Quality Monitoring and Preservation:

S. No.	Conditions	Reply
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.	Suitable dust mitigation measures will be implemented like water sprinkling, providing wind wall barriers, tarpaulin sheets, so that there will be minimum impact on the environment.
ii.	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.	Agreed. All necessary steps are being taken care to reduce the air pollution and to improve the air quality. Further, monitoring of ambient air quality is being done by NABL accredited laboratory. Test reports are enclosed as Annexure 3 .
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 ₁₀ and PM _{2.5}) covering upwind and downwind directions during the construction period.	Agreed. Ambient air quality monitoring station has been installed with project premises. Further, recent monitoring has been carried out and all the parameters are within the permissible limits. Test reports for ambient air quality monitoring is attached along as Annexure 3 .
iv.	Diesel power generating sets proposed as source of backup power should be of enclosed	Agreed. DG sets have been installed with proper stack height and inbuilt

	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.	enclosure to control air and noise pollution as per provision of EPA rules. Low Sulphur diesel is being used in the DG set. Further, the same will be complied for proposed DG sets.
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.	Agreed. All necessary steps like barricading sheets around construction area, tarpaulin sheets for covering vehicles carrying construction materials, regular sprinkling of water etc. are being followed to reduce the air pollution.
vi.	Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.	Agreed. The sand, cement, or other construction material is not being kept in open.
vii.	Wet jet shall be provided for grinding and stone cutting.	Agreed.
viii.	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	Agreed. Water sprinkling is being practiced 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.	Agreed. The construction and demolition debris is being stored at earmarked area within the project and used for levelling purpose or construction of internal roads.
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.	Agreed. DG set used at construction site is of low sulphur diesel as per the norms.
xi.	The gaseous emissions from DG set shall be dispersed through adequate stack height as per	Existing DG sets have been installed with proper stack height and inbuilt

	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.	enclosure to control air and noise pollution as per provision of EPA rules. Further, the same will be followed for proposed DG sets.
xii.	For indoor air quality the ventilation provisions as per National Building Code of India.	Agreed. National Building Code is being followed in the project.

Water Quality Monitoring and Preservation:

S. No.	Conditions	Reply
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.	Agreed. Natural drainage is not being affected due to construction and operation of the project.
ii.	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.	Agreed. The same is being followed.
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.	The electromagnetic flow meter has already been provided on the existing borewells record of meter readings is being maintained.
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	The ground water approval has been obtained from DC, Patiala. Further, as per the latest guidelines, CGWB is not processing the ground water application for Punjab state. Thus, fresh application will be submitted to PWRDA.

	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.	Agreed. Proper open spaces are being provided as per the local building bye- laws.
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.	Agreed, dual plumbing system will be provided in the proposed buildings and treated water will be reused for flushing as well as for horticulture purpose. Further, dual plumbing system has already been provided in existing building. Photograph showing the same is enclosed as Annexure 2.
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.	Agreed, low flow fixtures are being provided for the reduction of water usage.
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.	Agreed, dual plumbing system will be provided in the proposed buildings. Further, dual plumbing system has already been provided in existing buildings.
ix.	Water demand during construction should be reduced by use of pre- mixed concrete, curing agents and other best practices referred.	Agreed. Curing agents as well as other best practices are being used during construction work for reducing water demand.
x.	Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.	Agreed, 17 nos. of rain water recharging pits have already been provided so as to compensate the abstraction of ground water.
xi.	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	17 nos. of rain water recharging pits have already been provided within project premises for groundwater recharging.

	without approval from the Competent Authority.	
xii.	All recharge should be limited to shallow aquifer.	Agreed.
xiii.	No ground water shall be used during construction phase of the project.	Agreed. No ground water is being used for construction purpose.
xiv.	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.	Ground water approval has been obtained from DC, Patiala. Further, as per the latest guidelines, CGWB is not processing the ground water application for Punjab state. Thus, fresh application will be submitted to PWRDA.
xv.	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.	Electromagnetic flow meter has already been provided and records of meter is being maintained.
xvi.	Sewage shall be treated in the STP with tertiary treatment.	STP of capacity 2.3 MLD has been installed with the campus & treated water is being reused for flushing & horticulture purpose within the premises.
xvii.	No sewage or untreated effluent water would be discharged through storm water drains.	Agreed. The same is being taken care.
xviii.	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.	Agreed. STP of capacity 2.3 MLD has been installed with the campus & treated water is being reused for flushing & horticulture purpose.
xix.	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary	Agreed. STP inlet & outlet monitoring is being done by NABL accredited laboratory. Adequate

	measures should be made to mitigate the odor problem from STP.	measures are being taken to mitigate odor problem.
xx.	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.	STP sludge generated from existing STP is being utilized as manure for green area within the project premises.

Noise Monitoring and Prevention:

S. No.	Conditions	Reply
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.	Agreed. Ambient noise and air monitoring is being done recently by NABL accredited laboratory and results are within the limit. Test reports are enclosed as Annexure 3 .
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.	Agreed. Ambient noise levels is being maintained. Ambient monitoring is being done recently by NABL accredited laboratory and results are within the limit. Test reports are enclosed as Annexure 3 .
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.	Existing DG sets has been provided with stack of adequate height and inbuilt enclosure. Further, same will be followed for proposed DG sets. Also, ear plugs are being provided to workers and construction activities are confined to construction site only.

Energy Conservation Measures:

S. No.	Conditions	Reply
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.	Agreed. ECBC guidelines is being followed in the project.
ii.	Outdoor and common area lighting shall be LED.	Agreed, LED lights are being used in the project premises. Further, in the proposed buildings LED lights will be provided.
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.	Agreed. The same is being complied 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.	Agreed. LED lights are being provided in the buildings and in addition, solar energy has been proposed as energy conservation.
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.	Agreed. Solar power plant of capacity 3 MW has been proposed. Presently, process for taking quotations has been initiated for installation of 1 MW solar power plant as phase I. Vendors are being finalized considering technical and commercial aspects.
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	Agreed. Solar power plant of capacity 3 MW has been proposed. Presently, process for taking quotations has been initiated for installation of 1 MW solar power plant as phase I. Vendors are being finalized considering technical and commercial aspects.

	water demand from solar water heaters, as far as possible.	
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Waste Management:

S. No.	Conditions	Reply
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.	Permission for solid waste disposal has been obtained; copy of the same is attached along as Annexure 6 .
ii.	Disposal of muck during construction phase shall not create any adverse effect on the neighboring 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.	Agreed. Muck generated from construction activities is being disposed off in environmentally safe manner. Further, dust mitigation measures are being adopted like water sprinkling, tarpaulin sheets etc. so that there will be minimum impact on the environment.
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.	Separate wet and dry bins have been provided for segregation of solid waste.
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.	The Institute is complying with the Solid Waste Management Rules, 2016. The solid waste is being duly segregated into biodegradable and non-biodegradable components. Biodegradable waste is being composted by use of Mechanical composter having 7 Ton/day capacity.
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.	The same is being complied. Inert waste is being dumped to authorized dumping site. The recyclable waste is being sold to resellers.
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.	Agreed. Hazardous waste is generated at construction site like used oil from DG sets, empty

		containers etc. which are being taken care by the contractor only.
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.	Fly ash bricks and fly ash based cement are being used in the project.
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 27th August, 2003 and 25 th January, 2016. Ready mixed concrete must be used in building construction.	Agreed. PPC Cement is being used, which is constituted of Fly Ash. Further, PPC cement is being used in the buildings under 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.	Agreed. Construction waste is being managed as per Construction and Demolition 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	Agreed.

Green Cover:

S. No.	Conditions	Reply
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).	Agreed. The same is being complied.
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	No tree cutting is involved in the project.

	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.	During construction activities, the top soil excavated is being stored and used for the development of green belt within the project premises.

Transport:

S. No.	Conditions	Reply
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. <ul style="list-style-type: none"> 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. 	Agreed. The same will be complied.
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.	Vehicles used for bringing construction material to the site and other machinery used during construction phase are being maintained and monitored for pollution levels. However, PUC certificate of the vehicles used at the construction site is attached along as Annexure 7.
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	Agreed.

	<p>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.</p>	
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Human Health Issues:

S. No.	Conditions	Reply
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.	Agreed. Personal Protection Equipment's (PPE) is being provided to construction workers for safety.
ii.	For indoor air quality the ventilation provisions as per National Building Code of India.	Agreed. The same is being followed.
iii.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Agreed.
iv.	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	All the mandatory facilities are being provided at construction site.
v.	Occupational health surveillance of the workers shall be done on a regular basis.	Agreed. Regular health check-up of the worker is being done.
vi.	A First Aid Room shall be provided in the project both during construction and operations of the project.	A dispensary is already present within the campus.

Miscellaneous:

S. No.	Conditions	Reply
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.	Agreed. Advertisement has been published in the newspapers regarding grant of EC; copy of the same is enclosed along as Annexure 8.
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.	Copies of the environmental clearance has been submitted to the DC Office, Patiala and MC, Patiala. Copy of the acknowledgement I enclosed as Annexure 9.
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.	Environment clearance letter has been uploaded on the website; screenshot of the same is attached along as Annexure 10.
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.	Agreed. Six monthly compliance reports are being regularly submitted and copy of the acknowledgement of the previous submitted compliance report for period ending 31.03.2021 is attached along as Annexure 11.
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	The institute is having well defined environment policy.

	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.	Agreed. Separate Environmental Cell has already been constituted to deal with environmental related issues.
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.	Agreed. EMP will be implemented. In addition to this, CSR activities has been done regularly. Rs. 2.49 crores have been spent on the CSR activities till 30 th September, 2021.
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.	Environmental statement for each financial year in Form-V is being submitted to PPCB.
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.	Agreed. Consent to Establish for Expansion has been filled to PPCB.
x.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Agreed. Stipulations made by the State Pollution Control Board and the State Government are being strictly followed.
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.	Agreed.

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).	Agreed. If any further expansion or modification will be done, then fresh application will be filled to SEIAA, Punjab.
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.	Agreed.
xiv.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed.
xv.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed.
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.	Agreed. Full cooperation will be extended to the officer of the Regional Office and PPCB and requisite data/ information /monitoring reports will be given as demanded by them.
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.	Noted.
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.	Not applicable, as 30 days' time period has been completed & no appeal has been made.



Thapar University, Bhadson Road, Patiala
STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB
 Ministry of Environment and Forests, Government of India

O/O Punjab Pollution Control Board,
 Valavaran Bhawan, Nabha Road,
 Patiala - 147 001
 Telefax: - 0175-2215636

No. SEIAA/ 3777

Registered

Dated: 26-6-11

To

Sh. Gurinder Singh, Registrar
 Thapar University, Bhadson Road,
 Patiala.

Subject: Environmental Clearance under EIA notification dated 14.09.2006 for construction of "Thapar University" in the revenue estate of Thapar University, Bhadson Road, Patiala.

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 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, EIA study report and the additional clarifications furnished in response to the observations of the SEAC.

It is inter-alia noted that the proposal involves development of project namely "Thapar University" at Bhadson Road, Patiala, Punjab in an area of 249.13 acre (10,08,194.06 sq m). The total builtup area is 309416.91 sqm. The land has been transferred, vide Memo No. 902-TE(I)-66/1191 dated 20.06.1967 in the name of project proponent. The total cost of the project is Rs. 118.77 crores. The total population of the University will be 8374 persons. Total water requirement for the project will be 875 KLD which will be met through the tubewells. The total wastewater generation from the project will be 700 KLD, which will be treated in a STP of 1 MLD capacity within the project premises. In Summer 1144 KLD of water will be required for irrigation @ 5.5 lit/sqm of green area. In winter 374 KLD of water will be required for irrigation @ 1.8 lit/sqm of green area, and remaining 326 KLD will be discharged on 10 acre of green area which will be developed under Karnal Technology. In monsoon 104 KLD of water will be required for irrigation @ 1.8 lit/sqm, and remaining 596 KLD will be discharged on 10 acre of green area which will be developed under

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Karnal Technology. The project proponent has proposed to provide 12 rainwater harvesting pits for tapping of rain water to recharge the aquifer out of which 4 have already installed. 58555 kl/year of rainwater will be harvested and recharged. The total quantity of solid waste to be generated from the proposed project has been estimated as 2.6 MT/Day. The solid waste will be segregated to biodegradable and non-biodegradable waste as per MSW Rules, 2000. The recyclable inorganic waste will be sold to local resellers. Separate area will be earmarked for handling of solid waste. Biodegradable waste shall be recycled by using mechanical composter. Any excess waste or non-usable will be sent to authorized dumping site for which NOC from MC has already been obtained. The e-waste is handled and managed as per the E-waste (Management & Handling) Rules, 2011. The used oil from the D.G. sets is sold out to the registered recyclers as per the provisions of the Hazardous Waste (Management, Handling & Transboundary Movement), Rules, 2008.

The total load of electricity required for proposed project is 5915 KW which is supplied by PSPCL. The project proponent has proposed to install 8 DG sets 3 of 400 KVA, 1 of 500KVA, 1 of 380KVA, 1 of 320 KVA, 1 of 120 KVA and 1 of 115 KVA capacity for backup power supply. Solar mixed street lighting has been proposed for the conservation of energy and LED lights shall be used for lighting.

Sh. Gurbinder Singh, Registrar of Thapar University, Patiala, will be responsible for implementation of EMP (Environment Management plan) / CSR (Corporate Social Responsibility). Rs. 240 lacs will be incurred for implementation of EMP as capital cost and Rs.11 Lacs will be incurred as recurring cost. 1% of total project cost i.e Rs. 1.1 crore will be used for CSR which, beside other things, will include:

A. EDUCATION

- i) Providing toilet facilities in nearby schools for girls.
- ii) Adoption of schools for providing better infrastructures
- iii) Scholarships to meritorious students in and around the area.
- iv) Programs for primary education, specifically for girl children in and around the area.

B. HEALTH

- i) Medical facilities, periodical health check-up and vaccination for construction labour during

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C. CORPORATE SOCIAL RESPONSIBILITY

- i) Medical facilities, periodical health check-up and vaccination for construction labour during construction period.
- ii) Dispensary for welfare of villager at the space offered by the villagers.
- iii) Organizing Health camps in villages adjoining the project site.

