

भारतीय प्रौद्योगिकी संस्थान कानपुर  
INDIAN INSTITUTE OF TECHNOLOGY KANPUR  
अधिष्ठाता आधारभूत संरचना एवं योजना  
DEAN OF INFRASTRUCTURE AND PLANNING



पत्रालय-आई० आई० टी० कानपुर-२०८०१६ (भारत)  
Post Office: I.I.T. Kanpur-208016 (India)

Date:-

To,  
The Director (S)  
Regional Office (Central Region)  
Ministry OF Environment and Forest (MoEF)  
Kendriya Bhawan, 5<sup>th</sup> Floor, Sector- H,  
Aliganj, Lucknow,  
Uttar Pradesh.

**Sub: Submission of Six-monthly Compliance Report Condition of Environmental Clearance (for the period of October 2024 to March 2025) For Proposed Expansion of Institutional Project "Indian Institute of Technology", Kanpur, U.P., M/s Indian Institute of Technology Kanpur**

Sir,

In accordance with the condition of Environmental Clearance received from SEIAA, UP, vide letter no 1766/Parya/SEAC/2256/2013/AD(H)/ dated 11 November 2014, further expansion in EC has been obtained vide EC Identification No.- EC22B039UP174576, file no. 6906 dated 17/11/2022, We are submitting here with six monthly Compliance report of stipulated condition of Environmental Clearance (In soft copy" as per notification in gazette of India on 28<sup>th</sup> November 2018") for the period of October 2024 to March 2025 for above said project.

Thanking you

Yours Sincerely

Authorized Signatory

M/s Indian Institute of Technology Kanpur

CC TO:

1. The Member Secretary, Uttar Pradesh pollution Control Board (UPPCB), TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow, Uttar Pradesh 226010.
2. The Secretary, SEAC, Directorate of Environment of U.P., Dr. Bhim Rao Ambedkar Paryavaran Parisar, Vineet Khand-1, Gomati Nagar, Lucknow.

Six-Monthly Environmental Compliance Report of  
Stipulated Conditions of Environmental Clearance  
(October 2024 to March 2025)

FOR

Expansion of Institutional Project  
**“Indian Institute of Technology”**  
Kanpur, Uttar Pradesh

**EC Identification No: - EC22B039UP174576**  
**File No.: - 6906**

Submitted to:  
Ministry of Environment, Forest & Climate Change (MoEF&CC)

Submitted by:  
M/S INDIAN INSTITUTE OF TECHNOLOGY  
KANPUR

**July, 2025**

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**CHAPTER-1****INTRODUCTION AND PROJECT DESCRIPTION****1.1 INTRODUCTION**

The Expansion of Institutional Project “Indian Institute of Technology”, Kanpur, Uttar Pradesh is being developed by **M/S INDIAN INSTITUTE OF TECHNOLOGY KANPUR**.

This project has been granted environmental clearance vide letter no. **1766/Parya/SEAC/2256/2013/AD(H)**, dated 11 November, 2014, Further expansion EC has been granted vide EC identification no. **EC22B039UP17457** and File no. **6906** dated 17/11/2022, by the State Environmental Impact Assessment Authority, Uttar Pradesh. Copy of same is attached as **annexure 1**.

**1.2 PROJECT DESCRIPTION****Table 1.1: Brief Description of project**

S.N.	DESCRIPTION	DETAILS
1.	Plot Area	42,69,433.52 sqm
2.	Total Built Up Area	7,82,988.90 sqm
3.	Proposed FAR	6,78,746.41 sqm
4.	Ground Coverage	3,38,377.82 sqm
5.	Total Water Requirement	4,891.0 KLD
6.	Fresh Water Requirement	3,259.00 KLD
7.	Waste Water Generation	1,565.00
8.	STP Capacity	1,745.00 KLD
9.	ETP Capacity	165.00 KLD
10.	Green Area	19,92,318.35 sqm
11.	Total parking	530 ECS
12.	Total power requirement	6234 kw

The pocket area for the proposed development is 101171 sq.m. Total Built up Area after the proposed Expansion is 7,82,988.9 sqm (6,94,022 already constructed + 88,966 proposed expansion).

**1.3 PROJECT LOCATION**

The Expansion of Institutional Project “Indian Institute of Technology”, Kanpur, Uttar Pradesh is being developed by Indian Institute of Technology Kanpur.

**1.4 PRESENT STATUS**

As per Earlier EC, Project is in operation phase.  
Construction is going on at project site.

**1.5 PURPOSE OF THE REPORT**

- Monitoring compliances and status of implementations to adhere with EC conditions.
  - Transparency and accountability by providing record of environment performance and compliance efforts.
  - Protection of environment through adoption of various mitigation measures for environmental components with support of monitoring data.
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**CHAPTER-2****COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE**

<b>Name of Project</b>	<b>Expansion of Institutional Project "Indian Institute of Technology", Kanpur, Uttar Pradesh</b>
<b>EC Identification No.</b>	<b>EC22B039UP174576, dated 17<sup>th</sup> November, 2022</b>
<b>Period</b>	<b>October 2024 to March 2025</b>

**Additional Conditions**

1	The project proponent shall submit within the next 3 months the details of solar power plant and solar electrification details within the project.	Same has already been submitted.
2	The project proponent shall ensure to plant broad leaf trees and their maintenance. The CPCB guidelines in this regard shall be followed.	A well-developed green area is available at site. Maintenance of landscape is being ensured. Same will be complied in the expansion part of the project.
3	The project proponent shall submit within the next 3 months the details on quantification of year wise CER activities along with cost and other details. CER activities must not be less 2% of the project cost. The CER activities should be related to mitigation of Environmental Pollution and awareness for the same.	Quantification of CER activities along with cost and other details have already been submitted EC application.
4	The project proponent shall submit within the next 3 months the details of estimated construction waste generated during the construction period and its management plan.	Same has already been submitted.
5	The project proponent shall submit within the next 3 months the details of segregation plan of MSW.	Same has already been submitted.
6	The project proponent shall ensure that waste water is properly treated in STP and maximum amount should be reused for gardening flushing system and washing etc. For reuse of water for irrigation sprinkler and drip irrigation system shall be installed and maintained for proper function. Part of the treated sewage, if discharged to sewer line, shall meet the prescribed standards for the discharge.	Sewage effluent is being treated in onsite STP of 1350 KLD up to tertiary level. STP of 500 KLD capacity for expansion phase will be provided at site at appropriate stage of site development. Treated water is being used for gardening flushing system, DG cooling and HVAC. No treated sewage is being discharged into sewer as it is a zero-discharge project.
7	Under any circumstances untreated sewage shall not be discharged to municipal sewer line.	Untreated water will not be discharged in sewer line. All the Effluent waste is being treated in onsite STP of 1350 KLD. Additional 500 KLD capacity of onsite STP for treatment of sewage and 150 KLD capacity ETP for treatment of effluent will be provided.
8	The project proponent will ensure that proper dust control arrangements are made during construction and proper display board is installed at the site to inform the public the steps taken to control air pollution as per the	Water sprinkling through tanker is being ensured. Covered construction materials, wet jet, water sprinkling by tankers, green net, Cement covered in close place and wheel wash area is provided at site to control the dust generation at site. Site barricades

	Construction and Demolition Waste Management Rules.	have been provided at project site.
9	The project proponent shall install micro solar power plants, toilets in nearby villages, public place or school from CER fund of the project for which E.C is granted in addition to and water harvesting pits and carbon sequestration parks / designed ecosystems.	Project is in construction phase. Installation of micro solar power plants, toilets in nearby villages, public place or school from CER fund of the project will be done in due course of time.
10	A certificate from Forest Department shall be obtained that no forest land is involved and if forest land is involved the project proponent shall obtain forest clearance and permission of Central and State Government as per the provisions of Forest (conservation) Act, 1980 and submit before the start of work.	Not applicable as no forest land is involved in this project.
11	If the proposed project is situated in notified area of ground water extraction, where creation of new wells for ground water extraction is not allowed, requirement of fresh water shall be met from alternate water sources other than ground water or legally valid source and permission from the competent authority shall be obtained to use it.	Ground water will not be used for construction purpose. Water is being sourced from Jalkal Vibhag Kanpur. Assurance letter for supply of water has already been obtained and copy of the same is attached as <b>Annexure 7</b> . Water for expansion part will be sourced from ground water after obtaining permission from competent authority.
12	Provision for charging of electric vehicles as per the guidelines of GoI / GoUP should be submitted within the next 3 months.	Charging point of Electric vehicle is already available at site. Layout is attached as attached as <b>Annexure 02</b> . Same will be complied in Expansion part also.
13	PP should display EC granted to them on their website. 6-monthly compliance report should be displayed on their website	Uploading of EC letter on website is in process and same will be submitted with next six-monthly compliance report.
14	Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag.	Cement is being stored in closed area. Proper care is being taken to minimize the dust generation.
15	Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).	No use of single use of plastic is being ensured at site.
16	In compliance to Hon'ble Supreme Court order dated 13/01/2020 in IA no. 158128/2019 and 158129/2019 in Writ petition no. 13029/1985 (MC Mehta Vs. GoI and others) anti-smog guns shall be installed to reduce dust during excavation.	Anti smog guns were installed during excavation to reduce the emission and spread of dust. Presently regular water sprinkling is being done to reduce dust generation at site.
17	The proponent should provide the electric vehicle charging points and allocate the safe and suitable place in the premises for the same	Charging point of Electric vehicle is already available at site. Layout is attached as attached as <b>Annexure 02</b> . Same will be complied in Expansion part also.
18	Project Proponent should adopt 02 village & develop them as model village.	Noted, 2 villages will be adopted and will be developed as model village in due course of time.

**1- Statutory compliance:**

1.	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning	All the necessary clearances/permissions from all relevant agencies have been obtained before the commencement of work.
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	authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.	
2.	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.	NOC for Structural safety has been obtained. <b>Fire NOC has already been obtained vide letter No. UPFS/2021/35237/KPN/KANPURNAGAR/718 DD dated 04.08.2021, letter No. UPFS/2019/13670/KPN/KANPURNAGAR/216 CFO dated 18.11.2019 and Vide CFO/UPLATTER-MANUAL/18 dated 04.11.2018.</b> Copy of fire NOC is attached as <b>Annexure 3</b> . Lightening protector will be provided.
3.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	Not applicable as no forest land is involved in this project.
4.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not Applicable.
5.	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.	CTE has been obtained vide letter no. <b>201993/UPPCB/Kanpur Nagar(UPPCBRO)/CTE/ KANPURNAGAR/2024 dated 06.03.2024 and valid upto 05.03.2029.</b> copy of the same is attached as <b>Annexure 04</b> . Construction work is not started at the project site. CTO has been obtained vide letter no. <b>222614/UPPCB/Kanpur Nagar(UPPCBRO)/CTO/both/ KANPUR NAGAR/2024 and valid upto 31/12/2027,</b> for operational part of the project. Copy of CTO is attached as <b>Annexure 05</b> .
6.	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.	Ground water will not be used for construction purpose. Water is being sourced from Jalkal Vibhag Kanpur. Assurance letter for supply of water has already been obtained and copy of the same is attached as <b>Annexure 7</b> . Water for expansion part will be sourced from ground water after obtaining permission from competent authority.
7.	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.	Power is being sourced from local electricity board. Permission has already been obtained.
8.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, and Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.	All the necessary clearance has been obtained. <b>Fire NOC has already been obtained vide letter No. UPFS/2021/35237/KPN/KANPURNAGAR/718 DD dated 04.08.2021, letter No. UPFS/2019/13670/KPN/KANPURNAGAR/216 CFO dated 18.11.2019 and Vide CFO/UPLATTER-MANUAL/18 dated 04.11.2018.</b> Copy of fire NOC is attached as <b>Annexure 3</b> .

9.	The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.	Solid waste is being managed as per the norms. Solid Waste Management Plan is attached as <b>Annexure 06</b> .
10.	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.	Applicable ECBC norms are being followed for operational part of the project and same will be followed in expansion part.
<b>2</b>	<b>Air quality monitoring and preservation</b>	
1.	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.	Dust mitigation measures like water sprinkling, wind breaking wall, water trough, covering of construction material, wet jet, green curtain, PUC certified vehicle used for construction and metal road has been provided at project site.
2.	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.	A proper management plan has been adopted to contain the current exceedance in ambient air quality at the site. Measure like water sprinkling, wind breaking wall, water trough, covering of construction material, wet jet, green curtain, PUC certified vehicle used for construction has been provided at site. Site photograph of the same is attached as <b>Annexure 9</b> .
3.	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 PM2.5) covering upwind and downwind directions during the construction period.	Ambient air quality monitoring has been carried out at project site and monitoring report is attached as <b>Annexure 8</b> .
4.	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.	Barricades have been provided around the project site before the start of construction. Site photograph of the same is attached as <b>Annexure 9</b> . Water sprinkling, covering of construction material, wind breaking wall, water trough, valid PUC certified vehicles & wet jet has been ensured at project site.
5.	Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.	Sand, murrum, loose soil, cement, stored on site are kept covered to prevent dust pollution from site.
6.	Wet jet shall be provided for grinding and stone cutting	Wet jet has been provided at project site.
7.	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	Water sprinkling is being done regularly to suppress dust generation from site.

8.	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.	All construction and demolition debris is stored at the site before they are properly disposed. All demolition and construction waste is being managed as per the norms.
9.	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 mission standards	Ultra-low sulphur diesel fuel as prescribed by EC rules is being used for the operation of DG sets during construction phase.
10.	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. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.	Low sulphur diesel fuel is being used to run the DG sets. All the DG sets installed of “enclosed type” to prevent noise and conform to rules made under Environment (Protection) Act 1986, prescribed for air and noise emission standards. Stack height has been kept as per CPCB norms.
11.	For indoor air quality the ventilation provisions as per National Building Code of India.	Ventilation provisions are incorporated in the building plan as per National Building Code of India to maintain indoor air quality.
3.	<b>Water quality monitoring and preservation</b>	
1.	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, or wetland and water bodies. Check dams, bio-swales, landscape, other-sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.	Natural drainage will be ensured for unrestricted flow of water. No construction is allowed to obstruct the natural drainage of water system.
2.	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.	Building is so designed that it will hardly affect the natural topography.
3.	Total fresh water shall not exceed the proposed requirement as provided in the project details.	Fresh water requirement will not exceed as provided in the project details.
4.	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.	Water meters will be installed for all source and supply mainlines (usage wise) to record the water consumption during operation phase, which will assist in monitoring the water balance. The water balance diagram has already been submitted along with application.
5.	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, tile quantity of water allotted to the project under consideration and the	A certificate from Kanpur Nagar Nigam has already obtained. Copy of the same is attached as <b>Annexure 07</b> .

	balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.	
6.	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.	Necessary arrangement will be done at appropriate stage of development at the project site so that maximum absorption of the water by the soil occurs for ground water recharge.
7.	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bail-ling etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.	Dual plumbing system is available at existing operational site and Dual pipe plumbing will be used for supply of fresh water for drinking, cooking and bathing and other for supply of recycled water for flushing, Air conditioning and landscape irrigation.
8.	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.	Use of water saving device for water conservation is available at existing operational site, and same will be provided for expansion part also.
9.	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.	Use of water saving device for water conservation is available at existing operational site, and same will be provided for expansion part also.
10.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Pre-mixed concrete, curing agents and other best practices is being used to reduce water demand.
11.	The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.	RWH system has been designed in accordance with the local by-laws and CGWB guidelines. 2 nos. of RWH ponds are available at site and additional 2 No. of RWH ponds will be provided at site in due course of time.
12.	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.	The criteria have been considered in the calculation of numbers of Rain water harvesting ponds. 2 number of rain water harvesting pond is proposed at site of 351.95 cum. Ground water is being used for drinking purpose and permission for the same has already been taken. RWH plan has already been submitted at the time of EC application.
13.	All recharge should be limited to shallow aquifer.	Recharge pit is not feasible at site, so we have proposed 2 number of rain water harvesting pond for rain water harvesting.
14.	No ground water shall be used during construction phase of the project.	Ground water will not be used for construction purpose.

15.	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.	Permission of dewatering will be obtained, if required.
16.	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.	Records of fresh water usage, water recycling and rainwater harvesting will be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports during operation phase of the project. The water balance diagram has already been submitted along with application.
17.	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, not related water shall be disposed in to municipal drain.	Sewage is being treated in already existing STP of 1350KLD with tertiary treatment i.e. Ultra filtration. The treated effluent from STP is being recycled/re-used for flushing, AC makeup water, gardening, car and street washing. STP of 500 KLD capacity will be provided at site under expansion phase at appropriate stage of site development.
18.	No sewage or untreated effluent water would be discharged through storm water drains.	No sewage or untreated effluent water will be discharged through storm water drains.
19.	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.	All the sewage is being treated in onsite STP of capacity 1350 KLD. STP of 500 KLD capacity will be provided for project under expansion part.
20.	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.	Monitoring report of STP treated water is attached as <b>Annexure 08.</b>
21.	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.	Sludge from onsite sewage is being collected, dried and used as manure for landscape and horticulture development, surplus sludge will be disposed as per the Ministry of Urban Development, CPHEEO manual on sewerage and sewage treatment. Same will be complied for the project under expansion part.
4	<b>Noise monitoring and prevention</b>	
1.	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	Noise level confirms to Institutional standard both during day and night as per Noise pollution rule. Monitoring has been carried out in the month of March 2025 report is attached as an <b>Annexure 08.</b>

	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.	
2.	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.	Noise Monitoring report is attached as <b>Annexure 08</b> .
3.	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.	DG sets installed at site with acoustic enclosures for the operational part of the project. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel will be provided for expansion part of the project.
5.	<b>Energy Conservation measures</b>	
1.	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.	Applicable ECBC norms are being followed for operational part of the project and same will be followed in expansion part.
2.	Outdoor and common area lighting shall be LED.	LED is being used for common area lightening and will be used in expansional part of the project.
3.	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 specification.	2184 kwp capacity of Solar Energy is available at site for operational part. Remaining 200kwp of solar power of expansion part will be provided at site.
4.	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 part of the project commissioning.	Energy efficient luminaries like LEDs are being used within project site. Used/damaged LEDs are being stored at designated places within site and handed over to authorized recycler for proper disposal as per norms.
5.	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-law's requirement, whichever is higher.	2184 kwp capacity of Solar Energy is available at site for operational part. Remaining 200kwp of solar power of expansion part will be provided at site.
6.	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 provided to meet 20% of the hot water demand of the commercial building or as per the requirement of the local building whichever	Solar energy is being used for lighting the common area, apartment to reduce the power load. Separate electric meter has been installed for solar power and same will be done in expansion part also.

	is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.	
<b>6.</b>	<b>Waste Management</b>	
<b>1.</b>	A certificate from the competent authority handling municipal solid wastes, indicating the exiting civic capacities of handling and their adequacy to cater to the M.S.W, generated from project shall be obtained.	The MSW generated at the site is being segregated into biodegradable and non-biodegradable waste. Organic waste is being composted in organic waste convertor and manure is being used for landscaping and non-biodegradable waste is being handed over to authorized recycler for safe disposal/recycle. At present project of expansion part is going on and waste generated from project site during construction is being collected in separate wet and dry waste bins and handed over to authorized vendor for disposal at approved site.
<b>2.</b>	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.	Disposal of muck during construction phase is not creating any adverse effect on the neighboring communities and is being disposed by taking the necessary precaution for general safety and health aspect.
<b>3.</b>	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 waste bins have been provided for segregation of waste. Organic waste is being composted in organic waste convertor and manure is being used for landscaping and non-biodegradable waste is being handed over to authorized recycler for safe disposal/recycle. At present project of expansion part is going on and waste generated from project site during construction is being collected in separate wet and dry waste bins and handed over to authorized vendor for disposal at approved site.
<b>4.</b>	Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.	Bio-degradable waste is being composted in organic waste converter. Separate organic waste composter of adequate capacity will be installed in expansion part of the project.
<b>5.</b>	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.	All non-biodegradable waste is being handed over to authorized recycler for disposal as per norms.
<b>6.</b>	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.	Hazardous waste generated at the project site is being handed over to authorized vendor for safe disposal.
<b>7.</b>	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	Environment friendly materials like bricks, blocks and other construction materials is being for construction work.

	Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.	
8.	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.	Fly ash-based cement and other building materials like bricks and blocks is being used as building material in the construction of building. Ready mix concrete is being used in building construction.
9.	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.	Construction and demolition waste is being managed as per norms at the project site
10.	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.	Used LEDs is being collected separately and provided to authorize recyclers for safe disposal. Same will be complied in Expansion Part also.
7.	<b>Green Cover</b>	
1.	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).	Tree cutting is not involved in the project.
2.	A minimum of 1 tree (5’ tall) for every 80 sqm. of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. 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.	A well develop green area is available at site. Remaining Green area will be developed as per the green belt development plan submitted at the time of presentation. The species with heavy foliage, broad leaves and wide canopy cover will be preferred.
3.	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. Plantation to be ensured species (cut) to species (planted). Area of green belt development shall be provided as per the details provided in the project document.	Tree cutting is not involved in this project. Green area will be developed as per the green belt development plan submitted at the time of presentation
4.	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	Excavated soil is stored at separate place with proper covering and will be used for site leveling, back filling/filling raft and road construction. Top layer of soil is stored and used for landscaping /horticulture development work.

	site.	
<b>8.</b>	<b>Transport</b>	
<b>1.</b>	<p>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.</p> <p>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.</p>	The parking will be provided as per local regulations and bylaws, parking plan has already submitted with EC application. Entry and Exit points have been properly designed.
<b>2.</b>	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 nonpeak hours.	Pollution check certified vehicles is being used for construction work. All vehicles, equipment's and construction machines conform to applicable air and noise emission standard.
<b>3.</b>	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.	Fully internalized parking is provided. No traffic congestion near the entry and exit point will occur. Bell mouth shaped entry and exit has been provided.
<b>9</b>	<b>Human health issues</b>	
<b>1.</b>	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.	Adequate PPE (masks, hard hats Helmet, safety shoes, reflective jackets etc, as required) has been provided to labours at construction site.
<b>2.</b>	For indoor air quality the ventilation provisions as per National Building Code of India.	The ventilation system has been designed as per NBC norms.
<b>3.</b>	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall	Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan have already been submitted along with application.

	be implemented.	
4.	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.	All the necessary and requisite facilities like fuel for cooking, mobile toilets, safe drinking water, medical health care has been provided to the construction workers. Temporary structures provided for the housing to the labors will be removed after the completion of the project. Photograph of the same is attached as <b>Annexure 9</b> .
5.	Occupational health surveillance of the workers shall be done on a regular basis.	Occupational health surveillance of the workers is being done on a regular basis.
6.	A First Aid Room shall be provided in the project both during construction and operations of the project.	First Aid Room has been provided at site during construction phase. Photograph of the same is attached as <b>Annexure 9</b> . First aid facility is available at site for operation phase of the project.
<b>10</b>	<b>Corporate Environment Responsibility</b>	
1.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	Noted.
2.	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.	Noted and same will be complied.
3.	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 to the head of the organization.	Separate environment cell has been prepared at project site under the control of senior Executive, who directly reports to the head of the organization.
4.	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 to any other purpose. Year wise progress of implementation of	Action plan for implementing the environment management plan and environment conditions along with the responsibility has been prepared. Fund allocated for the environment management is being spent at site.

	action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	
<b>11.</b>	<b>Miscellaneous</b>	
<b>1.</b>	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.	Advertisement in the local newspaper has been done for the grant of environment clearance.
<b>2.</b>	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.	Noted.
<b>3.</b>	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.	Status of compliance of the stipulated environment clearance conditions, including results of monitored data will be uploaded on website and the same will be updated on half yearly basis.
<b>4.</b>	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.	Six-monthly compliance reports is being submitted regularly.
<b>5.</b>	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 will be submitted during complete operation phase of the project.
<b>6.</b>	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.	Same will be complied before the start of operation phase.
<b>7.</b>	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Project Authorities will strictly follow all the stipulations made by the State Pollution Control Board and the State Government.

8.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	We will abide by all the commitments and recommendations made in the EIA/EMP report and also during presentation to the Expert Appraisal Committee.
9.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	No further expansion or modifications in the project will be done without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
10.	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.	We do agree to the fact.
11.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted and agreed
12.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted and agreed
13.	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.	Noted, project authorities will provide full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
14.	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.
15.	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.	Noted.

**CHAPTER-3****DETAILS OF ENVIRONMENTAL MONITORING****3.1 AMBIENT AIR QUALITY MONITORING****3.1.1 Ambient Air Quality Monitoring Stations**

Ambient air quality monitoring has been carried out at one location in the month of March 2025, being near main gate to assess the ambient air quality of Project Site. This will enable to have an analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. The location of the ambient air quality monitoring station is given in **Table 3.1**.

**Table 3.1 Details of Ambient Air Quality Monitoring Stations**

S. No.	Location Code	Location Name/ Description	Environmental Setting
1.	AAQ-1	Project Site	Institute

**3.1.2 Ambient Air Quality Monitoring Methodology**

Monitoring was conducted in respect of the following parameters:

- Particulate Matter 2.5 (PM<sub>2.5</sub>)
- Particulate Matter 10 (PM<sub>10</sub>)
- Sulphur Dioxide (SO<sub>2</sub>)
- Oxide of Nitrogen (NO<sub>2</sub>)
- Carbon Monoxide (CO)

The ambient air sampling was carried out continuously for 24 hrs. duration for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>2</sub> per day and CO was sampled for 1 hours. The monitoring was conducted for one day. This is to allow a comparison with the National Ambient Air Quality Standards.

The air samples were analyzed as per standard methods specified by Central Pollution Control Board (CPCB) and IS: 5182. The techniques used for ambient air quality monitoring and minimum detectable levels are given in **Table 3.2**.

Fine Particulate Sampler APM 550 instruments have been used for monitoring Particulate Matter 2.5 (PM<sub>2.5</sub> i.e. <2.5 microns), and Respirable Dust Sampler APM 450 was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO<sub>2</sub>, and NO<sub>2</sub>. Bladder and Aspirator bags were used for collection Carbon monoxide samples. NDIR techniques have been used for the estimation of CO.

**Table 3.2: Techniques used for Ambient Air Quality Monitoring**

S. No.	Parameter	Technique	Technical Protocol
1	Particulate Matter 2.5	Fine Particulate Sampler APM 550, Gravimetric Method	IS 5182 (P-24):2019
2	Particulate Matter 10	Respirable Dust Sampler APM 450, with cyclone separator, Gravimetric Method	IS 5182 (P-23):2022
3	Sulphur dioxide	Modified West and Gaeke	IS 5182 (P-2):2023

S. No.	Parameter	Technique	Technical Protocol
4	Oxide of Nitrogen	Jacob & Hochheiser	IS 5182 (P-6):2022
5	Carbon Monoxide	NDIR	IS 5182 (P-10):2019

### 3.1.3 Ambient Air Quality Monitoring Results

The detailed on-site monitoring results of PM 2.5, PM 10, SO<sub>2</sub>, NO<sub>2</sub> and CO are presented in **Table 3.3**.