D. SOCIAL AWARENESS PROGRAMMES

On issues like saving and well-upbringing of girl child, discouraging of alcohol, family feuds, etc., promoting tree plantations, rain water recharging, solar street lighting system in and around the area, etc

The case was considered by the SEIAA in its 73rd meeting held on 31.10.2014 and decided to Issue directions under section 5 of the Environment (Protection) Act, 1986 as delegated by Ministry of Environment & Forests vide notification No. S.O. 637 (E) dated 28.02.2014 to restrain the promoter company from carrying out any further construction or operation activity of the project till the environmental clearance under EIA notification dated 14.09.2006 is obtained. The said directions were issued vide letter no. 3287 dated 07.11.2014.

The case was considered by the SEAC In its 103rd meeting held on 18.11.2014 wherein, the ToRs were issued to the project proponent vide letter no. 3491 dated 26.11.2014. The case was lastly considered by the SEAC in its 117th meeting held on 20.05.2015, 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 88th meeting held on 28.02.2015. 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 development of their Project namely "Thapar University" in an area of 249.13 acres

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having total built up area 3,09,416.91 sqm at Bhadoson Road, Patiala, Punjab, 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. Pre-Construction Phase

- (i) "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.
- (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 phase of the project.
- (iv) 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.
- (v) 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.
- (vi) 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.

II. Construction Phase:

- (i) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (ii) 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.
- (iii) 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.

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- (iv) Construction/provision of the STP, tubewell, DG Sets, Utilities etc, earmarked by the project proponent on the layout plan, should be made in the earmarked area only. In any case the position/location of these utilities should not be changed later-on
- (v) 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.
- (vi) 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.
- (vii) 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 and notification No. S.O. 2804 (E) dated 03.11.2009 (This condition is applicable only if the project is within 100 Km of Thermal Power Station).
- (viii) Ready mixed concrete should be used in building construction as far as possible.
- (ix) Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices.
- (x) The project proponent shall adopt dual plumbing system for reuse of treated wastewater for flushing system & HVAC etc
- (xi) 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.
- (xii) Adequate steps shall be taken to conserve energy by limiting the use of glass, provision of proper thermal insulation and taking measures as prescribed under the Energy Conservation Building Code.
- (xiii) 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.
- (xiv) 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.
- (xv) The project proponent will provide dual plumbing system for reuse of treated wastewater for flushing/ HVAC purposes etc. and colour coding of different pipe lines carrying water/wastewater/ treated wastewater as follows:
 - a. Fresh water: Blue
 - b. Untreated wastewater: Black
 - c. Treated wastewater: Green
(for reuse)
 - d. Treated wastewater: Yellow
(for discharge)
 - e. Storm water: Orange
- (xvi) The installation of sewage treatment plant (STP) 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/State Level Environment Impact Assessment Authority before the project is commissioned for operation.

III. Operation Phase and Entire Life

- i) "Consent to operate" 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 at the time of start of operation.
- ii) The project proponent shall discharge all the treated waste water within the project premises onto land for irrigation/ plantation.
- iii) 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.
- iv) The position / location of the STP, tubewell, DG Sets, Utilities etc, Installed by the project proponent as per the provisions made in the layout plan, should not be changed later-on under any circumstances.
- v) Rainwater harvesting for rooftop run-off should be implemented. Before recharging the rooftop run-off, pretreatment must be done to remove suspended matter, oil and grease. However, run off from gardens/green area/roads/pavements may also be connected with the ground water recharging system after adequate treatment as per the CGWA guidelines.
- vi) The solid waste generated should be properly collected and segregated. The recyclable solid waste shall be sold out to the authorized vendors and inert shall 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.
- vii) Adequate & appropriate pollution control measures should be provided to control fugitive emissions to be emitted within the complex.
- 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) Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored.
- x) 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.
- xi) The project proponent shall obtain completion and occupancy certificate from the Competent Authority and submit a copy of the same to the SEIAA, Punjab.
- xii) Adequate treatment facility for drinking water shall be provided, if required.

62

- xiii) 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.
- xiv) 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.
- xv) 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.
- xvi) 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.
- xvii) Environmental Management Cell shall be formed during operation phase which will supervise and monitor the environment related aspects of the project.
- xviii) 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.
- xix) Separation of drinking water supply and treated sewage supply should be done by the use of different colors.
- xx) 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.

PART B – General Conditions :

I. Pre-Construction Phase

- 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) 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, by project proponents from the competent authorities including Punjab Pollution Control Board and from other statutory bodies as applicable. The project proponent shall also obtain permission from the NBWL, if applicable.

- iv) 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 and SEIAA, Punjab.
- v) 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.
- vi) The project proponent shall obtain permission from the CGWA for abstraction of groundwater & digging of borewell(s) and shall not abstract any groundwater without prior written permission of the CGWA, even if any borewell(s) exist at site
- vii) The project proponent shall comply with the conditions imposed by the Competent Authority while granting CLU vide letter no. 13157 dated 16.09.2013.
- viii) 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.
- ix) The State Environment Impact Assessment Authority, Punjab 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.

II. Construction Phase

- i) 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.
- ii) 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 until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU after obtaining prior permission of the Punjab Pollution Control Board.
- iii) 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, the SPCB and SEIAA, Punjab.

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- iv) 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 and State Level Environment Impact Assessment Authority, Punjab.
- v) 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, Punjab.
- vi) Separate distribution pipelines be laid down for use of treated effluent / raw water for horticultural/gardening purposes with different colour coding.
- vii) The project proponent shall adhere to the commitments made in the Environment Management Plan and Corporate Social Responsibility and shall spend the amount as proposed or atleast minimum required to be spent under the provisions of the Companies Act 1956, whichever is higher.
- viii) The State Environment Impact Assessment Authority, Punjab 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.
- ix) Separation of drinking water supply and treated sewage supply should be done by the use of dual plumbing line.

III. Operation Phase and Entire Life

- i) 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.
- ii) The project proponent shall ensure that there will be no problem/ public nuisance due to parking of vehicles outside the campus.
- 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 until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU after obtaining prior permission of the Punjab Pollution Control Board.
- 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, the SPCB and SEIAA, Punjab.
- 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 and State Level Environment Impact Assessment Authority, Punjab.

- vi) 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.
- vii) The project proponent shall adhere to the commitments made in the Environment Management Plan and Corporate Social Responsibility and shall spend the amount as proposed or atleast minimum required to be spent under the provisions of the Companies Act 1956, whichever is higher. The project proponent shall submit 6 monthly compliance report of implementation of CSR activities.
- x) The State Environment Impact Assessment Authority, Punjab 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.

Member Secretary (SEIAA)

Dated _____

Endst. No. _____

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 Bhawan, CBD-cum-office Complex, East Arjun Nagar, New Delhi.
3. The Chairman, Punjab State Power Corporation Ltd., The Mall, Patiala.
4. The Deputy Commissioner, Patiala.
5. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.
6. The Chief Conservator of Forests (North), Ministry of Environment and Forest, Regional Office, Bays No.24-25, Sector-31-A, Chandigarh.
7. The Chief Town Planner, Department of Town and Country Planning, Punjab, 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 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. Gurbinder Singh, Registrar
 - b) Mobile/Phone No. 0175-2364498
 - c) E-mail registrar@thapar.edu
10. The Environmental Engineer (Computers), Punjab Pollution Control Board, Head Office, Patiala for uploading this document on the web site of the State Level Environment Impact Assessment Authority.

sdh
Member Secretary (SEIAA)



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB
 Ministry of Environment and Forests, Government of India

O/O Punjab Pollution Control Board,
 Vatavaran Bhawan, Nabha Road,
 Patiala – 147 001
 Telefax:- 0175-2215636

No. SEIAA/ 914

REGISTERED

Dated: 25.01.2016

To

Sh. Gurbinder Singh, Registrar
 Thapar University, Bhadson Road,
 Patiala.

Subject: Application for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for expansion of "Thapar University" in the revenue estate of Thapar University, Bhadson Road, Patiala

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 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, EIA study report and the additional clarifications furnished in response to the observations of the SEAC.

It is inter-alia noted that the proposal involves expansion of construction of project namely "Thapar University" at Bhadson Road, Patiala, Punjab. The total land area of the project before expansion was 1008194.06 sqm and after expansion will be 1008194.06 sqm. The land has been transferred, vide Memo No. 902-TE(I)-66/1191 dated 20.06.1967 in the name of project proponent. The total built up area before expansion was 309416.91 sqm and after expansion will be 333080.53 sqm. The total cost of the project is Rs. 111.67 crores. The total residential population of the University will be 9314 persons and the floating population will be 6410 person.

The total water requirement for the project before expansion was 875 KLD and after expansion will be 1.7 MLD, which will be met through the tubewells. The total wastewater generation from the project will be 1.27 MLD, which will be treated in a STP to be installed within the project premises.

The project proponent has proposed to use 333 KL/day of treated wastewater for flushing purpose, and remaining 937 KL/day will be used for irrigation of green area in summer season. In winter season, 333 KL/day of treated wastewater will be used for flushing purpose, and 422 KL/day will be used for irrigation of green area. In rainy season, 333 KL/day of treated wastewater will be used for flushing purpose and 117 KL/day will be used for irrigation of green area. Excess treated wastewater will be used for 10 acres of land available under Karnal Technology. Treated waste water will also be used for the construction purpose.

The project proponent has already provided 12 rainwater harvesting pits before expansion for tapping of rain water to recharge the aquifer. Additional 8 nos. of rainwater recharging pits will be established in the proposed expansion..

The solid waste generation from the existing site is 2.6 MT/Day and the total solid waste generation after expansion of the proposed project during operation phase has been estimated about 4.9 MT/Day. The provision of chute system will be made in new blocks to be added for collection of solid waste. The solid waste is segregated to biodegradable and non-biodegradable waste as per MSW Rules, 2000. The recyclable inorganic waste is sold to local resellers. Separate area is earmarked for handling of solid waste. Biodegradable waste shall be recycled by using mechanical composter Any excess waste or non-usable is sent to authorized dumping site for which NOC from MC has already been obtained which is segregated into bio-degradable and non-biodegradable waste as per the MSW Rules, 2000. All excavated soil will be consumed within the campus for filling purposes and no soil will be disposed off outside. The e-waste is handled and managed as per the E-waste (Management & Handling) Rules, 2011.. The used oil from the D.G. sets is sold out to the registered recyclers as per the provisions of the Hazardous Waste (Management, Handling & Transboundary Movement), Rules, 2008.

The total load of electricity before expansion was 4140 KW and 8 DG sets 3 of 400 KVA, 1 of 500KVA, 1 of 380KVA, 1 of 320 KVA, 1 of 120 KVA and 1 of 115 KVA capacity for backup power supply. After expansion, the total load of electricity will be 8800 KW which will be taken from the PSPCL. The project proponent has also proposed to install additional 9 DG sets (7 of 750 KVA, 1 of 380KVA, 1 of 180KVA).LED lights has been proposed for the lighting. The following aspects have been proposed in design and specification to reduce the energy load of the proposed buildings:-

- i. Use of highly efficient autoclaved aerated concrete block walls having low U- Values.
- ii. Use of 50mm thick XPS board for overdeck insulation to reduce heat ingress to the structure.
- iii. Natural ventilated common spaces.
- iv. Use of solar water heating system.
- v. Double glazed units with high performance glass for learning blocks.
- vi. Use of efficient sanitary fixture for water saving.
- vii. Highly efficient and CFC free refrigerant for chillers and AC units.

Sh. Gurbinder Singh, Registrar of Thapar University, Patiala, will be responsible for implementation of EMP (Environment Management plan) / CSR (Corporate Social Responsibility). Rs. 236 lacs will be incurred for implementation of EMP as capital cost and Rs.11 Lacs will be incurred as recurring cost.. 1% of total project cost i.e Rs. 1.356 will be used for CSR which, besides other things, includes support to build IT infrastructure in computer lab at ITI Patiala and BN Khalsa school, patiala, Support to provide lab facilities for modern education & training for students in civil server course, adoption of Govt. School at village ablowal for construction and face lift of toilets and drinking water facility, plantation and cleanliness drive in and around university campus, blood donation camps, health checkup camps, old age home support services, construction of bus shelters, water

treatment plant in school at Ablawal, CCTV camera to Patiala police, computer and furniture to women polytechnic, toilet in environment part and civil lines, scholarship merit scheme.

The case was considered by the SEAC in its 134th meeting held on 23.10.2015 wherein, the ToRs were issued to the project proponent vide letter no. 5468 dated 18.11.2015. The case was lastly considered by the SEAC in its 137th meeting held on 04.12.2015, 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 101st meeting held on 13.01.2016. The SEIAA also observed that the case stands recommended by SEAC and the Committee awarded '**Silver Grading**' to the project proposal. The SEIAA looked into the details of the case and was satisfied with the same. Therefore, the Authority decided to accept the recommendations of SEAC and grant environmental clearance to the project proponent for expansion of "Thapar University in an area of 249.13 acres having total built up area 3,33,080.53 sqm at Bhadson Road, Patiala, Punjab, 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:

III. Pre-Construction Phase

- (i) "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.
- (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 phase of the project.
- (iv) 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.
- (v) 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.
- (vi) 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.

IV. Construction Phase:

- (i) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.

- (ii) 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.
- (iii) 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.
- (iv) Construction/provision of the STP, tubewell, DG Sets, Utilities etc, earmarked by the project proponent on the layout plan, should be made in the earmarked area only. In any case the position/location of these utilities should not be changed later-on
- (v) 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.
- (vi) 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.
- (vii) The project proponent shall use only treated sewage/wastewater for construction activities and no fresh water for this purpose will be used. The project proponent shall treat sewage with UV/Ozonator technology prior to use in construction activities.
- (viii) 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 and notification No. S.O. 2804 (E) dated 03.11.2009 (This condition is applicable only if the project is within 100 Km of Thermal Power Station).
- (ix) Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices. Ready mixed concrete should be used in building construction as far as possible.
- (x) The project proponent shall adopt dual plumbing system for reuse of treated wastewater for flushing system & HVAC etc.
- (xi) 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.
- (xii) Adequate steps shall be taken to conserve energy by limiting the use of glass, provision of proper thermal insulation and taking measures as prescribed under the Energy Conservation Building Code.
- (xiii) 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.
- (xiv) 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.
- (xv) The project proponent will provide dual plumbing system for reuse of treated wastewater for flushing/ HVAC purposes etc. and colour coding of different pipe lines carrying water/wastewater/ treated wastewater as follows:

a.	Fresh water:	:	Blue
b.	Untreated wastewater:	:	Black
c.	Treated wastewater (for reuse)	:	Green
d.	Treated wastewater (for discharge)	:	Yellow
e.	Storm water:	:	Orange
- (xvi) The installation of sewage treatment plant (STP) 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/State Level Environment Impact Assessment Authority before the project is commissioned for operation.
- (xvii) The project proponent shall provide chute system in new blocks to be added for collection of solid waste. The solid waste generated should be properly collected and proper onsite storage facility (covered) should be provided at site.