**Table 3.3: Ambient Air Quality Monitoring Results**

S. No.	Location Code	Location	PM10 (µg/m <sup>3</sup> )	PM2.5 (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )
		Limit	100	60	80	80	4
1.	AAQ1	Project Site	172.0	82.6	8.22	23.4	0.86

### 3.1.4 Discussion on Ambient Air Quality in the Study Area

The levels of PM10 and PM2.5 near main gate of project site is above than permissible limit of 100 µg/m<sup>3</sup> 60 µg/m<sup>3</sup> respectively (for residential, rural and other areas as stipulated in the National Ambient Air Quality Standards). SO<sub>2</sub>, NO<sub>2</sub>, Co were observed within the corresponding stipulated limits (Limit for SO<sub>2</sub>, and NO<sub>2</sub>: 80 µg/m<sup>3</sup> and CO: 4mg/m<sup>3</sup>) at monitoring location.

## 3.2 AMBIENT NOISE MONITORING

### 3.2.1 Ambient Noise Monitoring Locations

The main objective of noise monitoring in the study area is to assess the present ambient noise levels in project site due to various construction allied activities and increased vehicular movement. A preliminary reconnaissance survey has been undertaken to identify the major noise generating sources in the area. Ambient noise monitoring was conducted at 1 location in the month of March, 2025 at the near main gate of the project, site as given in **Table 3.4**.

**Table 3.4: Details of Ambient Noise Monitoring Stations**

S. No.	Location Code	Location Name/ Description	Present Landuse
1.	ANQ1	Project Site	Institute

### 3.2.2 Methodology of Noise Monitoring

Noise levels were measured using integrated sound level meter manufactured by Envirotech Instrument Pvt. Ltd. The integrating sound level meter is an integrating/ logging type with frequency range of 'A' type as per IS 15675 (Part 1) 2005. This instrument is capable of measuring the Sound Pressure Level (SPL), Leq and SEL on digital display.

Noise level monitoring was carried out continuously for 24-hours with one hour interval starting at 11:00 hrs to 10:00 hrs next day. The noise levels were monitored on working days only. During each hour Leq were directly computed by the instrument based on the sound pressure

levels. Lday (Ld), Lnight (Ln) and Ldn values were computed using corresponding hourly Leq. Monitoring was carried out at 'A' response and fast mode.

### 3.2.3 Ambient Noise Monitoring Results

The ambient noise monitoring result are summarized in **Table 3.5**.

**Table 3.5: Ambient Noise Monitoring Results**

Sr. No.	Test Locations	Day Time - dB(A)		Night Time - dB(A)	
		Results	Limits as per CPCB guideline	Results	Limits as per CPCB guideline
1	Near Main Gate	52.7	50	43.1	40

### 3.2.4. Discussion on Ambient Noise Levels in the Study Area

#### **Day Time Noise Levels ( $L_{day}$ ):**

The day time noise level near main gate was found higher than the prescribed limit for Silence area i.e. 50 dB(A).

#### **Night Time Noise Levels ( $L_{night}$ ):**

The night time noise level at main gate was found higher than the prescribed limit for Silence area i.e. 40 dB(A)

## 3.3 GROUNDWATER QUALITY MONITORING

### 3.3.1 Groundwater Quality Monitoring Locations

Keeping in view the importance of groundwater as an important source of drinking water to the local population, sample of ground water was collected from Santoshi Mata Mandir, Nankari Kalyanpur nearby project site for the assessment of impacts of the project on the groundwater quality.

Water sample was collected from one location from Santoshi Mata Mandir, Nankari Kalyanpur nearby the project site. The sample was analyzed for various parameters to compare with the standards for drinking water as per IS: 10500 for ground water sources. The details of water sampling locations are given in **Table 3.6**.

**Table 3.6: Details of Water Quality Monitoring Station**

S. No.	Location Code	Location Name/ Description
1.	GW 1	Santoshi Mata Mandir, Nankari Kalyanpur (26°30'56.43"N 80°13'10.83"E)

### 3.3.2 Methodology of Groundwater Quality Monitoring

Sampling of ground water was carried out in March, 2025. Samples were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample were properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures. Sample for chemical analysis was collected in polyethylene carboys. Sample collected for metal content were acidified to <2 pH with 1 ml HNO<sub>3</sub>. A sample for bacteriological analysis was collected in sterilized glass bottles.

Soon after the completion of sampling, chain of custody sheets for the samples are filled in and then they were transported by road to IR&DH for further analysis. Proper care was taken during packing and transportation of samples. All the samples reached the central laboratory within the holding times for different parameters. After ensuring the same the samples were forwarded immediately for analysis.

The samples were analyzed as per the standard procedures specified in 'Standard Methods for the Examination of Water and Wastewater' published by American Public Health Association (APHA) and CPCB. The analytical techniques and the test methods adopted for testing of ground water are given in **Table 3.7**.

### 3.3.3 Groundwater Quality Monitoring Results

The detailed groundwater quality monitoring results are presented in **Table 3.7**.

**Table 3.7: Groundwater Quality Monitoring Results**

S No.	Parameter	Test Protocol	Results	Unit	Requirements as per IS 10500- 2012	
					Acceptable Limit ( Max)	Permissible limits (Max)
1.	pH	IS 3025 P-11 1983	7.75	--	6.5-8.5	No Relaxation
2.	Turbidity	IS 3025 P-10 (1984)	<1.0	NTU	1	5
3.	Total Hardness	IS 3025 P-21 (2009)	317.0	mg/l	200	600
4.	Total Dissolved Solids (TDS)	IS 3025 P-16(1984)	812.0	mg/l	500	2000
5.	Calcium as Ca	IS 3025 P-40 (1991)	60.48	mg/l	75	200
6.	Magnesium as Mg	IS 3025 P-46 (1994)	40.28	mg/l	30	100
7.	Total Alkalinity as CaCO <sub>3</sub>	IS 3025 P-23 (1986)	394.0	mg/l	200	600
8.	Chloride as Cl	IS 3025 P-32 (1988)	182.0	mg/l	250	1000
9.	Barium as Ba	Annex F of IS:13428	<0.05	mg/l	0.7	No Relaxation
10.	Ammonia as N	IS 3025 P-34 (1988)	<0.1	mg/l	0.5	No Relaxation
11.	Sulphate as SO <sub>4</sub>	IS 3025 P-24 (1986)	48.6	mg/l	200	400
12.	Nitrate as NO <sub>3</sub>	IS 3025 P-34 (1988)	17.22	mg/l	45	No Relaxation
13.	Fluoride as F	APHA,22nd Edition	0.28	mg/l	1	1.5
14.	Iron as Fe	IS 3025 P-53 (2003)	<0.1	mg/l	1.0	No Relaxation
15.	Aluminium as Al	IS 3025 P-55( 2003)	<0.01	mg/l	0.03	0.2
16.	Anionic Detergent	Annex K of IS:13428	<0.05	mg/l	0.2	1
17.	Phenolic Compounds	IS 3025 P-43 (1992)	<0.001	mg/l	0.001	0.002
18.	Boron as B	IS 3025 P-57 (2005)	<0.1	mg/l	0.5	2.4
19.	Chromium as Cr	IS 3025 P-52 (2003)	<0.01	mg/l	0.05	No Relaxation
20.	Lead as Pb	IS 3025 P47 (1994)	<0.01	mg/l	0.01	No Relaxation
21.	Copper as Cu	IS 3025 P42 (1992)	<0.01	mg/l	0.05	1.5
22.	Mercury as Hg	IS 3025 P-48 (1994)	<0.001	mg/l	0.001	No Relaxation
23.	Manganese as Mn	IS 3025 P-59 (2006)	<0.01	mg/l	0.1	0.3

24.	Zinc as Zn	IS 3025 P-49 (1994)	<0.01	mg/l	5	15
25.	Arsenic as As	IS 3025 P-37 (1988)	<0.01	mg/l	0.01	No Relaxation
26.	Nickel as Ni	IS 3025 P-54 (2003)	<0.01	mg/l	0.02	No Relaxation
27.	Cadmium as Cd	IS 3025 P-41 (1992)	<0.001	mg/l	0.003	No Relaxation

### 3.3.4 Discussion on Groundwater Quality in the Study Area

From the above tables, it is observed that all physical and chemical parameters are found within the permissible limits. However, parameters like Total Hardness, Total Dissolve Solid, Total Alkalinity, and Magnesium exceeds the acceptable limit as per IS:10500 standards

## 3.4 SOIL MONITORING

### 3.4.1 Soil Monitoring Locations

The objective of the soil monitoring is to identify the impacts of ongoing project activities on soil quality and also predict impacts, which have arisen due to execution of various constructions allied activities. Accordingly, a study of assessment of the soil quality has been carried out.

To assess impacts of ongoing project activities on the soil in the area, the physico-chemical characteristics of soil was examined by obtaining soil sample from selected point and analysis of the same. One sample of soil was collected from the project site for studying soil characteristics, the location of which is listed in **Table 3.6**.

**Table 3.7 Details of Soil Quality Monitoring Location**

S. No.	Location Code	Location Name/ Description
1.	S1	Project Site

### 3.4.2 Methodology of Soil Monitoring

The sampling has been done in line with IS: 2720 & Methods of Soil Analysis, Part-1, 2nd edition, 1986 of American Society for Agronomy and Soil Science Society of America. The homogenized sample was analyzed for physical and chemical characteristics (physical, chemical and heavy metal concentrations). The soil samples was collected in the month of March, 2025.

The sample has been analyzed as per the established scientific methods for physico-chemical parameters. The heavy metals have been analyzed by using Atomic Absorption Spectrophotometer and Inductive Coupled Plasma Analyzer.

### 3.4.3 Soil Monitoring Results

The physico-chemical characteristics of the soil, as obtained from the analysis of the soil sample, are presented in **Table 3.7**.

**Table 3.8: Physico-Chemical Characteristics of Soil in the Study Area**

S. No.	Parameter	Test Method	Results	Unit
1.	pH	IS 2720 P-26 (1987)	8.15	--
2.	Conductivity	IS 14767 (RA 2016)	395.0	μS/cm
3.	Moisture	IS 2720 P-25 (1972)	10.4	% by mass
4.	Water Holding Capacity	IRDH/SOP-SL/07	20.22	%
5.	Specific Gravity	IS 2720 P-3 (1980)	1.93	-
6.	Bulk density	IRDH/SOP-SL/06	1.42	gm/cc
7.	Chloride	IRDH/SOP-SL/14	265.0	mg/kg
8.	Calcium	IRDH/SOP-SL/17	1272.0	mg/kg
9.	Sodium	IRDH/SOP-SL/11	153.0	mg/kg
10.	Potassium	IRDH/SOP-SL/12	41.6	mg/kg
11.	Magnesium	IRDH/SOP-SL/16	218.0	mg/kg
12.	Organic matter	IS 2720 P-22 (1972)	0.50	% by mass
13.	Cation Exchange Capacity (CEC)	IRDH/SOP-SL/09	14.2	meq/100gm
14.	Available nitrogen	IS 14684(1999)	46.5	mg/kg
15.	Available Phosphorous	IRDH/SOP-SL/10	7.17	mg/kg
16.	Iron as Fe	IRDH/SOP-SL/22	1365.0	mg/kg
17.	Copper as Cu	IRDH/SOP-SL/21	16.6	mg/kg
18.	Zinc as Zn	IRDH/SOP-SL/20	28.2	mg/kg
19.	Texture	IRDH/SOP-SL/08		% by mass
	Sand		60.4	
	Clay		24.1	
	Silt		15.5	
20.	Sodium Adsorption Ratio (SAR)	IRDH/SOP-SL/13	1.04	By calculation

#### 3.4.4 Discussion on Soil Characteristics in the Study Area

The soil in study area is characterized by relatively less organic content. During the project development soil will be

disturbed only in a very confined area for foundation work. No chemical or waste will be discharged into the soil. Hence the soil will not be affected by the Project activities.

# **ANNEXURE I**

ENVIRONMENTAL  
CLEARANCE



Government of India  
Ministry of Environment, Forest and Climate Change  
(Issued by the State Environment Impact Assessment  
Authority(SEIAA), Uttar Pradesh)

To,

The Dean Infrastructure and Planning  
INDIAN INSTITUTE OF TECHNOLOGY KANPUR  
Dean Infrastructure and planning, Faculty building IIT Kanpur, Kalyanpur,  
Kanpur -208016

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity  
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)  
in respect of project submitted to the SEIAA vide proposal number  
SIA/UP/MIS/71689/2022 dated 01 Aug 2022. The particulars of the environmental  
clearance granted to the project are as below.

- |   |  |
|---|--|
| 1. EC Identification No.                      | EC22B039UP174576   |
| 2. File No.                                   | 6906   |
| 3. Project Type                               | Expansion  |
| 4. Category                                   | B1   |
| 5. Project/Activity including<br>Schedule No. | 8(b) Townships and Area Development<br>projects.   |
| 6. Name of Project                            | Expansion of Institutional Project "Indian<br>Institute of Technology", Kanpur, Uttar<br>Pradesh |
| 7. Name of Company/Organization               | INDIAN INSTITUTE OF TECHNOLOGY<br>KANPUR   |
| 8. Location of Project                        | Uttar Pradesh  |
| 9. TOR Date                                   | 07 Feb 2022  |

The project details along with terms and conditions are appended herewith from page  
no 2 onwards.

Date: 17/11/2022

(e-signed)  
Member Secretary  
Member Secretary  
SEIAA - (Uttar Pradesh)

*Note: A valid environmental clearance shall be one that has EC identification  
number & E-Sign generated from PARIVESH. Please quote identification  
number in all future correspondence.*

*This is a computer generated cover page.*

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive,  
and Virtuous Environmental Single-Window Hub)





## State Level Environment Impact Assessment Authority, Uttar Pradesh

Directorate of Environment, U.P.

Vineet Khand-1, Gomti Nagar, Lucknow- 226010

E-Mail- doeuplko@yahoo.com, seiaaup@yahoo.com

Phone no- 0522-2300541

**Reference- MoEFCC Proposal no- SIA/UP/MIS/71689/2021 & SEIAA, U.P File no-6906**

**Sub: Environmental Clearance for Proposed Expansion of Institutional Project “Indian Institute of Technology”, Kanpur, U.P., M/s Indian Institute of Technology Kanpur.**

Dear Sir,

This is with reference to your application / letter dated 30-01-2022, 15-03-2022, 01-08-2022, 25-08-2022 on above mentioned subject. The matter was considered by 683<sup>rd</sup> SEAC in meeting held on 07-09-2022 and 654<sup>th</sup> SEIAA in meeting held on 29-09-2022.

A presentation was made by the project proponent along with their consultant M/s Ind Tech House Consult to SEAC on 07-09-2022.

### **Project Details Informed by the Project Proponent and their Consultant**

The project proponent, through the documents and presentation gave following details about their project –

1. The environmental clearance is sought for Expansion of Institutional Project “Indian Institute of Technology”, Kanpur, U.P., M/s Indian Institute of Technology Kanpur.
2. Environment Clearance for the existing proposal was issued by SEIAA, U.P. vide letter no. 1766/Parya/SEAC/2256/2013/AD (H) dated 11/11/2014 for plot area 42,69,433.52 sqm and Built up area: 6,94,022 sqm respectively.
3. The standard terms of reference in the matter were issued through online Parivesh Portal on 07/02/2022.
4. The pocket area for the proposed development is 101171 sq.m. Total Built up Area after the proposed Expansion is 7,82,988.9 sqm (6,94,022 already constructed + 88,966 proposed expansion).
5. The hospital comprises of 07 nos. number of building blocks with max. number of Floors 10 nos. and number of beds is 607.
6. Certified Compliance Report for the existing project was issued by IRO, MoEFCC, Lucknow on 15/06/2022 and action taken report submitted on 31/08/2022.
7. Comparative details of existing and expansion project:

Sl. No.	Description	As per Previous EC	Addition due to Inclusion of Hospital	Total	Unit
1	Plot Area	42,69,433.52	0.00	42,69,433.52	SQM
2	Built Up Area	6,94,022.90	88,966	7,82,988.90	SQM
3	Proposed FAR	601654.41	77,092	6,78,746.41	SQM
4	Ground Coverage	321718.82	16,659	3,38,377.82	SQM
5	Total Water Requirement	3551	1340	4,891.00	KLD
6	Fresh Water Requirement	2723	536	3,259.00	KLD
7	Waste Water Generation	1035	530	1,565.00	KLD

8	STP Capacity	1245	500	1,745.00	KLD
9	ETP	15	150	165.00	KLD
10	Green Area	1973875.35	18443	19,92,318.35	SQM

8. Salient features of the project:

SN	Description	Particulars	Unit
<b>GENERAL</b>			
1	Pocket Area	101171	SQM
2	Proposed Built Up Area	88966	SQM
3	Number of Building Blocks	7	NOS
4	No of Beds	607	NOS
5	Max Height of Building	30	M
6	Max No of Floors	10	NOS
7	Cost of Project	495	CR
8	Expected Population	5477	PERSONS
9	Proposed Ground Coverage Area	16659.00	SQM
10	Proposed FAR Area	77092.00	SQM
11	Non FAR areas	11874.00	SQM
12	Proposed Total Built Up Area	88966	SQM
<b>WATER</b>			
13	Total Water Requirement	1340	KLD
14	Fresh water requirement	536	KLD
15	Waste water Generation from STP	404	KLD
16	Waste water Generation form ETP	126	KLD
17	Proposed STP Capacity	500	KLD
18	Proposed ETP Capacity	150	KLD
19	Treated Water Available for Reuse	477	KLD
20	Recycled Water	804	KLD
21	Surplus Treated water	327	KLD
<b>RAIN WATER HARVESTING</b>			
22	Rain Water Harvesting Potential	351.95	CUM
23	No of RWH Ponds	02	NOS
<b>PARKING</b>			
24	Total Parking required	500	ECS
25	Total Proposed Parking	530	ECS
<b>GREEN AREAS</b>			
26	Proposed Green Area	18443.00	SQM
<b>WASTE GENERATION</b>			
27	Municipal Solid Waste Generation	1.48	TPD
28	Bio Degradable waste	0.89	TPD
29	Bio Medical Waste	0.91	TPD
30	Quantity of Sludge Generated from STP	53.00	KG/DAY
<b>POWER</b>			
31	Total Power Requirement (Source : UPPCL)	6234	kW
32	DG set backup	9290	KVA

9. Water calculation details:

	POPULATION/ AREA/UNIT	RATE IN LTS	TOTAL QTY IN KL
HOSPITAL BEDS – 607		450	

HOSPITAL ( Multipurpose use )	607	270	163.89
Lab & OT	607	20	12.14
WARD	607	10	6.07
FLUSHING	607	150	91.05
LAUNDRY		125	56.25
KITCHEN - (cooking, washing, utencil wash)	607	10	6.07
OPD PATIENTS			
DOMESTIC	1800	10	18
FLUSHING	1800	5	9
NON RESIDENTIAL (Employees)			
DOMESTIC	2240	25	56
FLUSHING	2240	20	45
TOTAL POPULATION			
	Area in sqm		
GARDENING	18443.00	3.5	65
	KVA		
AIR CONDITIONING (MAKE UP)	4060	10	669.9
TOTAL WATER REQUIREMENT			1340

Fresh water from Ground water extraction	536 KLD
Recycle of treated effluent from STP & ETP	804 KLD
Additional Treated water requirement	327 KLD

10. Landscape plan:

Pocket Area	101171 m <sup>2</sup>
Proposed Green Area (18.23% of pocket area)	18443.00 m <sup>2</sup>
Required No of Trees	1264.6 Nos.
Proposed No. of trees	1270 Nos.

11. Solid waste generation details:

WASTE CATEGORY	QUANTITY	UNIT
TOTAL WASTE Generation	1.48	TPD
ORGANIC/BIODEGRADABLE WASTE	0.89	TPD
IN ORGANIC	0.59	TPD
BMW (1.5 KG/BED )	0.91	TPD
Dry Sludge Generated	53 kg/day	kg/Day

12. The project proposal falls under category–8(b) of EIA Notification, 2006 (as amended).

Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 07-09-2022 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held 29-09-2022 and decided to grant of environmental clearance on the proposal as above alongwith standard environmental clearance conditions prescribed by MoEF&CC, GoI and following additional conditions:

**Additional Conditions:**

1. The project proponent shall submit within the next 3 months the details of solar power plant and solar electrification details within the project.
2. The project proponent shall ensure to plant broad leaf trees and their maintenance. The CPCB guidelines in this regard shall be followed.
3. The project proponent shall submit within the next 3 months the details on quantification of year wise CER activities along with cost and other details. CER activities must not be less 2% of the

project cost. The CER activities should be related to mitigation of Environmental Pollution and awareness for the same.

4. The project proponent shall submit within the next 3 months the details of estimated construction waste generated during the construction period and its management plan.
5. The project proponent shall submit within the next 3 months the details of segregation plan of MSW.
6. The project proponent shall ensure that waste water is properly treated in STP and maximum amount should be reused for gardening flushing system and washing etc. For reuse of water for irrigation sprinkler and drip irrigation system shall be installed and maintained for proper function. Part of the treated sewage, if discharged to sewer line, shall meet the prescribed standards for the discharge.
7. Under any circumstances untreated sewage shall not be discharged to municipal sewer line.
8. The project proponent will ensure that proper dust control arrangements are made during construction and proper display board is installed at the site to inform the public the steps taken to control air pollution as per the Construction and Demolition Waste Management Rules.
9. The project proponent shall install micro solar power plants, toilets in nearby villages, public place or school from CER fund of the project for which E.C is granted in addition to and water harvesting pits and carbon sequestration parks / designed ecosystems.
10. A certificate from Forest Department shall be obtained that no forest land is involved and if forest land is involved the project proponent shall obtain forest clearance and permission of Central and State Government as per the provisions of Forest (conservation) Act, 1980 and submit before the start of work.
11. If the proposed project is situated in notified area of ground water extraction, where creation of new wells for ground water extraction is not allowed, requirement of fresh water shall be met from alternate water sources other than ground water or legally valid source and permission from the competent authority shall be obtained to use it.
12. Provision for charging of electric vehicles as per the guidelines of Gol / GoUP should be submitted within the next 3 months.
13. PP should display EC granted to them on their website. 6-monthly compliance report should be displayed on their website.
14. Project proponent is advised to explore the possibility and getting the cement in container rather through the plastic bag.
15. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
16. In compliance to Hon'ble Supreme Court order dated 13/01/2020 in IA no. 158128/2019 and 158129/2019 in Writ petition no. 13029/1985 (MC Mehta Vs. Gol and others) anti-smog guns shall be installed to reduce dust during excavation.
17. The proponent should provide the electric vehicle charging points and also allocate the safe and suitable place in the premises for the same.
18. Project Proponent should adopt 02 villages & develop them as model village.

#### **Standard Environmental Clearance Conditions prescribed by MoEF&CC:**

1. Statutory compliance:
  1. 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.
  2. 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.

3. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
  4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
  5. 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.
  6. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
  7. 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.
  8. 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.
  9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
  10. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
2. Air quality monitoring and preservation:
1. 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.
  2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
  3. 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 andPM25) covering upwind and downwind directions during the construction period.
  4. 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
  5. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
  6. Wet jet shall be provided for grinding and stone cutting.
  7. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
  8. 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 Rules 2016.
  9. 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 mission standards.
  10. 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. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

11. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Water quality monitoring and preservation:
  1. 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.
  2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
  3. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
  4. 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.
  5. 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.
  6. 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.
  7. 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.
  8. 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.
  9. 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.
  10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
  12. 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.
  13. All recharge should be limited to shallow aquifer.
  14. No ground water shall be used during construction phase of the project.
  15. 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.
  16. 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.

17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, not related water shall be disposed in to municipal drain.
  18. No sewage or untreated effluent water would be discharged through storm water drains.
  19. 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.
  20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odor problem from STP.
  21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Centre Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
4. Noise monitoring and prevention:
1. 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.
  2. 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.
  3. 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.
5. Energy Conservation measures:
1. 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.
  2. Outdoor and common area lighting shall be LED.
  3. 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.
  4. 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.
  5. 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.
  6. 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.

6. Waste Management :

1. 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.
2. 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.
3. 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.
4. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6. 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.
7. 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.
8. 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<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
9. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
10. 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.

7. Green Cover:

1. 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).
2. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. 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.
3. 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.
4. 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.

8. Transport:

1. 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.
2. 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.
  3. 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.
9. Human health issues :
1. 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.
  2. For indoor air quality the ventilation provisions as per National Building Code of India.
  3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
  4. 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.
  5. Occupational health surveillance of the workers shall be done on a regular basis.
  6. A First Aid Room shall be provided in the project both during construction and operations of the project.
10. Corporate Environment Responsibility:
1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
  2. 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.
  3. 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 to the head of the organization.
  4. 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.

11. Miscellaneous:

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
8. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
9. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
10. 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.
11. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
12. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
13. 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.
14. 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.
15. 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.

Concealing factual data and information or submission of false/fabricated data and failure to

comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1986.

This Environmental Clearance is subject to ownership of the site by the project proponents in confirmation with approved Master Plan for Kanpur. In case of violation; it would not be effective and would automatically be stand cancelled.

The project proponent has to ensure that the proposed site is not a part of any no-development zone as required/prescribed/identified under law. In case of the violation this permission shall automatically be deemed to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this Clearance shall automatically be deemed to be cancelled.

Further project proponent has to submit the regular 6 monthly compliance report regarding general & specific conditions as specified in the E.C. letter and comply the provision of EIA notification 2006 (as Amended).

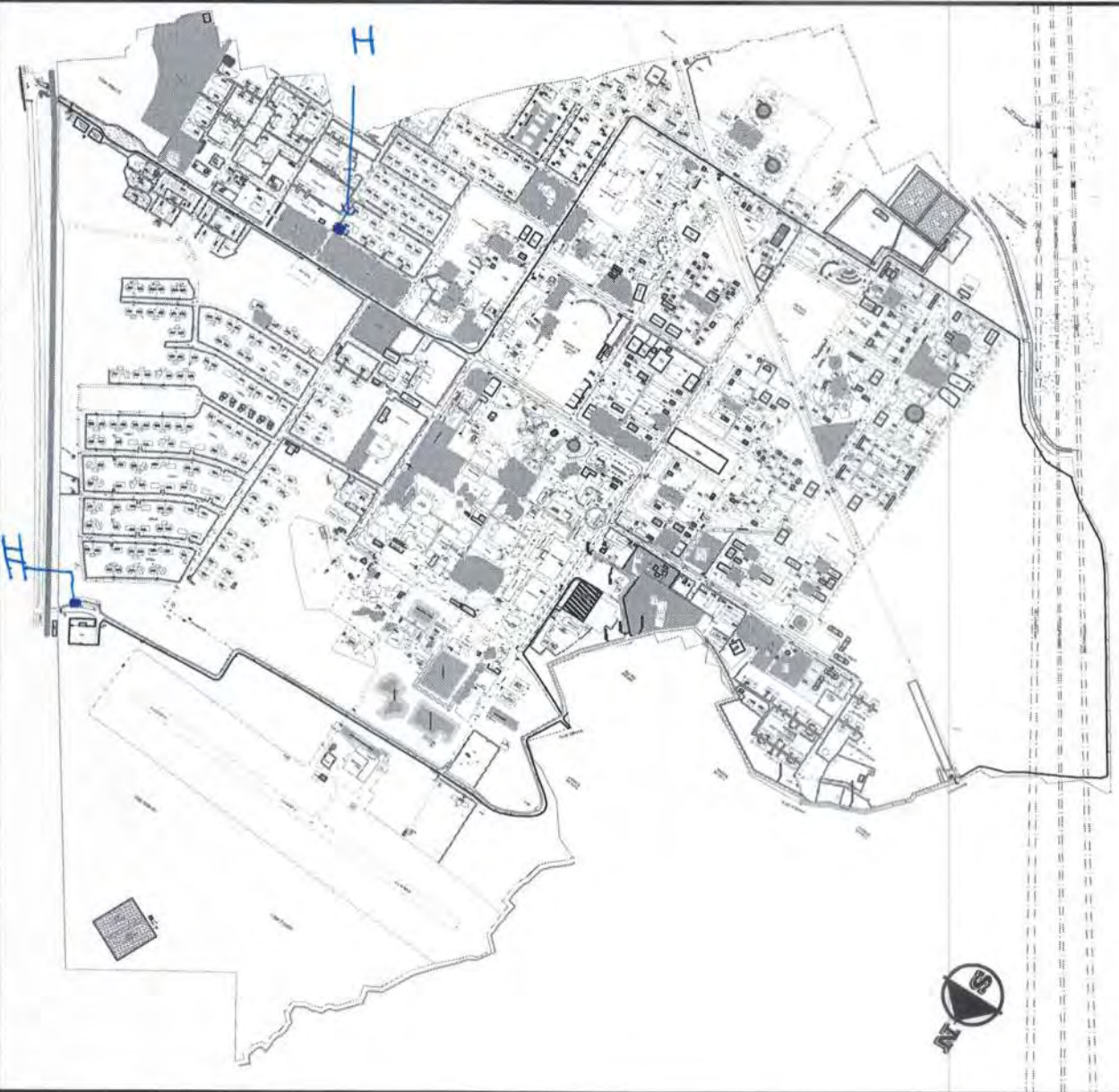
These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.