- (xviii) The Project Propoent shall provide solar power plant of capacity 3.0 Mega Watt for its expansion project.

V. Operation Phase and Entire Life

- i) "Consent to operate" 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 at the time of start of operation.
- ii) The total water requirement for the project will be 1.70 ML/day, which shall be met through own tubewell.
- iii) The total wastewater generation from the project will be 1270 KL/day, which will be treated in a STP of capacity 1500 KL/day to be installed within the project premises. As proposed, 333 KL/day of treated wastewater shall be used for flushing purpose, 937 KL/day for irrigation of green area and remaining excess treated water shall be discharged into sewer in summer season. In winter season, 333 KL/day of treated wastewater will be used for flushing purpose, 422 KL/day for irrigation of green area and remaining excess treated water will be discharged into sewer. In rainy season, 333 KL/day of treated wastewater will be used for flushing purpose, 117 KL/day for irrigation of green area and remaining excess treated water will be discharged into sewer. The Project Propoent shall develop 10 acres land under Karnal technology to utilize all excess treated waste water.
- 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) The position / location of the STP, tubewell, DG Sets, Utilities etc, installed by the project proponent as per the provisions made in the layout plan, should not be changed later-on under any circumstances.
- vi) Rainwater harvesting for rooftop run-off only should be implemented. Before recharging the rooftop run-off, pretreatment must be done to remove suspended matter, oil and grease.
- vii) The solid waste generated should be properly collected and segregated. The recyclable solid waste shall be sold out to the authorized vendors and inert shall be sent to disposal facility. The Bio-degradable solid waste shall be composted through mechanical composter. Prior approval of competent authority should be obtained, if required.
- viii) Adequate & appropriate pollution control measures should be provided to control fugitive emissions to be emitted within the complex.
- ix) Hazardous waste/E-waste should be disposed off as per Rules applicable and with the necessary approval of the Punjab Pollution Control Board.
- x) Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored.
- xi) 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.
- xii) The project proponent shall obtain completion and occupancy certificate from the Competent Authority and submit a copy of the same to the SEIAA, Punjab.
- xiii) Adequate treatment facility for drinking water shall be provided, if required.
- xiv) 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.
- xv) 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.

- xvi) 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.
- xvii) 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.
- xviii) Environmental Management Cell shall be formed during operation phase which will supervise and monitor the environment related aspects of the project.
- xix) 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.
- xx) Separation of drinking water supply and treated sewage supply should be done by the use of different colors.
- xxi) 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.

PART B – General Conditions :

I. Pre-Construction Phase

- 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) 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, by project proponents from the competent authorities including Punjab Pollution Control Board and from other statutory bodies as applicable. The project proponent shall not start any construction activity at site without obtaining permission from NBWL...
- iv) 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 and SEIAA, Punjab.
- v) 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.
- vi) The project proponent shall obtain permission from the CGWA for abstraction of groundwater & digging of borewell(s) and shall not abstract any groundwater without prior written permission of the CGWA, even if any borewell(s) exist at site.
- vii) The project proponent shall obtain CLU from the competent authority, if any authority insists.
- viii) 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.

- ix) The State Environment Impact Assessment Authority, Punjab 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.
- x) The environmental clearance is subject to their obtaining prior clearance from Forestry & Wildlife angle including clearance from Standing Committee of the National Board for Wildlife as applicable. The grant of environmental clearance does not necessarily implies that forestry & wildlife clearance shall be granted to the project and proposal for forestry & wildlife clearance will be considered by the respective authorities on their merits and decision taken. The investment made in the project, if any, based on environmental clearance so granted, in anticipation of the clearance from Forestry & Wildlife angle shall be entirely at the cost & risk of the project proponent and Ministry of Environment, Forests & Climate Change/SEIAA, Punjab shall not be responsible in this regard in any manner.

II. Construction Phase

- i) 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.
- ii) 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 until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU after obtaining prior permission of the Punjab Pollution Control Board.
- iii) 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, the SPCB and SEIAA, Punjab.
- iv) 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 and State Level Environment Impact Assessment Authority, Punjab.
- v) 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, Punjab.
- vi) Separate distribution pipelines be laid down for use of treated effluent / raw water for horticultural/gardening purposes with different colour coding.
- vii) The project proponent shall adhere to the commitments made in the Environment Management Plan and Corporate Social Responsibility and shall spent the amount as proposed or atleast minimum required to be spent under the provisions of the Companies Act 1956.
- viii) The State Environment Impact Assessment Authority, Punjab 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.
- ix) Separation of drinking water supply and treated sewage supply should be done by the use of dual plumbing line.

III. Operation Phase and Entire Life

- i) 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.
- ii) 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 until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU after obtaining prior permission of the Punjab Pollution Control Board.
- iii) 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, the SPCB and SEIAA, Punjab.
- iv) 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 and State Level Environment Impact Assessment Authority, Punjab.
- v) 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.
- vi) The project proponent shall adhere to the commitments made in the Environment Management Plan and Corporate Social Responsibility and shall spent the amount as proposed or atleast minimum required to be spent under the provisions of the Companies Act 1956.
- vii) The State Environment Impact Assessment Authority, Punjab 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.

Sd/-
Member Secretary (SEIAA)

Endst. No. 915-24

Dated 25.01.2016

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, Patiala.
5. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.
6. The Chief Conservator of Forests (North), Ministry of Environment and Forest, Regional Office, Bays No.24-25, Sector-31-A, Chandigarh.

7. The Chief Town Planner, Department of Town and Country Planning, Punjab, 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 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. Gurbinder Singh, Registrar
 - b) Mobile/Phone No. 0175-2364498
 - c) E-mail registrar@thapar.edu
10. The Environmental Engineer (Computers), Punjab Pollution Control Board, Head Office, Patiala for uploading this document on the web site of the State Level Environment Impact Assessment Authority.

Sd/-
Member Secretary (SEIAA)

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

Indira Paryavaran Bhawan,
 Jor Bagh Road, New Delhi - 3
 Tel: 011-24695363 Email: lk.bokolia@nic.in

Date: 12th March, 2021

To,

Dr. Gurbinder Singh, Registrar
M/s. Thapar Institute of Engineering and Technology
 Bhadson Road,
 Patiala, Punjab-147004
 Email: 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 11th 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 60th meeting held during 27th - 28th 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
Total											12,12,000 sq. ft. or 1,12,597.56 sqm.

- 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	4 DG Sets of 750 KVA	18 DG sets (9 of 750 capacity, 1 of 500 KVA, 3 of 400 KVA, 2 of

		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 lightning 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 draw 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. PM₁₀ and PM_{2.5}) 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, murrām and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrām, 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 27th August, 2003 and 25th 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.

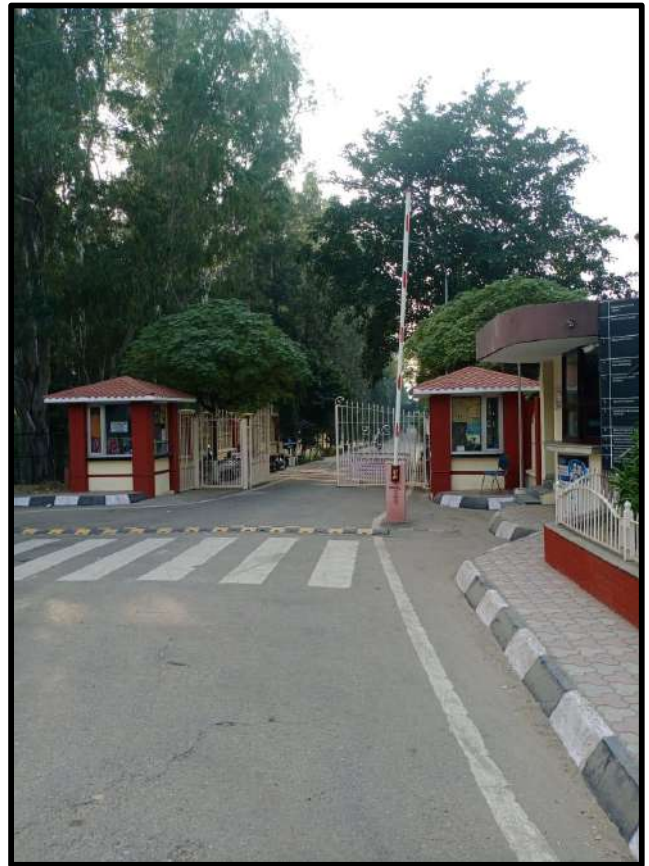

(Lalit Bokolia)
Director

Copy to:

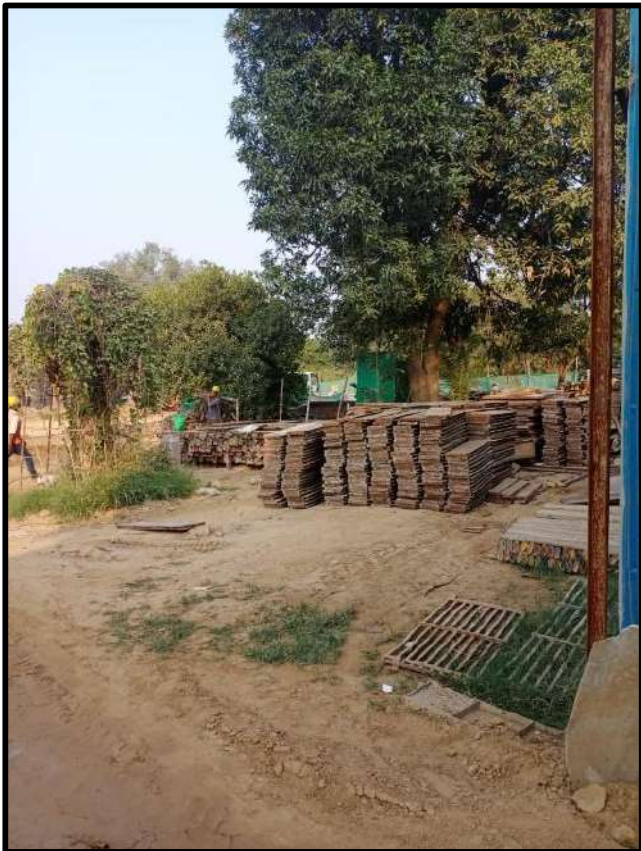
1. Secretary, Department of Science & Technology and Environment, Government of Punjab, Punjab Civil Secretariat-2, 9A, Sector-9, Chandigarh-160009
2. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office (Northern Zone), Bays No. 24-25, Sector 31 A, Dakshin 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)

Photographs of the Institute













Eco Laboratories & Consultants Pvt. Ltd.

CIN : U74140PB2011PTC034739

TEST REPORT



TC-7477

ULR No. : TC747721000007372F		Test Report No. : EL271121NW001	
Type of Sample : Water (Ground Water)		Date of Reporting : 29/11/2021	
Customer	Thapar Institute of Engineering & Technology Bhadson Road, Distt Patiala, (Punjab)	Work Order No. & Date	EL/THAPAR/TEL/2452 Dt.: 17/11/2021
		Customer reference No. (If any)	NA
Sampling Protocol	IS:3025 (P-1) 1987 RA 2019	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	27/11/2021	Date of Receipt of Sample	27/11/2021
Sampling Location	From Tubewell No.2	Testing Location	Permanent Facility
Testing Protocol	IS:10500-2012 (IInd Revision)	Period of Analysis	27/11/2021 To 29/11/2021
Sample Description	Clear colourless liquid		
Packing, Markings, Seal & Qty.	2 litre Plastic & 250ml Glass Bottle Marked 'S/27/01'		

RESULTS

I-Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Acceptable limit	Permissible limit in absence of alternate source	Test Method
1	Colour	Colour Units	BDL(DL5)	5	15	IS: 3025 (Part-4)Cl 2.0
2	Odour	-	Agreeable	Agreeable	Agreeable	IS:3025 (Part-5)
3	pH @ 25°C	-	7.34	6.5-8.5	No relaxation	IS:3025 (Part-11)
4	Taste	-	Agreeable	Agreeable	Agreeable	IS: 3025 (Part-8)
5	Turbidity	NTU	BDL(DL1.0)	1	5	IS 3025 (Part-10)
6	Chloride as Cl	mg/l	138	250	250	IS: 3025 (Part-32)
7	Iron as Fe	mg/l	BDL(DL0.1)	1.0	No relaxation	APHA-23rd Ed -3500Fe-B Phenanthroline Method
8	Total hardness as CaCO3	mg/l	252	200	600	IS :3025 (Part-21)

II -Biological Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Acceptable limit	Permissible limit in absence of alternate source	Test Method
1	Total coliform	CFU/100ml	Absent	Absent	-	IS:15185
2	E.coli.	CFU/100ml	Absent	Absent	-	IS:15185

Checked by QA

Simranjit Kaur
Authorized Signatory-Biological

Taru
Tanu Sharma
Authorized Signatory-Chemical



ULR No. : TC747721000007372F
Type of Sample : Water (Ground Water)

Test Report No. : EL271121NW001
Date of Reporting : 29/11/2021

Remarks : NA


OTHER INFORMATION


Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable
Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****