**Copy, through email, for information and necessary action to –**

1. **The Principal Secretary, Department of Environment, Forest and Climate Change, Government of Uttar Pradesh, Lucknow (email – [soenvups@rediffmail.com](mailto:soenvups@rediffmail.com))**
2. **Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India, 3rd Floor, Prithvi-Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 (email – [sudheer.ch@gov.in](mailto:sudheer.ch@gov.in))**
3. **Deputy Director General of Forests (C), Integrated Regional Office, Ministry of Environment, Forest and Climate Change, Kendriya Bhawan, 5th Floor, Sector “H”, Aliganj, Lucknow – 226020 (email – [rocz.lko-mef@nic.in](mailto:rocz.lko-mef@nic.in))**
4. **District Magistrate Kanpur.**
5. **Member Secretary, Uttar Pradesh Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow-226010 (email – [ms@uppcb.com](mailto:ms@uppcb.com))**
6. **Copy to Web Master for uploading on PARIVESH Portal.**
7. **Copy for Guard File.**

**(Ajay Kumar Sharma)**  
**Member Secretary, SEIAA**

# **ANNEXURE II**



SCALE : 1:5

MASTER PLAN

INDIAN INSTITUTE OF TECHNOLOGY KANPUR

# **ANNEXURE III**

## प्रारूप-घ (संलग्नक-3) औपबन्धिक (प्रोविजनल) अनापत्ति प्रमाणपत्र

यूआईटी संख्या: UPFS/2021/35237/KPN/KANPUR NAGAR/718/DD

दिनांक: 04-08-2021

प्रमाणित किया जाता है कि मैसर्स **INDIAN INSTITUTE OF TECHNOLOGY KANPUR** (भवन/प्रतिष्ठान का नाम) पता **AEROSPACE ENGINEERING DEPARTMENT BUILDING, KALYANPUR, KANPUR NAGAR** तहसील - **SADAR** प्लॉट एरिया **5657 sq.mt** (वर्गमीटर), कुल कवर्ड एरिया **17929.10** (वर्गमीटर), ब्लाकों की संख्या **1** जिसमें

ब्लॉक/टावर	प्रत्येक ब्लाक में तलों की संख्या	बेसमेंट की संख्या	ऊँचाई
AEROSPACE BUILDING	7	1	28.60 mt.

है। भवन का अधिभोग मैसर्स **INDIAN INSTITUTE OF TECHNOLOGY KANPUR** द्वारा किया जायेगा। इनके द्वारा भवन में अग्नि निवारण एवं अग्नि सुरक्षा व्यवस्थाओं का प्राविधान एन0बी0सी0 एवं तत्संबंधी भारतीय मानक ब्यूरो के आई0एस0 के अनुसार किया गया है। इस भवन को औपबन्धिक अनापत्ति प्रमाणपत्र, एन0बी0सी0 की अधिभोग श्रेणी **Educational** के अन्तर्गत इस शर्त के साथ निर्गत किया जा रहा है कि प्रस्तावित भवन में अधिभोग श्रेणी के अनुसार सभी अग्निशमन व्यवस्थाओं के मानकों का अनुपालन पूर्ण रूप से किया जायेगा तथा भवन के निर्माण के पश्चात भवन के अधिभोग से पूर्व अग्नि सुरक्षा प्रमाण पत्र प्राप्त किया जायेगा। ऐसा न करने पर निर्गत प्रोविजनल अनापत्ति प्रमाणपत्र स्वतः ही निरस्त मान लिया जायेगा, जिसके लिए मैसर्स **INDIAN INSTITUTE OF TECHNOLOGY KANPUR** अधिभोगी पूर्ण रूप से जिम्मेदार होगा/होगें।

**Note :** This certificate is issued on the basis of review inspection report of area FSO Fazalganj, construction of building should as per concerned bye laws and all fire fighting system must be installed as per category mention in NBC-2016.

"यह प्रमाण-पत्र आपके द्वारा प्रस्तुत अभिलेखों, सूचनाओं के आधार पर निर्गत किया जा रहा है। इनके असत्य पाए जाने पर निर्गत प्रमाण-पत्र मान्य नहीं होगा। यह प्रमाण-पत्र भूमि / भवन के स्वामित्व / अधिभोग को प्रमाणित नहीं करता है।"

निर्गत किये जाने का दिनांक : 06-08-2021

स्थान : KANPUR NAGAR

हस्ताक्षर (निर्गमन अधिकारी)

(उप निदेशक)



Digitally Signed By  
(MAHENDER PRATAP SINGH)

{49109D522CA55AADA595ECD6024253252F88A849}

06-08-2021

## प्रारूप-घ (संलग्नक-3) Provisional Certificate

यूआईसी संख्या: UPFS/2019/13670/KPN/KANPUR NAGAR/216/CFO

दिनांक: 18-11-2019

प्रमाणित किया जाता है कि मेसर्स **IIT KANPUR NAGAR** (भवन/प्रतिष्ठान का नाम) पता **IIT CAMPUS, KALYANPUR, KANPUR** तहसील - **KANPUR SADAR** जिसमें

ब्लॉक/टावर	तलों की संख्या	बेसमेंट की संख्या	ऊँचाई
CORE ENGI LAB	6	1	25.88 mt.

तथा प्लॉट एरिया **10128.80 sq.mt** है। भवन का अधिभोग **IIT KANPUR NAGAR** (भवन स्वामी/ अधिभोगी अथवा कम्पनी का नाम) द्वारा किया जायेगा। इनके द्वारा अग्नि निवारण एवं अग्नि सुरक्षा के समस्त प्राविधानों का समायोजन एगोबीओसीओ एवं ततसम्बन्धी भारतीय मानक ब्यूरो के आईओएसओ मानकों की संस्तुतियों के अनुरूप किया गया है। इस भवन को प्राविजनल अनापति प्रमाण पत्र (एनओबीओसीओ की अधिभोग श्रेणी) **Business** के अन्तर्गत इस शर्त के साथ दिया जा रहा है कि प्रस्तावित भवन में सभी मानकों का अनुपालन किया जायेगा तथा भवन के निर्माण होने के उपरान्त तथा भवन के अधिभोग से पूर्व अग्नि एवं जीवन सुरक्षा प्रमाण पत्र (Fire & Life Safety Certificate) प्राप्त किया जायेगा।

"यह प्रमाण-पत्र आपके द्वारा प्रस्तुत अभिलेखों, सूचनाओं के आधार पर निर्गत किया जा रहा है। इनके असत्य पाए जाने पर निर्गत प्रमाण-पत्र मान्य नहीं होगा।"

**Note :** Set back as per NBC-2016 Part-3, clause 8.3.19(d) and all fire fighting system must be installed as per NBC-2016.

निर्गत किये जाने का दिनांक: **11-12-2019**

स्थान: **KANPUR NAGAR**



हस्ताक्षर-

**MAHENDER PRATAP SINGH**

**C11D255907D0CA56BAADDE4898150EF856FC9AD9**

*Note:- Kindly check the authentication of NOC by verifying the UID at departmental portal of UP Fire Service.*

कार्यालय मुख्य अग्निशमन अधिकारी, कानपुर नगर

यू0आई0डी0 सं0:सीएफओ / अ0प्र0पत्र-मैनुअल / 18

दिनांक: 04.11.2018

प्रारूप-छ

अग्नि एवं जीवन सुरक्षा प्रमाण पत्र(Fire & Life Safety Certificate)

प्रमाणित किया जाता है कि आई0आई0टी0 कानपुर, इन्स्टीट्यूट वर्क्स डिपार्टमेंट द्वारा आई0आई0टी0 कानपुर परिसर अन्तर्गत निर्मित इण्टरनेशनल स्टूडेंट्स हाउसिंग फैसिलिटी भवन जिसमें तलों की संख्या भूतल+प्रथम+द्वितीय+तृतीय+चतुर्थ+पंचम तल है एवं बेसमेन्ट की संख्या शून्य है, जिसकी अधिकतम ऊँचाई 19.50 मी0 तथा प्लाट एरिया 3651.14 वर्गमी0 है। भवन का अधिभोग अधिशाषी अभियन्ता, आई0डब्ल्यू0डी0, आई0आई0टी0 कानपुर द्वारा किया जा रहा है। इनके द्वारा भवन में अग्नि निवारण एवं अग्नि सुरक्षा व्यवस्थाएँ एन0बी0सी0 एवं तत्सम्बन्धी भारतीय मानक ब्यूरो के आई0एस0 के अनुसार भवन में स्थापित व्यवस्थाओं का अनुरक्षण किया जा रहा है। जिसका निरीक्षण श्री पतिराम सरोज, अग्निशमन अधिकारी फजलगंज द्वारा दिनांक: 02.11.2018 को आई0आई0टी0 कानपुर, इन्स्टीट्यूट वर्क्स डिपार्टमेंट के अधिकृत प्रतिनिधि श्री नरेन्द्र के साथ किया गया, तथा भवन में अधिष्ठापित अग्नि एवं जीवन सुरक्षा व्यवस्थाओं को मानकों के अनुसार यथास्थिति में पाया गया। अतः प्रश्नगत भवन को अग्नि एवं जीवन सुरक्षा प्रमाण पत्र(Fire & Life Safety Certificate) एन0बी0सी0 2016 की रेजीडेन्सियल भवन की (ए-4)-2 श्रेणी के अन्तर्गत वैधता तिथि 04.11.2018 से 03.11.2023 तक 05 वर्ष के लिये इस शर्त के साथ दिया जा रहा कि भवन में सभी मानकों का अनुपालन किया जायेगा तथा भवन के इस प्रमाण पत्र नवीनीकरण निर्धारित समयावधि के अन्तर्गत पुनः कराया जायेगा तथा नवीनीकरण से पूर्व भवन स्थापित अग्निशमन व्यवस्थाओं को कियाशील रखने की जिम्मेदारी आपकी होगी।

सलरन:-सीएफओ कानपुर नगर द्वारा

प्रमाणित एफएसओ की निरीक्षण आख्या।

निर्गत किये जाने का दिनांक: नवम्बर 04, 2018

स्थान:-कानपुर नगर

(एम0पी0सिंह)

मुख्य अग्निशमन अधिकारी,

मुख्य अग्निशमन अधिकारी  
कानपुर नगर

प्रतिलिपि:-

1. अधिशाषी अभियन्ता, आई0डब्ल्यू0डी0, आई0आई0टी0 कानपुर को उपरोक्तानुसार अनुपालन हेतु।
2. एफएसओ फजलगंज को उनकी आख्या के क्रम में अभिलेखार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

सेवा में,

मुख्य अग्निशमन अधिकारी  
कानपुर नगर।

विशय:- आई0आई0टी0 कानपुर नगर परिसर अन्तर्गत निर्मित इण्टरनेशनल स्टूडेन्ट्स हाउसिंग फ़ैसिलिटीज भवन हेतु पूर्णतया अग्निशमन अनापत्ति प्रमाण पत्र निर्गत किये जाने के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक आवेदक श्री तरुण गौतम, एक्सीक्यूटिव इंजीनियर आई.डब्ल्यू.डी. आई.आई.टी. कानपुर द्वारा प्रेषित प्रार्थना पत्र: आई.डब्ल्यू.डी./डिवी0-11/2018/860 दिनांक 31.10.2018 के माध्यम से आई.आई.टी कानपुर नगर परिसर अन्तर्गत निर्मित इण्टरनेशनल स्टूडेन्ट्स हाउसिंग फ़ैसिलिटीज भवन हेतु अग्निशमन अनापत्ति प्रमाण पत्र निर्गत किये जाने की अपेक्षा की गयी है।

प्रश्नगत प्रकरण में आपके पृष्ठांकन आदेश 01.11.2018 के अनुपालन में आई.आई.टी. कानपुर नगर परिसर निर्मित इण्टरनेशनल स्टूडेन्ट्स हाउसिंग फ़ैसिलिटीज भवन में स्थापित अग्नि सुरक्षा व्यवस्थाओं का भौतिक निरीक्षण/परीक्षण मुझ (एफएसओ फजलगंज) द्वारा अधिकृत प्रतिनिधि नरेन्द्र के साथ मानकों के अनुसार किया गया निरीक्षण आख्या निम्नवत है।  
भवन की संरचना:-

1. कुल भूखण्ड एरिया -3651.14 वर्गमीटर है।

क0स0	तल का विवरण	तलवार कवर्ड एरिया वर्गमी0
1	भूतल	1559.49 वर्गमी0
2	प्रथम तल	1451.49 वर्गमी0
3	द्वितीय तल	1451.49 वर्गमी0
4	तृतीय तल	1451.49 वर्गमी0
5	चतुर्थ तल	1451.49 वर्गमी0
6	पंचम तल	1451.49 वर्गमी0

1- बेसमेंट प्रथम का कवर्ड एरिया - शून्य वर्ग मीटर है।

2-बेसमेंट द्वितीय का कवर्ड एरिया- शून्य वर्गमीटर

3- बेसमेंट तृतीय का कवर्ड एरिया - शून्य वर्गमीटर

4-भवन की ऊँचाई- 19.50 मीटर

भवन का अधिभोग एवं हैजार्ड श्रेणी:- प्रश्नगत भवन का अधिभोग एनबीसी की आवासीय भवन की (ए-4)-2 श्रेणी के अन्तर्गत वर्गीकृत किया गया है। संस्थान का हॉस्टल के रूप में अधिभोग किया जा रहा है। औद्योगिक भवन होने पर उसमें प्रयुक्त मैटेरियल का विवरण-निल

ढाँचागत व्यवस्थायें:-

1-पहुंच मार्ग- भवन के सामने 20.00 मी0 चौड़ा रोड एन0बी0सी0 मानको के अनुसार उपलब्ध है। तथा प्रवेश द्वार की चौड़ाई 4.50 मी0 मानकों के अनुसार उपलब्ध है।

2-सेट बैंक:-

अग्रभाग- 7.45 मी0

पूरुवभाग- 7.00 मी0

पार्श्व प्रथम- 7.00 मी0

पार्श्व द्वितीय- 7.00 मी0

भवन का सेट बैंक एन0बी0सी0 एवं भवन निर्माण एवं विकास उपविधि 2008 के सुगंगत मानकों के अनुसार है।

3-निकास मार्ग:- भवन में 1.50 मी० चौड़ाई के 04 स्टेयरकेसों तथा 02 लिफ्टों का प्राविधान किया गया है। ट्रेवलिंग डिस्टेन्स अधिकतम अनुमन्य सीमा के अन्तर्गत है।

रिफ्रूज एरिया:- प्रश्नगत भवन में रिफ्रूज एरिया एन०बी०सी० मानकों के अनुरूप आवश्यक नहीं है।

अग्नि सुरक्षा व्यवस्था:- निर्मित भवन में एनबीसी के सुसंगत मानकों के अनुसार स्थापित पायी गयी।

1. भूमिगत टैंक:- प्रश्नगत भवन में भूमिगत टैंक एन.बी.सी. मानकों के अनुसार आवश्यक नहीं है।

2. पम्प :- एन०बी०सी० मानकों के अनुसार आवश्यक नहीं है।

3. होजरील :- निर्मित भवन के प्रत्येक तल पर चार-चार होजरील लैण्डिंग वाल्व आई.एस. 3844 मानकों के अनुसार स्थापित एवं कार्यशील दशा में पायी गयी।

4. डाउन कामर :- प्रश्नगत निर्मित भवन में डाउन कामर सिस्टम एन.बी.सी मानकों के अनुरूप प्राविधान किया गया है। जो कार्यशील दशा में पाया गया।

5. प्रस्तावित सम्पूर्ण भवन परिसर में यार्ड हाइड्रेन्ट होज केबिनेट एवं उसमें डिलीवरी होज तथा ब्रान्च पाइप एवं इन्लेट का प्राविधान आई.एस. 13039:1991 के अनुसार आवश्यक नहीं है।

6. हस्तचालित इलेक्ट्रिक फायर अलार्म सिस्टम:- भवन में मैनुअल आपरेटेड इलेक्ट्रिक फायर एलार्म सिस्टम का प्राविधान एन०बी०सी० मानकों के अनुसार किया गया है।

7. स्व चालित डिटेक्शन एण्ड एलार्म सिस्टम:- भवन में आटोमैटिक डिटेक्शन एण्ड अलार्म सिस्टम का प्राविधान एन०बी०सी० मानकों के अनुसार किया गया है।

8. स्व चालित स्प्रिंकलर सिस्टम :- प्रश्नगत भवन में आटोमैटिक स्प्रिंकलर सिस्टम का प्राविधान एन०बी०सी० मानकों के अनुसार आवश्यक नहीं है।

9. टैरिस टैंक :- प्रश्नगत भवन के टैरिस पर 25,000- 25,000 ली० क्षमता के 02 टैरिस टैंकों का प्राविधान किया गया है। जो पानी से भरा पाया गया।

10. टैरिस पम्प :- प्रश्नगत भवन के टैरिस पर टैरिस टैंक के पास 450-450 एलपीएम क्षमता के टैरिस पम्पों का प्राविधान एनबीसी मानकों के अनुसार स्थापित किया गया है। जो कार्यशील दशा में पाये गये।

11. प्राथमिक अग्निशमन उपकरण(फायर एक्सटिंग्यूशर):- प्रश्नगत भवन के प्रत्येक तल पर प्राथमिक अग्निशमन उपकरण (फायर एक्सटिंग्यूशर)आई०एस०-2190 के अनुसार कार्यशील दशा में लगे पाये गये।

12. स्मोक एक्सट्रैक्शन सिस्टम:- स्मोक एक्सट्रैक्शन सिस्टम - आवश्यक नहीं है।

ए- फायर चैक डोर , स्मोक चैक डोर की लोकेशन व रेटिंग का - आवश्यक नहीं है।

बी- सिस्टम की मैकअप एयर हेतु व्यवस्था - आवश्यक नहीं है।

सी- स्मोक रिजर्व वायर एवं अनुमानित स्मोक लेयर आदि को आधारित करते हुए एक्सट्रैक्शन सिस्टम का तकनीकी विश्लेषण - आवश्यकता नहीं है।

13. प्रेशराइजेशन प्रणाली:-

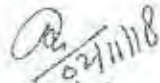
1. स्थानों पर प्रेशराइजेशन की गयी है व प्रयुक्त होने वाले फैंस की डक्टिंग इत्यादि आवश्यक नहीं है।

2. प्रेशराइजेशन सिस्टम , डिटेक्शन से इण्टरलॉकिंग- आवश्यक नहीं है।

14. एग्जिट साईनेज :-सम्पूर्ण भवन में एग्जिट साईनेज स्थापित किये गये हैं।

15. पी०ए० सिस्टम:- पी०ए० सिस्टम की व्यवस्था सम्पूर्ण भवन में स्थापित है।

अतः उपरोक्त अग्निशमन व्यवस्थाओं को सदैव कार्यशील दशा में बनाये रखने की शर्त पर आई.आई.टी. कानपुर नगर परिसर अन्तर्गत निर्मित इण्टरनेशनल स्टूडेंट्स हाउसिंग फ़ैसिलिटीज भवन हेतु अग्निशमन पूर्णतया अनापत्ति प्रमाण पत्र निर्गत किये जाने की संस्तुति आख्या आवश्यक कार्यवाही हेतु सादर सेवा में प्रेषित है।

  
(पी०आर०सरोज)  
अग्निशमन अधिकारी  
अग्निशमन अधिकारी  
कानपुर नगर

# **ANNEXURE IV**



**UTTAR PRADESH POLLUTION CONTROL BOARD**  
**Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010**

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.com, Website: www.uppcb.com

**Validity Period :06/03/2024 To 05/03/2029**

**Ref No. - 201993/UPPCB/Kanpur Nagar(UPPCBRO)/CTE/KANPUR Dated:- 11/03/2024**  
**NAGAR/2024**

To ,

Shri SAMIT RAY CHAUDHURI  
M/s INDIAN INSTITUTION OF TECHNOLOGY KANPUR  
Indian Institute of Technology”, Kanpur, U.P.,  
KANPUR NAGAR

**Sub :** Consent to Establish for New Unit/Expansion/Diversification under the provisions of Water (Prevention and control of pollution) Act, 1974 as amended and Air (Prevention and control of Pollution) Act, 1981 as amended.

Please refer to your Application Form No.- 24660489 dated - 08/02/2024. After examining the application with respect to pollution angle, Consent to Establish (CTE) is granted subject to the compliance of following conditions :

1. Consent to Establish is being issued for following specific details :

A- Site along with geo-coordinates :

B- Main Raw Material :

Main Raw Material Details		
Name of Raw Material	Raw Material Unit Name	Raw Material Quantity
NA as it is 607 bedded hospital	Metric Tonnes/Day	0

C- Product with capacity :

Product Detail	
Name of Product	Product Quantity
NA as it is 607 bedded hospital	0

D- By-Product if any with capacity :

By Product Detail			
Name of By Product	Unit Name	Licence Product Capacity	Install Product Capacity
NA as it is 607 bedded hospital	Metric Tonnes/Day	0	0

2. Water Requirement (in KLD) and its Source :

Source of Water Details		
Source Type	Name of Source	Quantity (KL/D)
Ground Water (within premises)	Domestic	536.0
Other	Treated water	804.0

3. Quantity of effluent (In KLD) :

<b>Effluent Details</b>	
<b>Source Consumption</b>	<b>Quantity (KL/D)</b>
Domestic	404.0
Industrial	126.0

4. Fuel used in the equipment/machinery Name and Quantity (per day) :

<b>Fuel Consumption Details</b>		
<b>Fuel</b>	<b>Consumption(tpd/kld)</b>	<b>Use</b>
Diesel	4.0	DG set for Emergency Backup

5. For any change in above mentioned parameters, it will be mandatory to obtain Consent to Establish again. No further expansion or modification in the plant shall be carried out without prior approval of U.P. Pollution Control Board.

For any change in above mentioned parameters, it will be mandatory to obtain Consent to Establish again. No further expansion or modification in the plant shall be carried out without prior approval of U.P. Pollution Control Board.

2. You are directed to furnish the progress of Establishment of plant and machinery, green belt, Effluent Treatment Plant and Air pollution control devices, by 10th day of completion of subsequent quarter in the Board.
3. Copy of the work order/purchase order, regarding instruction and supply of proposed Effluent Treatment Plant/Sewerage Treatment Plant /Air Pollution control System shall be submitted by the industry till 05/03/2029 to the Board.
4. Industry will not start its operation, unless CTO is obtained under water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and control of Pollution) Act, 1981 from the Board.
5. It is mandatory to submit Air and Water consent Application, complete in all respect, four months before start of operation, to the U.P. Pollution Control Board.
6. Legal action under water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 may be initiated against the industry With out any prior information, in case of non compliance of above conditions.

**Specific Conditions:**

1. This CTE of M/s INDIAN INSTITUTE OF TECHNOLOGY KANPUR is valid for establishment of 607 bedded hospital in Plot Area 101171 Sqmt and Builtup area 88966 Sqmt in the IIT, Kanpur premises.
2. The Project Proponent shall install ETP of capacity 150 KLD for treatment of waste water generated from the operation theatre, labor ward, laboratory etc, as per the proposal submitted and the treated water shall be reused for flushing, Cooling and Gardening etc.
3. The Project Proponent shall install STP of capacity 500 KLD for treatment of domestic effluent and the treated water shall be reused for flushing, Cooling and Gardening etc.
4. Project shall comply with the conditions of Environmental Clearance issued by SEIAA vide EC Identification No. EC22B039UP174576 dated 17.11.2022.
5. Proper dust control measures shall be taken during construction and provisions of Construction and Demolition Waste Management Rules 2016 shall be effectively implemented.
6. Necessary permission for withdrawal of ground water shall be taken from UPGWA and rain water harvesting system shall be installed as per guidelines of ground water authority.
7. Green Belt shall be developed and maintained as per the guidelines issued by the Board vide office order dated 16/02/2018, which is available on Board's Website- [www.uppcb.com](http://www.uppcb.com).
8. Project shall comply with provisions of Bio medical Waste (Management and Handling) Rules 2016.
9. Project shall take membership of Common Bio-Medical Waste Treatment and disposal facility before start of hospital for effective disposal of generated BMW and shall have proper arrangement for segregation and temporary storage of BMW as per provisions of Bio medical Waste (Management and handling) Rules 2016.
10. Onsite emergency plan approved by the competent authority shall be submitted to UPPCB.
11. Project shall install at least 0.2KVA mt high stack from roof level along with acoustic enclosures on DG sets of capacity 1010 KVA- 09 Nos. and DG set of capacity 200 KVA-01 No., for power backup.
12. The dust emission from the construction sites will be completely controlled and all precautions will be taken as per the provisions of Construction & Demolition Waste Management Rules 2016.
13. Project shall comply with the provisions of Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended.
14. Project shall comply with the provisions of Solid Waste Management Rules 2016 and provide facility for safe disposal of generated solid waste within the premises.
15. To ensure the compliance of CTE conditions, Bank Guarantee of Rupees 10,00,000/- in the prescribed format shall be submitted to the Board within 15 days, otherwise this CTE shall deemed to be automatically cancelled.

Please note that consent to Establish will be revoked, in case of, non compliance of any of the above mentioned conditions. Board reserves its right for amendment or cancellation of any of the conditions specified above. Industry is directed to submit its first compliance report regarding above mentioned specific and general conditions till 11/04/2024 in this office. Ensure to submit the regular compliance report otherwise this Consent to Establish will be revoked.