Checked by QA


Simranjit Kaur
Authorized Signatory-Biological


Tanu Sharma
Authorized Signatory-Chemical



TEST REPORT



TC-7477

ULR No. : TC747721000007383F		Test Report No. : EL291121NA001	
Type of Sample : Ambient Air Quality		Date of Reporting : 30/11/2021	
Customer	Thapar Institute of Engineering & Technology Bhadson Road, Distt Patiala, (Punjab)	Work Order No. & Date	EL/THAPAR/TEL/2452 Dt.: 17/11/2021
		Customer reference No. (If any)	NA
Sampling Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) / CPCBNAAQS-2009	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	27/11/2021	Date of Receipt of Sample	29/11/2021
Sampling Location	Near Project Estate Department	Period of Analysis	29/11/2021 To 30/11/2021
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQMS/36/2012-13) / CPCBNAAQS-2009	Environmental Conditions	Clear sky
Testing Location	On Site & Permanent Facility		

RESULTS

I-Chemical Testing

1. Atmospheric Pollution (Ambient Air)

S.No.	Test Parameter	Unit	Result	Standard	Method
1	Respirable Suspended Particulate Matter (as PM10)	µg/m ³	117	100	IS: 5182 (Part-23)
2	Particulate Matter (as PM2.5)	µg/m ³	67	60	Lab SOP: EL/SOP/AAQ/01, Issue No. 03, Jan 01
3	Sulphur Dioxide (as SO ₂)	µg/m ³	13	80	IS: 5182 (Part-2)
4	Nitrogen Dioxide (as NO ₂)	µg/m ³	28	80	IS: 5182 (Part-6)
5	Ammonia (as NH ₃)	µg/m ³	23	400	Lab SOP: EL/SOP/AAQ/02, Issue No. -03, Jan 01
6	Ozone (as O ₃)	µg/m ³	26	180	IS: 5182 (Part-9)
7	Carbon Monoxide (as CO),	mg/m ³	0.68	04	IS: 5182 (Part-10), NDIR Method

Remarks : NA

OTHER INFORMATION

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Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Tamir
Checked by QA

Umesh Kumar
Authorized Signatory-Chemical

TEST REPORT



TC-7477

ULR No. : TC747721000007389F		Test Report No. : EL291121NN001	
Type of Sample : Ambient Noise		Date of Reporting : 30/11/2021	
Customer	Thapar Institute of Engineering & Technology Bhadson Road, Distt Patiala, (Punjab)	Work Order No. & Date	EL/THAPAR/TEL/2452 Dt.: 17/11/2021
		Customer reference No. (If any)	NA
Sampling Protocol	IS 9989-1989, RA 2008.	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	27/11/2021	Date of Receipt of Sample	29/11/2021
Sampling Location	Near Project Estate Department	Period of Analysis	29/11/2021 To 29/11/2021
Testing Protocol	IS 9989-1989, RA 2008.		
Testing Location	On Site & Permanent Facility		

RESULTS

I- Chemical Testing

1. Atmospheric Pollution (Ambient Noise Level)

S.No.	Test Parameters	Units	Results	Method
1	Ambient Day Time Noise Levels	dB(A)	52.4	LAB SOP: EL/SOP/AN/01, Issue No.-04, Nov 10

Ambient Noise Quality Standards as per Noise Pollution (Regulation and Control) Rules, 2000

Area Code	Category of Area/Zone	Limits in dB(A) Leq*	
		Day Time	Night Time
A	Industrial area	75	70
B	Commercial area	65	55
C	Residential area	55	45
D	Silence Zone	50	40

Day time shall mean from 6.00 a.m. to 10.00 p.m., Night time shall mean from 10.00 p.m. to 6.00 a.m., Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority, Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale 'A' which is relatable to human hearing

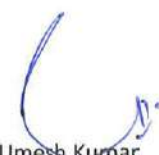
Remarks : NA

OTHER INFORMATION

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Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report


Checked by QA


Umesh Kumar
Authorized Signatory-Chemical

TEST REPORT



ULR No. : TC747721000007371F		Test Report No. : EL271121NS001	
Type of Sample : Soil		Date of Reporting : 29/11/2021	
Customer	Thapar Institute of Engineering & Technology Bhadson Road, Distt Patiala, (Punjab)	Work Order No. & Date	EL/THAPAR/TEL/2452 Dt.: 17/11/2021
		Customer reference No. (If any)	NA
Sampling Protocol	USEPA/600/R-92/128	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	27/11/2021	Date of Receipt of Sample	27/11/2021
Sampling Location	Near K-Hostel Park	Testing Location	Permanent Facility
Testing Protocol	IS Method	Period of Analysis	27/11/2021 To 29/11/2021
Sample Description	Brown Coloured soil		
Packing, Markings, Seal & Qty.	5 Kg Poly Bag Marked 'S/27/01'		

RESULTS

I. Chemical Testing

1. Pollution & Environment (Soil)

S.No.	Test Parameter	Unit	Result	Test Method
1	pH	--	8.13	IS:2720 (Part-26) Cl-2,
2	Conductivity	mmhos/cm	0.260	IS:14767
3	Moisture Content	%	11.1	IS:2720 (Part-II) Sec-1
4	Organic Matter	%	1.30	IS: 2720 (Part XXII) Sec-1,
5	Texture	--	Sandy loam	IS:2720 (Part-4) Cl 2,4,
6	Bulk Density	gm/cc	1.45	IS: 2720 (Part-7)

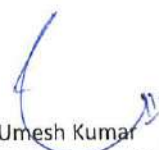
Remarks : NA

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End of Report


Checked by QA


Umesh Kumar
Authorized Signatory-Chemical



PUNJAB POLLUTION CONTROL BOARD
 Zonal Office-I, Vatavaran Bhawan, Nabha Road, Patiala-147001.
 Website:- www.ppcb.gov.in

Office Dispatch No : _____ Registered/Speed Post _____ Date: _____
 Industry Registration ID: R14PTA803193 _____ Application No : 12521174

To,
Dr. Gurbinder Singh
Thapar Institute Of Engineering & Technology Bhadson Road Patiala
Patiala,Punjab-147004

Subject: Grant Varied 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981 for discharge of emissions arising out of premises.

With reference to your application for obtaining Varied 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981, you are hereby, authorized to operate an industrial unit for discharge of the emission(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate.

1. Particulars of Consent to Operate under Air Act, 1981 granted to the industry

Consent to Operate Certificate No.	CTOA/Varied/PTA/2020/12521174
Date of issue :	27/10/2020
Date of expiry :	31/03/2022
Certificate Type :	Varied
Previous CTO No. & Validity :	CTOA/Varied/PTA/2019/9438220 From:18/09/2019 To:31/03/2020

2. Particulars of the Industry

Name & Designation of the Applicant	Dr. Gurbinder Singh, (Registrar)
Address of Industrial premises	Thapar Institute Of Engineering & Technology, Bhadson Road, Patiala, Patiala,Patiala-147004
Capital Investment of the Industry	65130.0 lakhs
Category of Industry	Red
Type of Industry	Building, Const. projects, Township & Area development covered under EIA notification dated 14/9/06
Scale of the Industry	Large
Office District	Patiala
Consent Fee Details	Rs. 708000/- vide NEFT no. SBIN220048394264 dated 17/2/2020.
Raw Materials (Name with Quantity per day)	N.A. being educational institute (built up area 307424.2 sq/mtr).
Products (Name with Quantity per day)	N.A. being educational institute (built up area 307424.2 sq/mtr).

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By-products, if any, (Name with Quantity per day)	---
Details of the machinery and process	<i>As per application no. 12521174</i>
Quantity of fuel required (in TPD) and capacity of boilers/ Furnace/Thermo heater etc.	<p><i>3 no. DG sets of capacity 400 KVA each : HSD @ 180 Ltr/day in each of DG set.</i></p> <p><i>5 no. DG sets of capacity 750 KVA each : HSD @ 420 Ltr/day in each of DG set.</i></p> <p><i>1 no. DG sets of capacity 320 KVA : HSD @ 90 Ltr/day.</i></p> <p><i>1 no. DG set of capacity 500 KVA : HSD @ 150 Ltr/hr.</i></p> <p><i>2 no. DG set of capacity 380 KVA : HSD @ 150 Ltr/hr in each of DG set.</i></p> <p><i>2 no. DG set of capacity 325 KVA : HSD in each of DG set.</i></p>
Type of Air Pollution Control Devices to be installed	<p><i>3 no. DG sets of capacity 400 KVA each : Canopy on each DG set</i></p> <p><i>5 no. DG sets of capacity 750 KVA each : Canopy on each DG set</i></p> <p><i>1 no. DG sets of capacity 320 KVA : Canopy on DG set</i></p> <p><i>1 no. DG set of capacity 500 KVA : Canopy on DG set.</i></p> <p><i>2 no. DG set of capacity 380 KVA each : Canopy on each DG set</i></p> <p><i>2 no. DG set of capacity 325 KVA each : Canopy on each DG set</i></p>
Stack height provided with each boiler/thermo heater/Furnace etc.	<p><i>DG sets : Stack height H (in meter) shall be worked out according to the formula:</i></p> $H = h + 0.2 (KVA)^{0.5}$ <p><i>where h = height of the building in meters where the generator set is installed.</i></p>
Sources of emissions and type of pollutants	<i>DG sets : SPM / SOx / NOx</i>
Standards to be achieved under Air(Prevention & Control of Pollution) Act, 1981	<i>As per stack emission standards prescribed by the PPCB/ MoEF&CC from time to time.</i>



27/10/2020

(Gursharan Dass Garg)
Environmental Engineer

For & on behalf
of

(Punjab Pollution Control Board)

Endst. No.:

Dated:

A copy of the above is forwarded to the following for information and necessary action please:

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Thapar Institute Of Engineering & Technology, Bhadson Road, Patiala, Patiala, Patiala, 147004

Page2

He is requested to ensure the compliance of conditions of consent granted under the Air (Prevention & Control of Pollution) Act, 1981 and submit the compliance report, within stipulated period.



27/10/2020

(Gursharan Dass Garg)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)



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Thapar Institute Of Engineering & Technology, Bhadson Road, Patiala, Patiala, Patiala, 147004

Page 3

TERMS AND CONDITIONS

A. GENERAL CONDITIONS

1. This consent is not valid for getting power load from the Punjab State Power Corporation Ltd. or for getting loan from the financial institutions.
2. The industry shall apply for renewal /extension of consent at least two months before expiry of the consent.
3. The industry shall not violate any of the norms prescribed under the Air (Prevention & Control of Pollution) Act, 1981, failing which, the consent shall be cancelled / revoked.
4. The achievement of adequacy and efficiency of the air pollution control devices installed shall be the entire responsibility of the industry
5. The authorized fuel being used shall not be changed without the prior written permission of the Board.
6. The industry shall not discharge any fugitive emissions. All gases shall be emitted through a stack of suitable height, as per the norms fixed by the Board from time to time.
7. The industry shall provide port-holes, platforms and/or other necessary facilities as may be required for collecting samples of emissions from any chimney, flue or duct or any other outlets.

Specifications of the port-holes shall be as under:-

- i) The sampling ports shall be provided atleast 8 times chimney diameter downstream and 2 times upstream from the flow disturbance. For a rectangular cross section the equivalent diameter (D_e) shall be calculated from the following equation to determine upstream, downstream distance:-
$$D_e = 2 LW / (L+W)$$

Where L= length in mts. W= Width in mts.
 - ii) The sampling port shall be 7 to 10 cm in diameter
8. The industry shall put display Board indicating environmental data in the prescribed format at the main entrance gate.
 9. The industry shall discharge all gases through a stack of minimum height as specified in the following standards laid down by the Board.

(i) Stack height for boiler plants

S.NO.	Boiler with Steam Generating Capacity	Stack heights
1.	Less than 2 ton/hr.	9 meters or 2.5 times the height of neighboring building which ever is more
2.	More than 2 ton/hr. to 5 ton/hr.	12 meters
3.	More than 5 ton/hr. to 10 ton/hr	15 meters
4.	More than 10 ton/hr. to 15 ton/hr	18 meters
5.	More than 15 ton/hr. to 20 ton/hr	21 meters
6.	More than 20 ton/hr. to 25 ton/hr.	24 meters
7.	More than 25 ton/hr. to 30 ton/hr.	27 meters
8.	More than 30 ton/hr.	30 meters or using the formula $H = 14 Q_g^{0.3}$ $H = 74 (Q_p)^{0.24}$ Where Q_g = Quantity of SO ₂ in Kg/hr. Q_p = Quantity of particulate matter in Ton/day.

Note : Minimum Stack height in all cases shall be 9.0 mtr. or as calculated from relevant formula whichever is more.

(ii) For industrial furnaces and kilns, the criteria for selection of stack height would be based on fuel used for the corresponding steam generation.

(iii) Stack height for diesel generating sets:

Capacity of diesel generating set	Height of the Stack	
0-50 KVA	Height of the building	+ 1.5 mt
50-100 KVA	-do-	+ 2.0 mt.
100-150 KVA	-do-	+ 2.5 mt.
150-200 KVA	-do-	+ 3.0 mt.
200-250 KVA	-do-	+ 3.5 mt.
250-300 KVA	-do-	+ 3.5 mt.

For higher KVA rating stack height H (in meter) shall be worked out according to the formula:

$$H = h + 0.2 (KVA)^{0.5}$$

where h = height of the building in meters where the generator set is installed.

10. The pollution control devices shall be interlocked with the manufacturing process of the industry to ensure its regular operation.
11. The existing pollution control equipment shall be altered or replaced in accordance with the directions of the Board, and no pollution control equipment or chimney shall be altered or as the case may be erected or re-erected except with the prior approval of the Board.
12. The industry will provide canopy and adequate stack with the D.G sets so as to comply with the provision of notification No GSR-371 E dated 17-5-2002(amended from time to time) issued by MOEF under Environment (Protection) Act, 1986.
13. The Govt. of Punjab, Department of Science, Technology & Environment vide its notification no.4/46/92-3ST/2839 dt. 29/12/1993 has put prohibition on the use of rice husk as fuel after 1.4.1995 except the following:-
In the form of briquettes and use of rice husk in fluidized bed combustion. So the industry shall make the necessary arrangement to comply with the above notification.
14. The industry shall submit balance sheet of every financial year to the concerned Regional Office by 30th June of every year
15. That the industry shall submit a yearly certificate to the effect that no addition / up-gradation/ modification/ modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.
16.
 - a) The industry shall ensure that at any time the emission do not exceed the prescribed emissions standards laid down by the Board from time to time for such type of industry /emissions.
 - b) The industry shall ensure that the emissions from each stack shall conform to the following emission standards laid down by the Board in respect of the Industrial Boilers.

Steam Generating capacity A.	Required particulate matter B.	
<i>Area upto 5 Km from Other than 'A' class Other than the periphery of I and Class-II town</i>		
<i>Less than 2 ton/hr.</i>	800 mg/NM3	1200 mg/NM3
<i>2 ton to 10 ton/hr.</i>	500 mg/NM3	1000 mg/NM3
<i>Above 10 ton to 15 ton/hr</i>	350 mg/NM3	500 mg/NM3
<i>Above 15 ton/hr</i>	150 mg/NM3	150 mg/NM3

All emissions normalized to 12% carbon dioxide.

17. The industry shall ensure that the Hazardous Wastes generated from the premises are handled as per the provisions of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008, without any adverse effect on the environment, in any manner.
18. The air pollution control equipments shall be kept at all time in good running condition and;

- (i) All failures of control equipments.
 - (ii) The emissions of any air pollutant into the atmosphere in excess of the standards lay down by the Board occurring or being apprehended to occur due to accident or other unforeseen act or event. 'Shall be intimated through fax to the concerned Regional Office as well as to the Director of Factories, Punjab, Chandigarh as required under rule 10 of the Punjab State Board for the Prevention and Control of Air Pollution Rules, 1983'.
19. The industry shall plant minimum of three suitable varieties of trees at the density of not less than 1000 trees per hectare all along the boundary of the industrial premises.
 20. The industry shall submit a site emergency plan approved by the Chief Inspector of Factories, Punjab as applicable.
 21. The industry shall comply with the conditions imposed by the SEIAA/MOEF in the Environmental Clearance granted to it as required under EIA notification dated 14/9/06, if applicable.
 22. The industry shall make necessary arrangements for the monitoring of stack emissions and shall get its emissions analyzed from lab approved / authorized by the Board:-
 - (i) Once in Year for Small Scale Industries.
 - (ii) Twice/thrice/four time in a Year for Large/Medium Scale Industries.
 23. The industry shall maintain the following record to the satisfaction of the Board :-
 - (i) Log books for running of air pollution control devices or pumps/motors used for it.
 - (ii) Register showing the result of various tests conducted by the industry for monitoring of stack emissions and ambient air.
 - (iii) Register showing the stock of absorbents and other chemicals to be used for scrubbers.
 24. The industry will install the separate energy meter for running pollution control devices and shall maintain record with respect to operation of air pollution control device so as to satisfy the Board regarding the regular operation of air pollution control device and monthly reading / record may be sent to the Board by the fifth of the following month.
 25. The industry shall provide online monitoring system as applicable, for in stack emission and shall maintain the record of the same for inspection of the Board Officers.
 26. The Board reserves the right to revoke the consent granted to the industry at any time, in case the industry is found violating the provisions of Air (Prevention & Control of Pollution) Act, 1981 as amended from time to time.
 27. The industry shall comply with any other conditions laid down or directions issued in due course by the Board under the provisions of the Air (Prevention & Control of Pollution) Act, 1981.
 28. Nothing in this consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected to under this or any other Act.
 29. Any amendments/revisions made by the Board/CPCB/MOEF in the emission/stack height standards shall be applicable to the industry from the date of such amendments/revisions.
 30. The industry shall dispose off its solid waste generated by the burning of fuel in an Environmentally Sound Manner within the premises/outside as approved by the Board, to avoid public nuisance and air pollution problem in the area.
 31. The industry shall ensure that no air pollution problem or public nuisance is created in the area due to the discharge of emissions from the industry.
 32. The industry shall provide adequate arrangement for fighting the accidental leakage/discharge of any air pollutant/gas/ liquids from the vessels, mechanical equipment's etc, which are likely to cause environmental pollution.
 33. The industry shall not change or alter the manufacturing process(es) and fuel so as to change the quality/quantity of emissions generated without the prior permission of the Board.
 34. The industry shall earmark a land within their premises for disposal of boiler ash in an environmentally sound manner, and / or the industry shall make necessary arrangements for proper disposal of fuel ash in a scientific manner and shall maintain proper record for the same, if applicable.
 35. The industry shall obtain and submit Insurance cover under the Public Liability Insurance Act, 1991.
 36. The industry shall provide proper and adequate air pollution control arrangements for control emission from its fuel handling area, if applicable.

37. The industry shall comply with the code of practice as notified by the Government/Board for the type of industries where the siting guidelines / Code of Practice have been notified.
38. The industry shall not cause any nuisance/traffic hazard in vicinity of the area
39. The industry shall ensure that the noise & air emission from D.G. sets do not exceed the standards prescribed for D.G. sets by the Ministry of Environment & Forests, New Delhi.
40. The industry shall ensure that there will not be significant visible dust emissions beyond the property line
41. The industry shall provide adequate and appropriate air pollution control devices to contain emissions from handling, transportation and processing of raw material & product of the industry.
42. The Industry shall ensure that its production capacity does not exceed the capacity mentioned in the consent and shall not carry out any expansion without the prior permission / NOC of the Board.

B. SPECIAL CONDITIONS

1. The institute shall comply with conditions imposed in the Environmental Clearance granted by SEIAA, Punjab vide letter no. SEIAA/914 dated 25/01/2016 in true letter & spirit.
2. The institute will comply with the provisions of MSW Rules, 2016.
3. The institute will comply with the provisions of E-waste Management Rules, 2016.
4. The institute will comply with guidelines of Central Ground Water Authority (CGWA) for the abstraction of ground water issued from time to time.
5. The institute shall operate its UASB efficiently and will make arrangements for using the gas being generated from the UASB and will explore the possibility to utilize the gas being produced from the UASB for use full purpose instead of flaring the same and shall submit a proposal in this regard to the Board, within a period of three months.
6. The institute shall utilize maximum quantity of treated wastewater for flushing purpose in the newly constructed buildings and report the compliance of the same to the Board.
7. The institute shall ensure that the plantation area should always be free from the wild growth and maintain the ridges & furrows of the plantation area in good condition at all the times, so as to utilize the treated wastewater in a scientific manner.
8. The institute will provide permanent water sprinkler near the under construction buildings for suppressing the dust.
9. The institute will provide arrangements for controlling the fugitive emissions from its labs.
10. The institute will provide solar power plant for its expansion project as per condition imposed in the EC.
11. The institute will provide chute system in new blocks as per condition imposed in the EC.
12. The institute shall install in house mechanism for handling of municipal solid waste i.e. by installing composter/ composting pits etc., within six months.
13. The institute will not emit black smoke from its stacks under any circumstances.
14. The institute will ensure that there is no odour in the surrounding area.
15. The institute will not exceed the generation of effluent of more than 1.27 MLD after the completion of the ongoing construction as mentioned in the EC letter.
16. The institute will obtain varied consent to operate under the Air (Prevention & Control of Pollution) Act, 1981 after completion of the work of construction.



27/10/2020

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Thapar Institute Of Engineering & Technology, Bhadson Road, Patiala, Patiala, Patiala, 147004

Page7

**(Gursharan Dass Garg)
Environmental Engineer**

For & on behalf

of

(Punjab Pollution Control Board)



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Thapar Institute Of Engineering & Technology, Bhadson Road, Patiala, Patiala, Patiala, 147004

Page 8



PUNJAB POLLUTION CONTROL BOARD
Zonal Office-I, Vatavaran Bhawan, Nabha Road, Patiala-147001.
Website:- www.ppcb.gov.in

Office Dispatch No : _____ Registered/Speed Post _____ Date: _____
Industry Registration ID: *R14PTA803193* Application No : *12521331*

To,
Prof Parkash Gopalan
Thapar Institute Of Engineering & Technology Bhadson Road Patiala
Patiala,Punjab-147004

Subject: **Grant Varied 'Consent to Operate'an outlet u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974 for discharge of effluent.**

With reference to your application for obtaining Varied i½Consent to Operatei½an outlet for discharge of the effluent u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974, you are, hereby, authorized to operate an industrial unit for discharge of the effluent(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate

1. Particulars of Consent to Operate under Water Act, 1974 granted to the industry

Consent to Operate Certificate No.	<i>CTOW/Varied/PTA/2020/12521331</i>
Date of issue :	<i>27/10/2020</i>
Date of expiry :	<i>31/03/2022</i>
Certificate Type :	<i>Varied</i>
Previous CTO No. & Validity :	<i>CTOW/Varied/PTA/2019/9438496</i> <i>From:18/09/2019 To:31/03/2020</i>


2. Particulars of the Industry

Name & Designation of the Applicant	<i>Dr. Gurbinder Singh, (Registrar)</i>
Address of Industrial premises	<i>Thapar Institute Of Engineering & Technology, Bhadson Road, Patiala, Patiala,Patiala-147004</i>
Capital Investment of the Industry	<i>65130.0 lakhs</i>
Category of Industry	<i>Red</i>
Type of Industry	<i>Building, Const. projects, Township & Area development covered under EIA notification dated 14/9/06</i>
Scale of the Industry	<i>Large</i>
Office District	<i>Patiala</i>
Consent Fee Details	<i>Rs. 708000/- vide NEFT no. SBIN220048394173 dated 17/2/2020.</i>
Raw Materials(Name with quantity per day)	<i>N.A. being educational institute (built up area 307424.2 sq/mtr).</i>
Products (Name with quantity per day)	<i>N.A. being educational institute (built up area 307424.2 sq/mtr).</i>
By-Products, if any,(Name with quantity per day)	<i>---</i>

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Details of the machinery and processes	<i>As per application no. 12521331</i>
Details of the Effluent Treatment Plant	<i>Sewage Treatment Plant (STP) installed for the treatment of domestic effluent @ 1.2 MLD.</i>
Mode of Disposal	<i>Domestic Effluent @ 1.2 MLD : Reuse for flushing purposes @ 115 KLD and rest onto land for plantation after treatment in STP.</i>
Standards to be achieved under Water(Prevention & Control of Pollution) Act, 1974	<i>As per effluent standards prescribed by the PPCB/ MoEF&CC and amended from time to time.</i>



27/10/2020

**(Gursharan Dass Garg)
Environmental Engineer**

*For & on behalf
of*

(Punjab Pollution Control Board)

Endst. No.:

Dated:

A copy of the above is forwarded to the following for information and necessary action please:

The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Patiala. He is requested to ensure the compliance of conditions of consent granted under the Water (Prevention & Control of Pollution) Act, 1974 and submit the compliance report, within stipulated period.



27/10/2020

**(Gursharan Dass Garg)
Environmental Engineer**

*For & on behalf
of*

(Punjab Pollution Control Board)

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Page2

TERMS AND CONDITIONS

A. GENERAL CONDITIONS

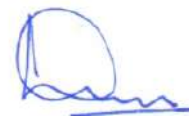
1. This consent is not valid for getting power load from the Punjab State Power Corporation Limited or for getting loan from the financial institutions.
2. The industry shall apply for renewal/further extension in validity of consent atleast two months before expiry of the consent.
3. The industry shall ensure that the effluent discharging through the authorized outlet shall confirm to the prescribed standards as applicable from time to time.
4. The industry shall plant minimum of three suitable varieties of trees at the density of not less than 1000 trees per hectare all along the boundary of the industrial premises.
5. The achievement of the adequacy and efficiency of the effluent treatment plant/pollution control devices/re-circulation system installed shall be the entire responsibility of the industry.
6. The industry shall ensure that the Hazardous Wastes generated from the premises are handled as per the provisions of the Hazardous Wastes(Management, Handling and Trans boundary Movement) Rules, 2008 as amended time to time , without any adverse effect on the environment, in any manner
7. The responsibility to monitor the effluent discharged from the authorized outlet and to maintain a record of the same rests with the industry. The Board shall only test check the accuracy of these reports for which the industry shall deposit the samples collection and testing fee with the Board as and when required.
8. The industry shall submit balance sheet of every financial year to the concerned Regional Office by 30th June of every year.
9. The industry shall submit a yearly certificate to the effect that no addition/up-gradation/ modification/modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.
10. During the period beginning from the date of issuance and the date of expiration of this consent, the applicant shall not discharge floating solids or visible foam.
11. Any amendments/revisions made by the Board in the tolerance limits for discharges shall be applicable to the industry from the date of such amendments/revisions.
12. The industry shall not change or alter the manufacturing process(es) so as to change the quality and/or quantity of the effluents generated without the written permission of the Board.
13. Any upset conditions in the plant/plants of the factory, which is likely to result in increased effluent and/or result in violation of the standards lay down by the Board shall be reported to the Environmental Engineer, Punjab Pollution Control Board of concerned Regional Office immediately failing which any stoppage and upset conditions that come to the notice of the Board/its officers, will be deemed to be intentional violation of the conditions of consent.
14. The industry shall provide terminal manhole(s) at the end of each collection system and a manhole upstream of final outlet (s) out of the premises of the industry for measurement of flow and for taking samples.
15. The industry shall for the purpose of measuring and recording the quantity of water consumed and effluent discharged, affix meters of such standards and at such places as approved by the Environmental Engineer, Punjab Pollution Control Board of the concerned Regional Office.
16. The industry shall maintain record regarding the operation of effluent treatment plant i.e. record of quantity of chemicals and energy utilized for treatment and sludge generated from treatment so as to satisfy the Board regarding regular and proper operation of pollution control equipment.
17. The industry shall provide online monitoring equipment^{1/2}s for the parameters as decided by concerned Regional Office with the effluent treatment plant/air pollution control devices installed, if applicable.
18. The pollution control devices shall be interlocked with the manufacturing process of the industry.
19. The authorized outlet and mode of disposal shall not be changed without the prior written permission of the Board.
20. The industry shall comply with the conditions imposed by the SEIAA / MOEF in the environmental clearance granted to it as required under EIA notification dated 14/9/06, if applicable.
21. The industry shall obtain and submit Insurance cover as required under the Public Liability Insurance Act, 1991.
22. The industry shall not use any unauthorized out-let(s) for discharging effluents from its premises. All unauthorized outlets, if any, shall be connected to the authorized outlet within one month from the date of issue of this consent.