**Chief Environmental Officer Circle-2**

Dated:- 11/03/2024

**Copy To -**

Regional Officer, UPPCB, Kanpur Nagar with direction to send the compliance report of CTE conditions on quarterly basis to Head Office

**Chief Environmental Officer Circle-2**



## मिशन LIFE - पर्यावरण के लिए जीवन शैली (Lifestyle For Environment) जनसहभागिता का सन्देश



- स्वच्छता – देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेंकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेंकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई – वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइकिलिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय - सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है - वह भी क्या व्यक्तिगत रूप से ? छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- धरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्रथाक्रीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें - उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 - 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रेफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |

# **ANNEXURE V**



## Uttar Pradesh Pollution Control Board

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

**Category : RED**

**Application Id : 28392537**

**222614/UPPCB/Kanpur Nagar(UPPCBRO)/CTO/both/KANPUR NAGAR/2024**

**Date: 07/12/2024**

To,

M/s

**INDIAN INSTITUTE OF TECHNOLOGY**

**CENTRAL OFFICE, IWD, IIT, KANPUR,KANPUR NAGAR,**

**Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule-6(2) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 notified under Environment (Protection) Act, 1986 as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively).**

CCA is hereby granted to **INDIAN INSTITUTE OF TECHNOLOGY** located at **CENTRAL OFFICE, IWD, IIT, KANPUR,KANPUR NAGAR,** subject to the provisions of **the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016** and the orders that may be made further and subject to following terms and conditions :-

1. This CCA **INDIAN INSTITUTE OF TECHNOLOGY** granted for the period from **07/12/2024 to 31/12/2027** and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	N.A.	-	Metric Tonnes/Day

**2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-**

(i) The daily quantity of effluent discharge (KLD) :-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	1.35 MLD	STP	Reused for irrigation, dust suppression and rest shall be discharged as per the prescribed norms.

(ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

### Industrial Effluent Quality Standard

S.No.	Parameter	Standard
-------	-----------	----------

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality. In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	pH	6.5 - 9.0
2	BOD (mg/L)	30 mg/l
3	TSS (mg/L)	100 mg/l
4	Fecal Coliform (MPN/100ml)	1000 (MPN/100 ml)

### 3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

#### Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	D.G. Set 750 KVA	HSD	01	Particulate Matter	As per norms with acoustic enclosure.
2	D.G. Set 750 KVA	HSD	02	Particulate Matter	As per norms with acoustic enclosure.
3	D.G. Set 500 KVA	HSD	03	Particulate Matter	As per norms with acoustic enclosure.
4	D.G. Set 500 KVA	HSD	04	Particulate Matter	As per norms with acoustic enclosure.
5	D.G. Set 500 KVA	HSD	05	Particulate Matter	As per norms with acoustic enclosure.
6	D.G. Set 500 KVA	HSD	06	Particulate Matter	As per norms with acoustic enclosure.
7	D.G. Set 500 KVA	HSD	07	Particulate Matter	As per norms with acoustic enclosure.
8	D.G. Set 500 KVA	HSD	08	Particulate Matter	As per norms with acoustic enclosure.

9	D.G. Set 500 KVA	HSD	09	Particulate Matter	As per norms with acoustic enclosure.
10	D.G. Set 320 KVA	HSD	10	Particulate Matter	As per norms with acoustic enclosure.
11	D.G. Set 320 KVA	HSD	11	Particulate Matter	As per norms with acoustic enclosure.
12	D.G. Set 320 KVA	HSD	12	Particulate Matter	As per norms with acoustic enclosure.
13	D.G. Set 320 KVA	HSD	13	Particulate Matter	As per norms with acoustic enclosure.
14	D.G. Set 320 KVA	HSD	14	Particulate Matter	As per norms with acoustic enclosure.
15	D.G. Set 250 KVA	HSD	18	Particulate Matter	As per norms with acoustic enclosure.
16	D.G. Set 250 KVA	HSD	19	Particulate Matter	As per norms with acoustic enclosure.
17	D.G. Set 320 KVA	HSD	15	Particulate Matter	As per norms with acoustic enclosure.
18	D.G. Set 250 KVA	HSD	17	Particulate Matter	As per norms with acoustic enclosure.
19	D.G. Set 200 KVA	HSD	20	Particulate Matter	As per norms with acoustic enclosure.
20	D.G. Set 50 KVA	HSD	21	Particulate Matter	As per norms with acoustic enclosure.
21	D.G. Set 250 KVA	HSD	16	Particulate Matter	As per norms with acoustic enclosure.

### Emmission Quality Standards

S No.	Stack no	Parameters	Standards
1	01 to 20	Particulate Matter	less than or equal to 0.2 g/kW-hr
2	21	Particulate Matter	less than or equal to 0.3 g/kW-hr

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

(ii) The unit will not use any type of restricted fuel.

iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows :-

Day time : from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

Standards for Noise level in db(A) Leq	Industrial Area		Commercial Area		Residential Area		Silence Zone	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
	75	70	65	55	55	45	50	40

#### 4. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 :-

The Factory Manager of M/s INDIAN INSTITUTE OF TECHNOLOGY. is hereby granted an authorization to operate a facility for collection and storage of Hazardous wastes. The authorization is granted to operate a facility for generation, collection and storage of hazardous wastes within factory premises for following category of wastes:-

S.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity(ton/annum)
1	Sludge and filters contaminated with oil (Sch-1, Cat-3.3)	Through TSDF	2800 Ton/Month
2	Used or Spent Oil/Waste or residues (Schi-1, Cat-5.1, 5.2)	through TSDF/Authorized Recyclers	1047 Ton/Month

**The authorization shall be in force and shall be valid upto 31/12/2027.** The authorization is subject to the conditions stated below and such conditions as may be specified in the rules for the time being in force under Environment (Protection) Act, 1986.

#### Terms and conditions of Hazardous Waste authorization :-

- (i) The authorization shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
- (ii) The authorization and its renewal shall be produced for inspection at the request of an officer authorized by the SPCB.
- (iii) The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the SPCB.
- (iv) Any unauthorized changes in personnel, equipment as working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
- (v) It is the duty of the authorized person to take prior permission of the SPCB to close down the facility.
- (vi) An application for the renewal of an authorization shall be made as laid down under these rules.
- (vii) The unit shall comply with any other conditions specified in the guidelines issued by the MoEF or CPCB/SPCB from time to time.
- (viii) The authorization is valid for temporary storage of Hazardous Waste within premises only.
- (ix) The authorized agency shall ensure that on-line data with regard to quantity and nature of hazardous chemicals being used in the plant as well as air emission and waste generated within premises is displayed on Display Board of size 6x4 feet outside the main factory gate within premises
- (x) It is duty of the authorized person to take prior permission of this Board to close and cleanup the facility for treatment, storage and disposal of hazardous waste.
- (xi) The applicant shall maintain record of hazardous waste in Form-3 and shall submit annual return in Form-4 on or before the 30th day of June following to the financial year to which that return relates.

(xii) In no case any hazardous waste shall be disposed off on land, in any drain, or into any water stream. All spillage must also be safely collected and stored.

(xiii) Before the hazardous waste is stored or dumped in the facility, applicant must conduct a detailed physical and chemical analysis of hazardous waste sample and report to the Board.

(xiv) Dried hazardous sludge from the process in the plant shall be stored in double lined HDPE pit constructed with R.C.C. or such material which does not react with the waste contained in it.

(xv) The storage area should be fenced properly and Sign/Notice Board indicating 'Danger' and 'Hazardous' shall be displayed at appropriate position both in Hindi and English.

(xvi) The industry shall store non-ferrous metal waste, used oil/spent oil waste in sealed drums placed on impervious floor under covered shed. Hazardous waste if required shall be sold only to Registered Recyclers/Re-processors.

(xvii) In case of any transportation of hazardous waste, the details in Form-10 of the Hazardous and Other Wastes Rules, 2016 shall be submitted to the Board.

#### **5. Essential documents to be submitted by the Industry/Unit as Applicable:-**

(i) Annual return in Form-4 and Waste Disposal Manifest in Form-10 under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and Third Party Audit Report.

(ii) Environment Statement in Form-V of Environment (Protection) Rules, 1986.

(iii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.

6. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.

7. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will result in legal action under the aforesaid Acts and Rules.

8. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-<http://www.upecp.in/TrainingSession.aspx> for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.

9. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

#### **General Conditions:-**

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.

2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.

3. Treated Industrial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.

4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.

5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof

6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.

7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
11. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point
12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

**Specific Conditions:-**

1. Institute shall operate and maintain APCS installed on D.G. sets of capacity 750 KVA-02 Nos., 500 KVA-7 Nos., 320 KVA-6 Nos., 250 KVA-4 Nos, 200 KVA-01 No., and 50 KVA -01 No. to achieve the emission standards as prescribed under Environment (Protection) Rules, 1986.
2. Institute shall submit the Stacks /Ambient Air quality monitoring reports of Board's Laboratory/NABL accredited Laboratory within 01 month and thereafter on quarterly basis to the Board.
3. Institute shall establishing Miyawaki forest as per the GO no. 1011/81-7-2021-09(rit)/2016 dated 13.10.2021 of Deptt. of Environment, forest and climate change.
4. Unit shall install and operate Electro Magnetic Flow meter at Water source and outlet of STPs along with connectivity to CPCB and UPPCB server. The logbook of mentioned Flow meters reading shall be maintained.
5. Institute shall treat domestic effluent through 1.35 MLD STPs (100 KLD-13 Nos. and 50 KLD-01 No.) as per the prescribed standards. The treated effluent shall be reused in plantation and dust suppression etc as much as possible and rest shall be discharged in such a manner that no water logging takes place.
6. Institute shall obtain permission from UPGWA for withdrawal of ground water and shall make arrangement for rain water harvesting for recharging ground water as per guidelines of Ground Water Authority.
7. Institute shall comply with the provisions of Hazardous and Other waste (Management & Trans boundary Movement) Rules 2016.
8. Solid waste shall be disposed in such manner, so that no water, air and soil pollution takes place.
9. Institute shall comply with the provisions of SWM Rules 2016 and provide facility for safe disposal of generated solid waste within the premises.
10. Institute shall comply with the Plastic Waste Management Rules 2016 as amended.
11. Institute shall develop and maintain green belt as per the guidelines issued by the Board vide office order dated 16/02/2018, which is available on Board's Website- [www.uppcb.com](http://www.uppcb.com).
12. Institute shall provide at least 0.2KVA mt high stack from roof level along with acoustic enclosures on DG sets.
13. Institute shall submit the Onsite emergency plan approved by the competent authority.
14. Institute shall abide by directions given by Hon'ble Court, MoEF&CC, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time.
15. Consent fees if revised, shall be payable by industry from the date of its applicability.

16. Institute shall comply with the relevant provisions of Environmental Laws.
17. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order.
18. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
19. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
20. An application for the renewal of an authorization shall be made in form 1, before its expiry as laid down in rule. It is further brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 shall be allowed to operate without valid authorization. It is also provided in the same orders that industries which are not complying with the conditions of authorization shall not be allowed to operate. Hence in case you fail to apply for authorization, before its expiry or fail to comply with conditions of the earlier authorization issued to you, closure order shall be issued against your industry without any further notice.
21. The applicant must file returns on prescribed Form 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.
22. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.
23. The authorized person shall not receive, collect, or store any hazardous waste from any unauthorized occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorization of the Board.
24. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorization issued under the Rule – 7 of Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
25. You are directed to display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.

**Chief Environmental Officer Circle-2**

Copy to:

Reginal Officer, UPPCB, Kanpur Nagar with direction to send the compliance report of CCA conditions on quarterly basis to Head Office.

**Chief Environmental Officer Circle-2**



## मिशन LIFE - पर्यावरण के लिए जीवन शैली (Lifestyle For Environment) जनसहभागिता का सन्देश



- स्वच्छता – देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेंकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेंकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई – वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइकिलिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय - सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है - वह भी क्या व्यक्तिगत रूप से ? छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्रथाक्रीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें - उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 - 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रेफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |

# **ANNEXURE VI**

# SOLID WASTE MANAGEMENT



# SOLID WASTE MANAGEMENT

## Solid Waste Management

- Proposed project will generate about **1.48 TPD** wastes including approx. (**0.89 TPD** biodegradable wastes + **0.59 TPD** Non-biodegradable).
- Door to door collection will be implemented with twin bin waste collection system
- Provision of Organic Waste Converter for treatment of biodegradable wastes.
- Recyclable waste shall be handed over to authorized agency.
- Garbage collection room would be provided.
- Transportation and disposal of inert and non salable waste through local authority to common municipal waste disposal site on regular basis

## Hazardous Waste Management

- It shall be maintained as per HWM Rule 2016.
- Used oil/spent oil from DG will be recycled through pollution control board authorized vendor.
- There should not be any ignition source near the storage room.