23. The industry shall make necessary arrangements for the monitoring of effluent being discharged by the industry and shall monitor its effluents:-
 - (i) Once in Year for Small Scale Industries.
 - (ii) Four in a Year for Large/Medium Scale Industries.
 - (iii) The industry will submit monthly reading/ data of the separate energy meter installed for running of effluent treatment plant/re-circulation system to the concerned Regional Office of the Board by the 5th of the following month.
24. The industry shall provide electromagnetic flow meters at the source of water supply, at inlet/outlet of effluent treatment plant within one month and shall maintain the record of the daily reading and submit the same to the concerned Regional Office by the 5th of the following month.
25. The Board reserves the right to revoke this consent at any time in case the industry is found violating any of the conditions of this consent and/or the provisions of Water (Prevention & Control of Pollution) Act, 1974 as amended from time to time.
26. The issuance of this consent does not convey any property right in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local Laws or Regulations.
27. The consent does not authorize or approve the construction of any physical structures or facilities for undertaking of any work in any natural watercourse.
28. Nothing in this consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected under this or any other Act.
29. The industry shall make necessary and adequate arrangements to hold back the effluent in case of failure of septic tank.
30. The diversion or bye pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this consent is prohibited except.
 - (i) Where unavoidable to prevent loss of life or some property damage or
 - (ii) Where excessive storm drainage or run off would damage facilities necessary for compliance with terms and conditions of this consent. The applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
31. The industry shall ensure that no water pollution problem is created in the area due to discharge of effluents from its industrial premises.
32. The industry shall comply with the code of practice as notified by the Government/ Board for the type of industries where the siting guidelines/ code of practice have been notified.
33. Solids, sludge, filter backwash or other pollutant removed from or resulting from treatment or control of waste waters shall be disposed off in such a manner to prevent any pollutants from such materials from entering into natural water.
34. The industry shall re-circulate the entire cooling water and shall also re-circulate/reuse to the maximum extent the treated effluent in processes
35. The industry shall make necessary and adequate arrangements to hold back the effluent in case of failure of re-circulation system/ effluent treatment plant.
36. The industry shall make proper disposal of the effluent so as to ensure that no stagnation occurs inside and outside the industrial premises during rainy season and no demand period.
37. Where excessive storm water drainage or run off, would damage facilities necessary for compliance with terms and conditions of this consent, the applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
38. The industry shall submit a detailed plan showing therein the distribution system for conveying waste-water for application on land for irrigation along with the crop pattern for the year.
39. The industry shall ensure that the effluent discharged by it is toxicity free.
40. The industry shall not irrigate the vegetable crops with the treated effluents which are used/ consumed as raw.
41. Drains causing oil & grease contamination shall will be segregated. Oil & grease trap shall be provided to recover oil & grease from the effluent.

42. The industry shall establish sufficient number of piezometer wells in consultation with the concerned Regional Office, of the Board to monitor the impact on the Ground Water Quantity due to the industrial operations, and the monitoring shall be submitted to the Environmental Engineer of the concerned Regional Office by the 5th of every month.
43. The industry shall ensure that its production capacity & quantity of trade effluent do not exceed the quantity mentioned in the consent and shall not carry out any expansion without the prior permission/NOC of the Board.

B. SPECIAL CONDITIONS

1. The institute shall comply with conditions imposed in the Environmental Clearance granted by SEIAA, Punjab vide letter no. SEIAA/914 dated 25/01/2016 in true letter & spirit.
2. The institute will comply with the provisions of MSW Rules, 2016.
3. The institute will comply with the provisions of E-waste Management Rules, 2016.
4. The institute will comply with guidelines of Central Ground Water Authority (CGWA) for the abstraction of ground water issued from time to time.
5. The institute shall operate its UASB efficiently and will make arrangements for using the gas being generated from the UASB and will explore the possibility to utilize the gas being produced from the UASB for use full purpose instead of flaring the same and shall submit a proposal in this regard to the Board, within a period of three months.
6. The institute shall utilize maximum quantity of treated wastewater for flushing purpose in the newly constructed buildings and report the compliance of the same to the Board.
7. The institute shall ensure that the plantation area should always be free from the wild growth and maintain the ridges & furrows of the plantation area in good condition at all the times, so as to utilize the treated wastewater in a scientific manner.
8. The institute will provide permanent water sprinkler near the under construction buildings for suppressing the dust.
9. The institute will provide arrangements for controlling the fugitive emissions from its labs.
10. The institute will provide solar power plant for its expansion project as per condition imposed in the EC.
11. The institute will provide chute system in new blocks as per condition imposed in the EC.
12. The institute shall install in house mechanism for handling of municipal solid waste i.e. by installing composter/ composting pits etc., within six months.
13. The institute will ensure that there is no odour in the surrounding area.
14. The institute will not discharge any of its untreated / treated effluent into any drain / river / nallah / choe / inland surface water under any circumstances.
15. The institute will operate and maintain its STP regularly and efficiently, so as to achieve the effluent standards, consistently as prescribed by the Board / MoEF&CC and amended from time to time.
16. The institute will not exceed the generation of effluent of more than 1.27 MLD after the completion of the ongoing construction as mentioned in the EC letter.
17. The institute will obtain varied consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 after completion of the work of construction.



27/10/2020

**(Gursharan Dass Garg)
Environmental Engineer**

For & on behalf

of

(Punjab Pollution Control Board)



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Thapar Institute Of Engineering & Technology, Bhadson Road, Patiala, Patiala, Patiala, 147004

Page 6

STRUCTURAL STABILITY CERTIFICATE

Certified that, undersigned shall analyse and design the **Complete Structure of New Boys Hostel – 928 Pax** being constructed at **Thapper University Patiala, Punjab**.

It is further certified that the structural design has been done in accordance with the provisions of relevant I.S. Codes including IS: 456, IS:1786, IS:875 and IS:1893, IS:4326 for schematic zone III.

Hence structure is Safe and Stable under the designed loads and natural hazards including earth-quake.



Thanking you,

Yours faithfully,

For, M/s. Perceptive Ideas Consulting Engineer Private Limited

Mr. Ajay Gupta
Registration No. M -1474744 ;
CHARTERED ENGINEER (CIVIL DIVISION)
Institution of Engineers (India)

Date : 15/11/2019



ਦਫਤਰ ਨੰਬਰ 93 ਨਗਰ ਨਿਗਮ ਪਟਿਆਲਾ ਮਿਤੀ 5-2-19

ਸੇਵਾ ਵਿਖੇ

ਰਜਿਸਟਰਾਰ
ਬਾਪਰ ਯੂਨੀਵਰਸਿਟੀ
ਪਟਿਆਲਾ।

ਵਿਸ਼ਾ ਡੈਂਪ ਤੇ ਕੁੜਾ ਸੁਟਣ ਸਬੰਧੀ।

ਮਾਨਯੋਗ ਕਮਿਸ਼ਨਰ ਨਗਰ ਨਿਗਮ ਪਟਿਆਲਾ ਜੀ ਦੇ ਹੁਕਮ ਮਿਤੀ 5/2/19 ਅਨੁਸਾਰ ਹੇਠ ਲਿਖਿਆ ਸ਼ਰਤਾਂ ਤੇ ਪ੍ਰਤੀ ਮਹੀਨੇ 3000/- ਰੁਪਏ ਨਗਰ ਨਿਗਮ ਪਟਿਆਲਾ ਦੇ ਖਾਤੇ ਵਿੱਚ ਜਮਾ ਕਰਵਾਉਣ ਤੇ ਕੁੜਾ ਸੁਟਣ ਦੀ ਪ੍ਰਵਾਨਗੀ ਦਿੱਤੀ ਜਾਂਦੀ ਹੈ।

- 1 ਇਹ ਕਿ ਕੁੜਾ ਸੁਟਣ ਦੇ ਚਾਰਜ ਹਰ ਮਹੀਨੇ ਐਡਵਾਂਸ ਜਮਾ ਕਰਵਾਏ ਜਾਣ।
- 2 ਕੁੜਾ ਸੁਟਣ ਲਈ ਟਰੈਕਟ ਟਰਾਲੀਆ ਢੱਕਕੇ ਡੈਂਪ ਤੇ ਲਿਆਂਦੀ ਜਾਵੇ।
- 3 ਕੁੜਾ ਕਰਕਟ ਸ਼ਿਸ਼ਾ ਵੱਲੋਂ ਆਪਣੀ ਟਰੈਕਟ ਟਰਾਲੀ ਰਾਹੀਂ ਡੈਂਪ ਤੇ ਸੁਟਿਆ ਜਾਵੇਗਾ।
- 4 ਕੁੜਾ ਕਰਕਟ ਵਿੱਚ ਕੋਈ ਵੀ ਵਾਇਓ ਸੈਂਡੀਕਲ ਵੇਸਟ ਨਹੀਂ ਹੋਣਾ ਚਾਹੀਦਾ।

(Signature)
ਹੈਲਰ ਅਫ਼ਸਰ
ਨਗਰ ਨਿਗਮ-ਪਟਿਆਲਾ
ਚੈਲਜ਼ ਅਵਾਰਡ
ਨਗਰ ਨਿਗਮ, ਪਟਿਆਲਾ

(Signature)
Registrar
Thapar Institute of Engineering & Tech.
PATIALA-147 004 (India)

(Signature)
Registrar
Thapar University
Pat

प्रदूषण नियंत्रित प्रमाणपत्र
POLLUTION UNDER CONTROL CERTIFICATE
 (Authorised By)

**ALL INDIA
 VALID**



परिवहन विभाग, पंजाब सरकार
Transport Department Govt. of Punjab

Pucc No. : RTA-PTA-86-415
 वाहन पंजी संख्या
 Veh. Reg. No. :
 मेक : **PB11CX=6365**
 Make :
 मॉडल : TATA
 Model :
 वर्ग : 2825 TIPPER
 Category :
 निर्माण की तिथि : B4W
 Year :
 ईंधन : 2021
 Fuel : Diesel
 दिनांक :
 Date : 29/09/2021
 समय :
 Time : 11:49:56 AM
 वैधता :
 Valid Upto : 28/12/2021

This is to certify
 that the
 Smoke Density
 of this vehicle
 is according to
 C.M.V. Rules, 1989
 (Rule 115 (2))

Flushing Cycle						
Avg RPM		Min	RPM Max			
		656	5509			
S.No.	RPM Min	RPM Max	Km ⁻¹	HSU %	Temp	
1	756	5502	1.00	35.0	75	
2	751	5511	1.08	37.4	75	
3	515	5511	1.02	35.7	75	
4	604	5515	1.08	37.2	75	
Avg		Pass	1.04	36.3		

Average Value
 or Level



Dated: 29/09/2021, 11:49:56 AM



Auth. Lic. No. 86
D.T.O., Patiala (Pb.)

Checked by :-

ZORAWAR ENGG. WORKS & POLLUTION CHECKING CENTRE
BHARAT PETROLEUM, PATIALA ROAD, PASIANA

VALID FOR 3 MONTHS IN DELHI

प्रदूषण नियंत्रित प्रमाणपत्र
POLLUTION UNDER CONTROL CERTIFICATE
 (Authorised By)

**ALL INDIA
 VALID**



परिवहन विभाग, पंजाब सरकार
Transport Department Govt. of Punjab

प्रमाण पत्र संख्या
Pucc No. :
 वाहन पंजी. संख्या
Veh. Reg. No. : RTA-PTA-86-416
 मॉडल
Make : FB11CX=5965
 मॉडल
Model : TATA
 वर्ग
Category : 2825 TIPPER
 निर्माण की तिथि
Year : B4W
 ईंधन
Fuel : 2021
 दिनांक
Date : Diesel
 समय
Time : 23/09/2021
 वैधता
Valid Upto : 11:51:22 AM
 28/12/2021

This is to certify
 that the
 Smoke Density
 of this vehicle
 is according to
 C.M.V. Rules, 1989
 (Rule 115 (2))

Flushing Cycle						
Avg		RPM Min	RPM Max			
656		5509				
S.No.	RPM Min	RPM Max	Km ⁻¹	HSU %	Temp	
1	756	5502	1.00	35.0	75	
2	751	5511	1.08	37.4	75	
3	515	5511	1.02	35.7	75	
4	604	5515	1.08	37.2	75	
Average	Pass		1.04	36.3		

Average Value
 or Level



Auth. Lic. No. 86
D.T.O., Patiala (Pb.)

Checked by :
 VALID FOR 3 MONTHS IN DELHI

ZORAWAR ENGINEERING WORKS & POLLUTION CHECKING CENTRE
BHARAT PETROLEUM, PATIALA ROAD, PASIANA



प्रदूषण नियंत्रित प्रमाणपत्र
POLLUTION UNDER CONTROL CERTIFICATE
 (Authorised By)

**ALL INDIA
 VALID**



परिवहन विभाग, पंजाब सरकार
Transport Department Govt. of Punjab

Pucc No. : RTA-PTA-86-425
 Veh. Reg. No. : PB11CT-9265
 Make : TATA
 Model : 2518 TIPPER
 Category : B4W
 Year : 2019
 Fuel : Diesel
 Date : 03/10/2021
 Time : 12:03:39 PM
 Valid Upto : 02/01/2022

This is to certify
 that the
 Smoke Density
 of this vehicle
 is according to
 C.M.V. Rules, 1989
 (Rule 115 (2))

Flushing Cycle						
Avg	RPM Min	RPM Max				
	741	5224				
S.No.	RPM Min	RPM Max	Km ⁻¹	HSU %	Temp	
1	823	5175	0.21	0.0	82	
2	740	5176	4.06	82.6	83	
3	644	5176	1.28	42.4	83	
4	827	5253	1.21	40.6	83	
5	678	5255	1.11	38.2	83	
6	737	5314	1.29	42.8	83	
Mean		Pass	1.53	41.1		

Average Value
 or Level

Auth. Signatory

Dated: 03/10/2021 12:03:39 PM



Auth. Lic. No. 86
 D.T.O., Patiala (Pb.)

Checked by :
 VALID FOR 3 MONTHS IN DELHI

ZORAWAR ENGINEERING WORKS POLYMER CHECKING CENTRE
 BHARAT PETROLEUM, PATIALA ROAD, PASIANA



प्रदूषण नियंत्रित प्रमाणपत्र
POLLUTION UNDER CONTROL CERTIFICATE

**ALL INDIA
 VALID**



(Authorised By)
 परिवहन विभाग, पंजाब सरकार
Transport Department Govt. of Punjab

पूजा संख्या : Pucc No.
 वाहन पंजी संख्या : Veh. Reg. No. : RTA-PTA-86-417
 संकेत : PB11CX-6061
 ब्रांड : Make : CAT
 मॉडल : Model : JCB
 श्रेणी : Category : 4w
 वर्ष : Year : 2021
 ईंधन : Fuel : Diesel
 तिथि : Date : 29/09/2021
 समय : Time : 11:53:41 AM
 वैधता : Valid Upto : 28/12/2021

This is to certify
 that the
 Smoke Density
 of this vehicle
 is according to
 C.M.V. Rules, 1989
 (Rule 115 (2))

Flushing Cycle						
Avg	RPM Min	RPM Max				
	741	5224				
S.No.	RPM Min	RPM Max	Km ⁻¹	HSU %	Temp	
1	823	5175	0.21	0.0	82	
2	740	5176	4.06	82.6	83	
3	644	5176	1.28	42.4	83	
4	827	5253	1.21	40.6	83	
5	678	5255	1.11	38.2	83	
6	737	5314	1.29	42.8	83	
Mean		Pass	1.53	41.1		

Average Value
 or Level



Auth. Lic. No. 86
 D.T.O., Patiala (Pb.)

Checked by :- ZORAWAR ENGINEERING WORKS
 POLLUTION CHECKING CENTRE
 BHARAT PETROLEUM, PATIALA ROAD, PASIANA

VALID FOR 3 MONTHS IN DELHI

Sr. No.

Pollutant (as applicable)

1

2

Idling Emissions

Carbon Monoxide (CO)

Hydrocarbon, (THC/HC)

High Idling emissions

CO

RPM

Lambda

Smoke Density

Light absorption coefficient

This PUC certificate is system generated therefore not required to be signed by the operator.

Note : 1. Vehicle owners to link their mobile numbers at <https://vahan.parivahan.gov.in>

Authorized Signature with stamp of PUC operator
(Optional for State)
60mm x 20 mm



ਪ੍ਰਦੂਸ਼ਿਤ ਨਿਯੰਤਰਿਤ ਖਾਜ਼ਾਨਾ
POLLUTION UNDER CONTROL CERTIFICATE
 (Authorised By)

ਪ੍ਰਦੂਸ਼ਿਤ ਨਿਯੰਤਰਿਤ ਖਾਜ਼ਾਨਾ
 ਖੇਤਰੀ ਖਾਜ਼ਾਨਾ, ਖੇਤਰੀ ਸਰਕਾਰ
 Transport Department Govt. of Punjab



ਪੁਸ਼ਟ ਨੰਬਰ : HTA SAN 76 9400

ਵਹਿ. ਰਜ਼. ਨੰ. : **PE11CU4960**

ਬਣਾਓ : ASHOK LEYLAND LTD

ਮਾਡਲ : 2518

ਕੈਟਗਰੀ : TRUCK

ਸਾਲ : 2019

ਫਿਊਲ : Diesel

ਮਿਤੀ : 20/07/2021

ਸਮਾਂ : 05:24:27 PM

ਵੈਲਿਡ ਊਪਟੋ : **19/01/2022**

Auth. Lic. No. **76 TEST Fees=100**
 R.T.O., Sangrur (Pb.)

This is to certify that the Smoke Density of this vehicle is according to C.M.V. Rules, 1989 (Rule 115 (2))

Average Value

of Leyshn Chhokar
 Govt. Approved
 Air Engg. Work



Flush	Eng Cycle	Avg RPM	Min RPM	Max RPM	Avg	Min	Max	km ³	MSD	Average
1	649	3151	0.80	29.4	85					
2	640	3063	0.71	32.4	85					
3	636	3001	0.70	26.1	85					
Avg			0.80	29.2						

Checked by :
 VALID FOR 3 MONTHS IN DELHI
 C/o Krishna Filling Station, Bhawanagarh Patiala Road, Chander (Near Pepsi Foods)
 H/E AIR



Form 59

(See rules 115 (7))

Pollution Under Control Certificate

Issued by
Government of Haryana

Date : 08/09/2021
Time : 08:35:45 AM
Validity upto : 07/03/2022



Certificate No. : HRD5700190001945
Registration No. : PB13AR5444
Date of Registration : 01/Jun/2016
Month & Year of Manufacturing : April 2016
Chassis Number : *****185
Emission Norms : BHARAT STAGE II
Fuel : DIESEL
PC No. : HRD570039
GSTIN :
Tax : Rs.100.0 (GST as applicable)
ML No. : No

*Auth Pollution Control Centre
Govt of Haryana, Sahasra Bazar, Faridkot
Issued By Pooja Choudhary*

Vehicle Photo with Registration plate
60 mm x 30 mm



GOVERNMENT OF NAGALAND

Motor Vehicles Department
KOHIMA RTO
FORM 3B

[See Rule 62(1)]

CERTIFICATE OF FITNESS

(Applicable in the case of transport vehicles only)



Vehicle No. NL01K4160 (Goods Carrier) is certified as complying with the provisions of the Motor vehicles Act, 1988 and the rules made there under.

Registration No : NL01K4160
 Application No : NL20070449994823
 Inspection Fee Receipt No : NL1R200700001342
 Receipt Date : 04-Jul-2020
 Chassis No : MAT503014DAE03545
 Engine No : 31D84106450
 Seating Capacity : 3 (Including Driver)
 Type of Body : TRUCK (OPEN BODY)
 Manufacturing Year : 2013
 Category of Vehicle : HGV
 Inspected on : 10-Jul-2020
 Printed on : 11-Jul-2020 08:26:59

Certificate will expire on : 09-Jul-2022
 Next Inspection Due Date : 10-Jun-2022



PUC

प्रदूषण नियंत्रित प्रमाणपत्र

POLLUTION UNDER CONTROL CERTIFICATE

परिष्कार विभाग, राज्य प्रवेश, सरकार की मान्यता प्राप्त



Validity 6 Months
 REGISTERED IN THE STATE OF NAGALAND
 Co Level of string (Validity)

PUC No. : MP22-00700002185

REG NO : NL01K4160

MAKE : TATA/M

MODEL : 3518

VEHICLE TYPE : TRUCK

REG YEAR : 3-7-2013

FUEL TYPE : DIESEL

TEST DATE : 10-4-2021

TEST TIME : 04:55 PM

VALID UPTO : 9-10-2021

FUEL IN Avg	CO		Temp °C	R. Motion G. Vmms	G. Vmms
	1375R 550	1375R 1510			
5.25	1600	1923	22.44	00.52	60
5.50	1780	1923	24.03	00.64	63
5.50	1780	1923	21.08	00.61	61
MEAN	PASS		23.18	00.61	

PASS

Test Fee - Rs. 200



MP-2020 Seal/2020

Mon. 4839149185

अधिकृत केंद्र कोड
 Auth. Center Code

MP22 - 007 PUC/SEONI/2020



RATE LIST

Two Wheeler - 100/- • LMV-250/- • HGV- 500/-
 Three Wheeler- 150/- • LCV-300/- • HPSV- 500/-

अधिकृत हस्ताक्षरकर्ता

कुशम डेहरिया प्रदूषण जाँच

कुरई - जिला सिवनी (म.प्र.)

M. - 8878104124, 8839149



ਸਰਕਾਰੀ ਪ੍ਰਿਫਿਰਿਟ ਪ੍ਰਮਾਣਿਕਤਾ
POLLUTION UNDER CONTROL CERTIFICATE
 (Authorized by)



**ALL INDIA
 VALID**

ਪ੍ਰਦਿਸ਼ਟ ਫਿਰਮਾ, ਸ਼ਹੀਦ ਸਰਕਾਰ
Transport Department Govt. of Punjab

HTA SAN 15 2404

ਸੰਖਿਆ: 4960

ਡਾਕੂਮੈਂਟ ਨੰਬਰ

ਫੋਟੋ ਨੰਬਰ

ਯੋਜਨਾ ਨੰਬਰ

ਸੰਖਿਆ

ਮਾਡਲ

ਕੈਟਗੋਰੀ

ਸੰਨ

ਦੀਤੀ

ਵਿਧੀ

ਮਿਤੀ

ਸਮਾਂ

ਸਥਾਨ

ਵਿਧੀ

ਮਿਤੀ

ਸਮਾਂ

ਸਥਾਨ

ਵਿਧੀ

ਮਿਤੀ

ਸਮਾਂ

ਸਥਾਨ

ਵਿਧੀ

ਮਿਤੀ

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ਸਥਾਨ

ਵਿਧੀ

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ਸਮਾਂ

ਸਥਾਨ

ਵਿਧੀ

ਮਿਤੀ

ਸਮਾਂ

ਸਥਾਨ

ਵਿਧੀ

ਮਿਤੀ

ਸਮਾਂ

ਸਥਾਨ

ਵਿਧੀ

ਮਿਤੀ

ਸਮਾਂ

ਇਹ ਪ੍ਰਮਾਣਿਕਤਾ ਦਿੰਦੀ ਹੈ ਕਿ

ਸਿਮਕੇ ਘਣਤਾ

ਇਸ ਵਾਹਨ ਦੀ

ਜਿਵੇਂ ਕਿ

ਸਮਾਪਤੀ

ਦੀ

ਜਿਵੇਂ ਕਿ

ਦੀ

ਜਿਵੇਂ ਕਿ

ਦੀ

ਜਿਵੇਂ ਕਿ

ਦੀ

ਜਿਵੇਂ ਕਿ

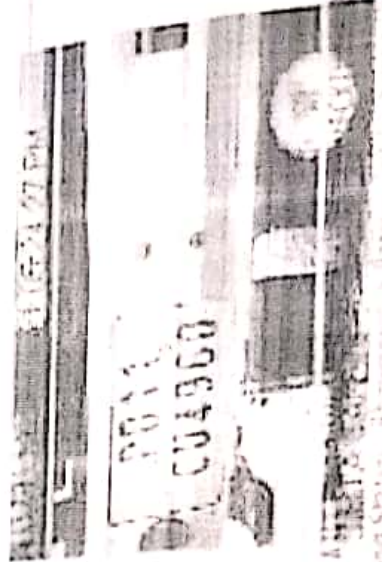
ਦੀ

ਜਿਵੇਂ ਕਿ

ਦੀ

Flush	rpm	Min	rpm	Max	rpm	Temp
Avg	1	649	3151	0.60	29.1	85
Min	2	640	3000	0.51	28.1	85
Max	1	656	3000	0.70	26.1	85
Average	Mean			0.60	29.3	

Average Value
 of Emission Checked
 Govt. of Punjab
 Sangrur
 19/01/2022



Auth. Lic. No. 76
 R.T.O., Sangrur (Pb.)
 Valid upto : 19/01/2022

Checked by :
 VALID FOR 3 MONTHS IN DELHI

M/s. A.P. Sangrur
 Sangrur
 C/o. Sangrur

Pollution Under Control Certificate

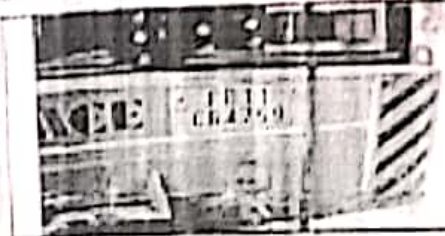
Vehicle No. **KA-01-10016**
 Date **26/10/2021**
 Time **16:41:52 PM**
 Validity upto **25/04/2022**



Vehicle make
 Model
 Year of registration
 Manufacturer's name
 Vehicle type
 Fuel
 Power
 Capacity
 Fee

Vehicle No. **KA-01-100160001495**
 Registration No. **R4759**
 Date of registration **12/Mar/2019**
 Manufacturer **Maruti**
 Model **Swift**
 Fuel **Gasoline**
 Power **100.00**
 Capacity **100.00**
 Fee **100.00 (GST as applicable)**

Vehicle Photo with Registration plate
 60 mm x 30 mm

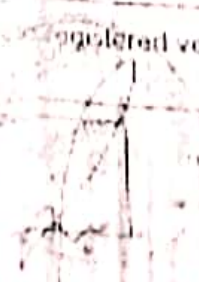


Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
1	Carbon Monoxide (CO)	Percentage (%)		
2	Hydrocarbon (HC)	ppm		
3	NOx	percentage (%)		
4	PM	ppm	2.00 ± 200	
5	Lambda		1 ± 0.03	
6	Light absorption coefficient	1/metre	2.45	1.04

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Note: Vehicle owner can link their mobile number to registered vehicle by logging to [https://vahan.parivahan.gov.in](#)

Authorized Signatory of the Registrar of PUC, Bangalore
 Karnataka State
 Bangalore - 560001



All Type of Vehicle Insurance Available Here
 Mob: 91 164 02379
 99885-88472

PUBLIC NOTICE

Ministry of Environment and Forest & Climate Changes (MoEF &CC), Govt. of India has granted the approval to their project "Expansion of Thapar Institute of Engineering & Technology, Patiala" vide letter no F.No IA3-10/7/2021-IA.III. dated 12-03-21

The copy of clearance containing the conditions to be complied is available at official website of MoEF &CC and TIET Patiala.

Either of the following mentioned officials may be contacted for further information:-

Dr. Gurbinder Singh Registrar, TIET Patiala

Er. Rajendra Nigam, General Manager (P&E) TIET Patiala

Government of Punjab**Tender Notice Reference No. 65 Dt. 24.03.2021**

On behalf of the Governor of Punjab Executive Engineer, Provincial Division, PWD B&R, Sangrur invites online bids for the following works:-

Sr. No.	Item	Quantity
1	Construction of road along Police Line Boundary Wall up to Hareri road under Head 5054 RB-10 including maintainance of road for 5 years.	1
2	Periodical repair of Sunam-Jagatpura Khadial-Taranjikhera up to Sullar (NH-71) road (ORD-19) road length=3.00 Kms. (Under Head 3054) including maintainance of road for 3 years (One Year Defect Liability Period+2 Years Maintainance Period).	1

Closing date & time:- Will be intimated later on website <http://eproc.punjab.gov.in>. For details logon to:- <http://eproc.punjab.gov.in>.

Note: Any corrigendum(s) to the Tender Notice shall be published on the above website only.

Sd/- Executive Engineer,
Provincial Divn. PWD B&R,
Sangrur (Pb.).

DPR/Pb/3084

EXCISE & TAXATION DEPARTMENT U.T., CHANDIGARH

Corrigendum regarding change of venue for opening of Technical/Financial e-bids.

This is for information of the general public that venue of Technical bid and Financial e-bid for

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ਰੂਪਨਗਰ ਇੰਪਰੂਵਮੈਂਟ ਟਰੱਸਟ, ਰੂਪਨਗਰ

ਪਬਲਿਕ ਨੋਟਿਸ

ਇਸ ਪਬਲਿਕ ਨੋਟਿਸ ਰਾਹੀਂ ਆਮ ਜਨਤਾ ਦੀ ਜਾਣਕਾਰੀ ਲਈ ਸੂਚਿਤ ਕੀਤਾ ਜਾਂਦਾ ਹੈ ਕਿ ਪਲਾਟ ਨੰ. 56, ਸਕੀਮ ਸ਼ਹੀਦ-ਏ-ਆਜ਼ਮ ਭਗਤ ਸਿੰਘ ਨਗਰ, ਰੂਪਨਗਰ ਟਰੱਸਟ ਰਿਕਾਰਡ ਅਨੁਸਾਰ ਸ਼੍ਰੀਮਤੀ ਸ਼ਸੀ ਬਾਲਾ ਪਤਨੀ ਸ੍ਰੀ ਮੋਹਿੰਦਰ ਕੁਮਾਰ, ਨੇੜੇ ਮੰਦਿਰ ਬੂਟੀ ਦਾਸ, ਫ਼ਤਹਿਗੜ੍ਹ ਚੂੜੀਆਂ, ਡਾਹਿ. ਬਟਾਲਾ, ਜ਼ਿਲ੍ਹਾ ਗੁਰਦਾਸਪੁਰ ਦੇ ਨਾਂ 'ਤੇ ਹੈ। ਮਿਤੀ 26.02.2021 ਨੂੰ ਸ੍ਰੀ ਮੋਹਿੰਦਰ ਕੁਮਾਰ ਸ਼ਰਮਾ ਪੁੱਤਰ ਸ੍ਰੀ ਬ੍ਰਹਮ ਸਾਗਰ ਨੇ ਸ਼੍ਰੀਮਤੀ ਬਾਲਾ ਉਰਫ਼ ਸ਼ਸੀ ਸ਼ਰਮਾ ਦੀ ਮੌਤ ਦਾ ਸਰਟੀਫਿਕੇਟ ਅਤੇ ਰਜਿਸਟਰਡ ਵਸੀਅਤ ਦੀ ਕਾਪੀ ਪੇਸ਼ ਕਰਦੇ ਹੋਏ ਬੇਨਤੀ ਕੀਤੀ ਹੈ ਕਿ ਮੇਰੀ ਪਤਨੀ ਸ਼ਸੀ ਬਾਲਾ ਉਰਫ਼ ਸ਼ਸੀ ਸ਼ਰਮਾ ਦੀ ਮੌਤ ਮਿਤੀ 02.02.2017 ਨੂੰ ਹੋ ਚੁੱਕੀ ਹੈ, ਇਸ ਲਈ ਪਲਾਟ ਨੰ. 56, ਸ਼ਹੀਦ-ਏ-ਆਜ਼ਮ ਭਗਤ ਸਿੰਘ ਨਗਰ, ਰੂਪਨਗਰ ਰਜਿਸਟਰਡ ਵਸੀਅਤ ਦੇ ਆਧਾਰ 'ਤੇ ਉਨ੍ਹਾਂ ਦੇ ਨਾਂ 'ਤੇ ਤਬਦੀਲ ਕੀਤਾ ਜਾਵੇ। ਹੁਣ ਪਲਾਟ ਨੰ. 56, ਸ਼ਹੀਦ-ਏ-ਆਜ਼ਮ ਭਗਤ ਸਿੰਘ ਨਗਰ ਰਜਿਸਟਰਡ ਵਸੀਅਤ ਮਿਤੀ 09.02.2021 ਦੇ ਆਧਾਰ 'ਤੇ ਸ੍ਰੀ ਮੋਹਿੰਦਰ ਕੁਮਾਰ ਸ਼ਰਮਾ ਪੁੱਤਰ ਸ੍ਰੀ ਬ੍ਰਹਮ ਸਾਗਰ ਦੇ ਨਾਮ ਮੌਤ ਦੇ ਆਧਾਰ 'ਤੇ ਤਬਦੀਲ ਕੀਤਾ ਜਾਣਾ ਹੈ। ਜੇਕਰ ਕਿਸੇ ਵੀ ਵਿਅਕਤੀ ਨੂੰ ਪਲਾਟ ਨੰ. 56, ਸ਼ਹੀਦ-ਏ-ਆਜ਼ਮ ਭਗਤ ਸਿੰਘ ਨਗਰ, ਰੂਪਨਗਰ ਰਜਿਸਟਰਡ ਵਸੀਅਤ ਦੇ ਆਧਾਰ 'ਤੇ ਸ੍ਰੀ ਮੋਹਿੰਦਰ ਕੁਮਾਰ ਸ਼ਰਮਾ ਪੁੱਤਰ ਬ੍ਰਹਮ ਸਾਗਰ ਦੇ ਨਾਮ 'ਤੇ ਕਰਨ ਵਿਚ ਕੋਈ ਵੀ ਇਤਰਾਜ਼ ਹੋਵੇ ਤਾਂ ਉਹ ਆਪਣਾ ਲਿਖਤੀ ਇਤਰਾਜ਼ ਇਸ ਨੋਟਿਸ ਦੇ ਛਪਣ ਦੀ ਮਿਤੀ ਤੋਂ 30 ਦਿਨਾਂ ਦੇ ਅੰਦਰ-ਅੰਦਰ ਇਸ ਦਫ਼ਤਰ ਵਿਖੇ ਲਿਖਤੀ ਰੂਪ ਵਿਚ ਪੇਸ਼ ਕਰ ਸਕਦਾ ਹੈ। ਮਿਥੇ ਸਮੇਂ ਤੋਂ ਬਾਅਦ ਕੋਈ ਵੀ ਇਤਰਾਜ਼ ਸਵੀਕਾਰ ਨਹੀਂ ਕੀਤਾ ਜਾਵੇਗਾ ਅਤੇ ਇਸ ਪਲਾਟ ਦੀ ਮਾਲਕੀ ਸ੍ਰੀ ਮੋਹਿੰਦਰ ਕੁਮਾਰ ਸ਼ਰਮਾ ਪੁੱਤਰ ਸ੍ਰੀ ਬ੍ਰਹਮ ਸਾਗਰ ਦੇ ਨਾਂ 'ਤੇ ਕਰ ਦਿੱਤੀ ਜਾਵੇਗੀ।

ਸਹੀ/- ਚੇਅਰਮੈਨ, ਨਗਰ ਸੁਧਾਰ ਟਰੱਸਟ, ਰੂਪਨਗਰ।

DPR/Pb/3122



Khadi India

राज्य कार्यालय, पंजाब एवं केन्द्रशासित चण्डीगढ़
State Office, Punjab & U.T. Chandigarh



in Mauli Jagran to attend the court hearing.

He is survived by three brothers and two sisters.

SHO of PS Mauli Jagran,

of Mauli Jagran. Sources said Shubham gave the car to them for travelling. One of the injured in the shootout, Gaurav, was referred to GMCH-32 for the treatment.

THAPAR INSTITUTE OF ENGINEERING & TECHNOLOGY
Patiala (Punjab)
(Deemed to be University)

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SHRI KRISHNA AYUSH UNIVERSITY, KURUKSHETRA
(Umri Road, Sector-8, Kurukshetra, Haryana-136118)

3rd PHYSICAL COUNSELING /ADMISSION NOTICE
BAMS/BHMS FOR ACADEMIC SESSION 2020-21

The 3rd Physical Counseling for vacant seats of all affiliated/Pvt. University colleges of Haryana & UT Chandigarh will be held for BAMS/BHMS in Shri Krishna AYUSH University Kurukshetra on 31.03.2021. Interested NEET qualified candidates are required to reach University in between 9:00 A.M. to 12:30 P.M. All related schedule, terms & conditions, number of vacant seats & name of colleges are available on University Website www.skau.ac.in /UG_Admission.

REGISTRAR

2335/HRY

Centre for Development of Advanced Computing (C-DAC)
Electronics and Information

गोपा... प्रशासनिक स्तर पर शिविर रोहतास सैनी, दीप चंद, कुलदीप
लगाने की बात कही, जिससे छोटे सैनी आदि मौजूद रहे।

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Patiala (Punjab)
(Deemed to be University)

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ट बैंक आफ इंडिया

एसेट्स मैनेजमेंट ब्रांच, एससीओ 99-107,

PH. 0172-4567164, Email:- sbi.04262@sbi.co.in

1)] कब्जा सूचना (अचल प्रापर्टी हेतु)

ऑफ फाइनांशियल एसेट्स एंड इन्फोर्समेंट ऑफ सिक्योरिटी इंडस्ट्र एक्ट 2002 (54/2002) के मैनेजमेंट ब्रांच, पहली मंजिल, एससीओ 99-107, सेक्टर 8-सी, चंडीगढ़ के अधिकृत अधिकारी (इन्फोर्समेंट) रूल्ज़, 2002 के नियम 3 के साथ पठनीय धारा 13(12) अधीन प्रदत्त शक्तियों का ब्रांच, चंडीगढ़ (04262) में तैनात अधिकृत अधिकारी ने उक्त एक्ट की दफा 13(2) के तहत करके खाते के गारंटर मै. जेकान इन्फ्रास्ट्रक्चर लिमि.) नामत : 1. श्री रोशन लाल मित्तल पुत्र स्ट्र-6, पंचकूला-134109 (हरियाणा), 2. योगिन्द्र मित्तल पुत्र श्री रोशन लाल मित्तल, मकान नं. श्री जतिन्द्र मित्तल पुत्र रोशन लाल मित्तल, मकान नं. 1464, ग्राउंड फ्लोर, सेक्टर 43-बी, चंडीगढ़- श्री जतिन्द्र मित्तल, मकान नं. 1464, ग्राउंड फ्लोर, सेक्टर 43-बी, चंडीगढ़-160022 (यहां ये सभी अत डिमांड नोटिस की प्राप्ति की तिथि से 60 दिन के अंदर 01.12.2020 से बनते आकस्मिक खर्च, राशि पर अनुबंध दर वाले भविष्य के ब्याज समेत दिनांक 30.11.2020 के अनुसार रु. करने के लिए निर्देश दिए गए थे। कर्जदार राशि का भुगतान करने में असफल रहे। अतः कर्जदारों को नता को सूचित किया जाता है कि अधोहस्ताक्षरी द्वारा उक्त नियमों के नियम 8 के साथ पढ़े जाने वाले प्रदान की गयी शक्तियों का प्रयोग करते हुए निम्नांकित प्रापर्टी का 25 मार्च, 2021 को प्रतीकात्मक

... प्रापर्टी संबंधी कोई लेन-देन न करें और इस

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THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY
(Deemed to be University)

No. TIET/R/

Dated : March 17, 2021.

The Deputy Commissioner
A-Block, Mini Secretariat
PATIALA.

Uranis 20
17/3/2021

Dear Sir,

Please find enclosed herewith letter No. IA3-10/7/2021-IA.III dated March 12, 2021 of Ministry of Environment, Forest and Climate Change, Government of India.

As per the above letter, the Institute has been granted Environment Clearance for expansion of built up area from 3,33,080.33 to 4,45,678.09.

This is for your kind information please.

Thanking you,

With regards,



REGISTRAR

No. TIET/R/

Dated : March 17, 2021.

The Commissioner
Municipal Corporation
PATIALA

Dear Sir,

Please find enclosed herewith letter No. IA3-10/7/2021-IA.III dated March 12, 2021 of Ministry of Environment, Forest and Climate Change, Government of India.

As per the above letter, the Institute has been granted Environment Clearance for expansion of built up area from 3,33,080.33 to 4,45,678.09.

This is for your kind information please.

Thanking you,

With regards,



REGISTRAR

17/3/21
मंसिवादी

EIA Clearance

EIA CLEARANCE

- Six Month Report ending 31-03-2021
- Test Reports
- Award Letter of Environment Clearance by MoEF &CC ,Govt. of India
- Six Month Report ending 30-09-2020
- Test Reports

Received
31/05/2021

THAPAR INSTITUTE OF ENGINEERING & TECHNOLOGY

(Deemed-to-be-University u/s 3 of the UGC Act, 1956)

Thapar Technology Campus,
Bhadson Road, Patiala - 147 004 (Punjab) India

Phone : +91-175-2393021

Email : registrar@thapar.edu

URL : www.thapar.edu

भारत सरकार / Government of India
 पर्यावरण, वन एवं जलवायु परिवर्तन विभाग / Ministry of Environment, Forest & Climate Change
 बय नं. 24-25, सेक्टर 31-ए
 Bays No.24-25, Sec-31 A
 चण्डीगढ़/Chandigarh

Dated 31-05-21

✓ To,
The Joint Director,
 Ministry of Environment, Forest & Climate Change,
 Regional Office (North),
 Government of India
 Bay No. 24-25, Sector-31A
 Chandigarh 160030.

Subject: Submission of six monthly report for period ending 31.03.2021 of the project namely " Thapar Institute of Engineering and Technology (Deemed to be University)" located Bhadson Road, Patiala, Punjab, by M/s Thapar Institute of Engineering and Technology.

With reference to the EIA Notification & its amendments regarding submission of six monthly compliance report. We are hereby submitting the six monthly compliance report for period ending 31.03.2021 for the above said project in soft copy in compact disk (CD) of the compliance report for your perusal.

Kindly acknowledge the receipt of the same.
 Thanking you.

Sincerely,



Name- Dr. Gurbinder Singh
Contact No.- 8288008118
Designation- Registrar, TIET, Patiala
Email- registrar@thapar.edu

CC to: Member Secretary, SEIAA Punjab, Directorate of Environment and Climate Change, C/o Punjab State Council for Science & Technology, MGSIPA Complex, Sector 26- Chandigarh-160019.