## E- Waste Management

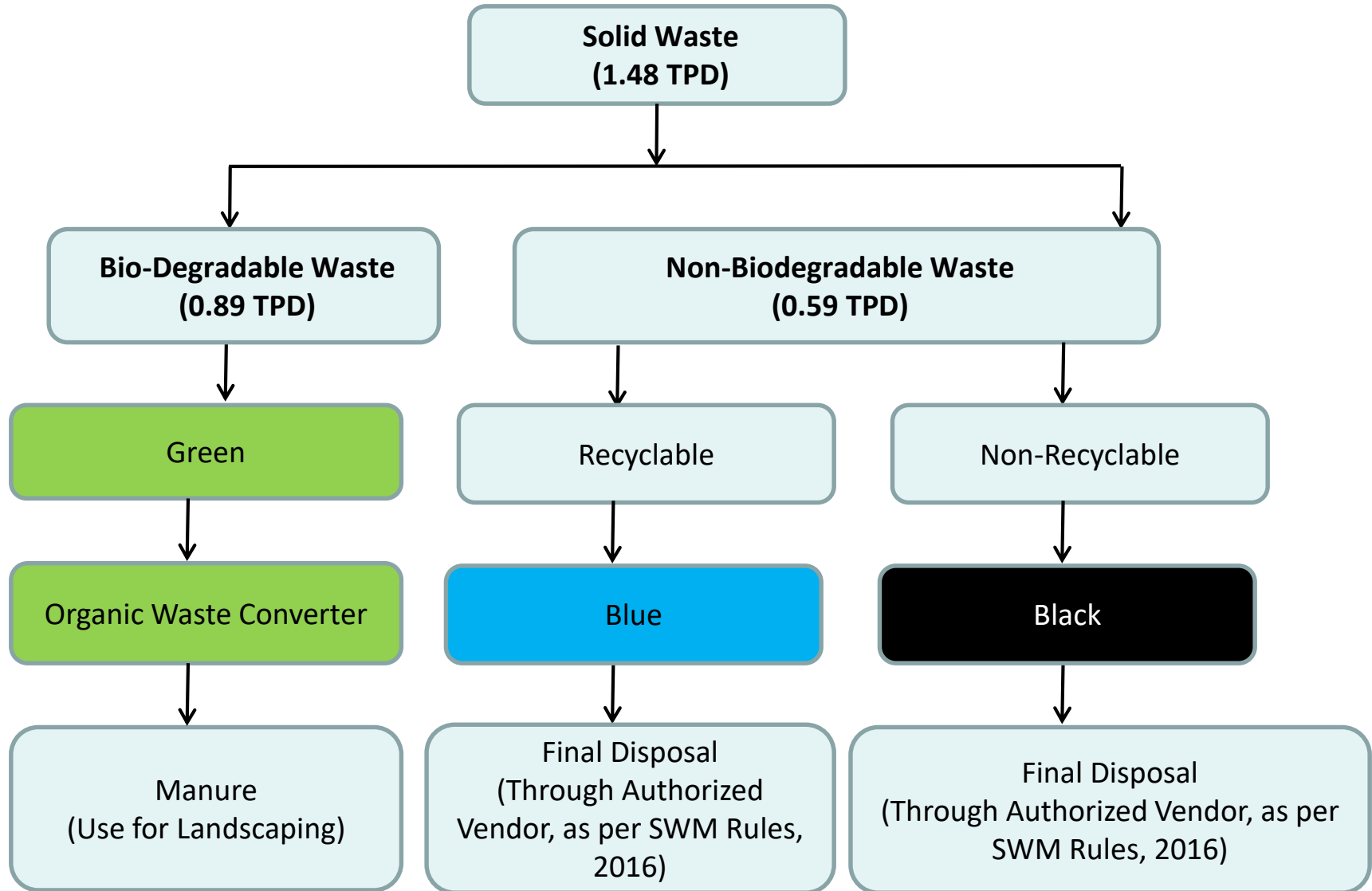
- E-waste will be collected and stored in separate storage area and will be handed over to authorized vendor of UPPCB/ MOEF&CC as per E-waste management & handling rules 2016.

# SOLID WASTE MANAGEMENT

Waste Category	Quantity	Unit
Municipal Solid Waste Generation	1.48	TPD
Bio Degradable waste	0.89	TPD
Non-Biodegradable waste	0.59	TPD
Bio Medical Waste	0.91	LPD
Quantity of Sludge Generated from STP	53	KG/DAY

- 1. Solid waste:** Biodegradable waste will be disposed off through on-site OWC and used as manure in landscaping area whereas non-biodegradable waste will be further segregated into recyclable and non recyclable waste and handed over to authorized recyclers for further process as per SWM Rules, 2016
- 2. Hazardous waste:** Waste oil will be disposed off through authorized recyclers as per Hazardous Waste Management Rules, 2016.
- 3. E- Waste:** Will be separately stored in an exclusive area and disposed off through authorized recyclers.
- 4. Construction Waste:** Excavated soil, concrete waste, brick bats will be used on site as filler material for covering open spaces such as internal roads and pavements remaining construction waste if any will be sent to an approved dumping site.
- 5. Bio-medical waste-** BMW waste will be disposed as per Bio-medical Waste Management Rules, 2016.

# SOLID WASTE MANAGEMENT PLAN- (OPERATIONAL PHASE)

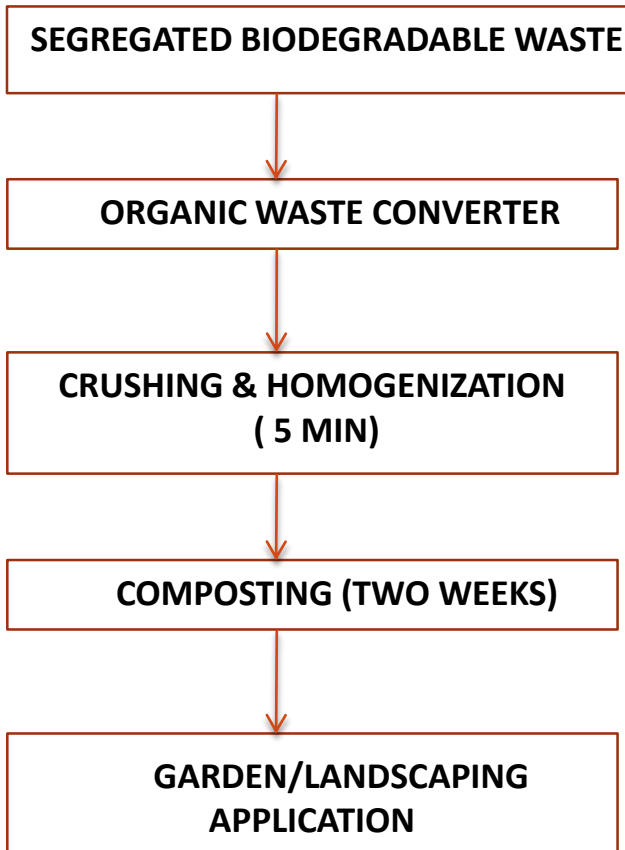


# BIODEGRADABLE WASTE MANAGEMENT-OWC

## Biodegradable Waste Management

The segregated biodegradable waste will be composted in Organic Waste Converter and will be used as manure for landscaping.

### Process:



# SOLID WASTE MANAGEMENT

Impacts	Mitigation Measures
<b>Construction Phase</b>	
Impacts due to construction activity	<ul style="list-style-type: none"><li>▪ Excess excavated earth and construction debris will be dumped in areas designated by local authority</li><li>▪ Materials like cement bags, waste papers, cardboard packing material, unusable steel in bits and pieces will be sold to recyclers.</li><li>▪ Workers handling the solid waste shall be provided with protective gear</li></ul>
<b>Operational Phase</b>	
Impacts due to solid waste disposal	<ul style="list-style-type: none"><li>▪ The quantity of solid waste generated from the project is 1.48 TPD including biodegradable waste.</li><li>▪ Segregation of solid wastes into organic and inorganic components</li><li>▪ Selling of the recyclable inorganic wastes</li><li>▪ Stabilized and dewatered Sludge from STP will be used as manure for horticulture</li></ul>

# **ANNEXURE VII**



जल कल विभाग, नगर निगम, कानपुर  
बेनाझाबर रोड, कानपुर - 208002  
फोन : 0512-25448213, 2549018, फैक्स : 0512-2554072  
Website : www.kanpurjalsansthan.com

पत्रांक-जलकल/223 /अ0अ0-6/14-15  
दिनांक-18/06/2014

सेवा में,  
निदेशक,  
भारतीय प्रौद्योगिकी संस्थान,  
कानपुर।

विषय:-भारतीय प्रौद्योगिकी संस्थान, कानपुर को 2 एम.एल.डी. पानी की आपूर्ति के सम्बन्ध में।

महोदय,  
इस कार्यालय के पत्र सं०-जलकल/179/अ0अ0-6/09/पा0क0 आई0आई0टी0 /14-15 दिनांक-09.06.2014 के क्रम में भारतीय प्रौद्योगिकी संस्थान, कानपुर की पाइप लाइन के बल्क संयोजन हेतु निर्मित कुर्सी क्षेत्रफल (प्रस्तावित क्षेत्र को छोड़कर) के विरुद्ध निर्धारित विकास शुल्क एवं संयोजन शुल्क तथा संयोजन हेतु पाइप लाइन कार्य हेतु प्राकलित धनराशि जलकल विभाग, कानपुर को प्राप्त हो गयी है। जलकल विभाग, नगर निगम, कानपुर के द्वारा 2 एम.एल.डी. पानी की आपूर्ति करने हेतु आवश्यक कार्यवाही सुनिश्चित की जा रही है।

भवदीय

अधिशायी अभियन्ता  
जोन-6

प्रतिलिपि:-निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. महाप्रबन्धक महोदय, जलकल विभाग नगर निगम कानपुर।
2. सचिव, जलकल विभाग नगर निगम कानपुर।
3. वित्त अधिकारी, विभाग नगर निगम कानपुर।

अधिशायी अभियन्ता  
जोन-6

हमारा लक्ष्य स्वच्छ जल ।। शुद्ध जल ही अच्छे स्वास्थ्य की कुंजी है।

# **ANNEXURE VIII**



# IND RESEARCH & DEVELOPMENT HOUSE PVT. LTD.



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TC No. 14384

## TEST REPORT (Water)

Page 1/2

Report No. :	IRDH-0325-COM-WQ-752
Date of Reporting	11/03/2025
Issued to	M/s Ind Tech House Consult, G-8/6, Ground Floor, Sector-11, Rohini, Delhi-110085
Project Name	Proposed Institutional project "Indian Institute of Technology" located at Kanpur, UP.
Nature of Sample	Ground Water
Identification of Sample	Water collected from Santoshi Mata Mandir, Nankari Kalyanpur (26°30'56.43"N 80°13'10.83"E)
Date of Sampling	04/03/2025
Method of sampling	As per standard method
Date of testing:	04/03/2025 To 11/03/2025
Sampled by	IR&DH – Team

### RESULTS

S No.	Parameter	Test Protocol	Results	Unit	Requirements as per IS 10500- 2012	
					Acceptable limits( Max)	Permissible limits(Max)
1.	pH	IS 3025 (P-11):2022	7.75	--	6.5-8.5	No Relaxation
2.	Turbidity	IS 3025 (P-10):2023	<1.0	NTU	1	5
3.	Total Hardness	IS 3025 (P-21):2019	317.0	mg/l	200	600
4.	Total Dissolved Solids (TDS)	IS 3025 (P-16):2023	812.0	mg/l	500	2000
5.	Calcium as Ca	IS 3025 (P-40): 2019	60.48	mg/l	75	200
6.	Magnesium as Mg	IS 3025 (P-46): 2023	40.28	mg/l	30	100
7.	Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (P-23): 2023	394.0	mg/l	200	600
8.	Chloride as Cl	IS 3025 (P-32): 2019	182.0	mg/l	250	1000
9.	Barium as Ba	IS:13428(Annex K):2005	<0.05	mg/l	0.7	No Relaxation
10.	Ammonia as N	IS 3025 (P-34):2023	<0.1	mg/l	0.5	No Relaxation
11.	Sulphate as SO <sub>4</sub>	IS 3025( P-24):2022	48.6	mg/l	200	400
12.	Nitrate as NO <sub>3</sub>	IS 3025 (P-34):2023	17.22	mg/l	45	No Relaxation

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TC No. 14384

Report No. -IRDH-0325-COM-WQ-752

Page: 2/2

S No.	Parameter	Test Protocol	Results	Unit	Requirements as per IS 10500- 2012	
					Acceptable limits( Max)	Permissible limits(Max)
13.	Fluoride as F	APHA-4500 F-D	0.28	mg/l	1	1.5
14.	Iron as Fe	IS 3025 (P-53):2024	<0.1	mg/l	1.0	No Relaxation
15.	Aluminium as Al	IS 3025 (P-55):2019	<0.01	mg/l	0.03	0.2
16.	Anionic Detergent	IS:13428(Annex K):2005	<0.05	mg/l	0.2	1
17.	Phenolic Compounds	IS 3025 (P-43):2022	<0.001	mg/l	0.001	0.002
18.	Boron as B	IS 3025 (P-57):2021	<0.1	mg/l	0.5	2.4
19.	Chromium as Cr	IS 3025 (P-52):2003	<0.01	mg/l	0.05	No Relaxation
20.	Lead as Pb	IS 3025 (P-47):2019	<0.01	mg/l	0.01	No Relaxation
21.	Copper as Cu	IS 3025( P-42):1992	<0.01	mg/l	0.05	1.5
22.	Mercury as Hg	IS 3025 (P-48):2019	<0.001	mg/l	0.001	No Relaxation
23.	Manganese as Mn	IS 3025 (P-59):2023	<0.01	mg/l	0.1	0.3
24.	Zinc as Zn	IS 3025 (P-49):1994	<0.01	mg/l	5	15
25.	Arsenic as As	IS 3025 (P-37):2022	<0.01	mg/l	0.01	No Relaxation
26.	Nickel as Ni	IS 3025 (P-54):2003	<0.01	mg/l	0.02	No Relaxation
27.	Cadmium as Cd	IS 3025( P-41):2023	<0.001	mg/l	0.003	No Relaxation

\*End of Report\*

  
Dr. SNA Rizvi  
Authorized Signatory

- 1- Test Report is limited to the invoice raised/item tested.
- 2-Test Report cannot be reproduced in a part or as whole in court without laboratory permission.
- 3- Samples shall be retained for 4 weeks after test report submitted.

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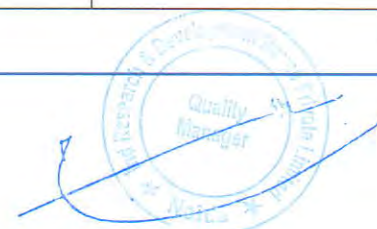
## TEST REPORT (Soil)

Report No. :	IRDH-0325-COM-SL-752
Date of Reporting	11/03/2025
Issued to	M/s Ind Tech House Consult, G-8/6, Ground Floor, Sector-11, Rohini, Delhi-110085
Project Name	Proposed Institutional project "Indian Institute of Technology " located at Kanpur ,UP.
Nature of Sample	Soil
Identification of Sample	Soil Sample collected from Project Site (26°30'16.08"N 80°13'31.84"E)
Date of Sampling	04/03/2025
Method of sampling	As per standard method
Date of testing:	04/03/2025 To 11/03/2025
Sampled by	IR&DH - Team

### RESULTS

S. No.	Parameter	Test Method	Results	Unit
1.	pH	IS 2720( P-26):2021	8.15	--
2.	Conductivity	IS 14767:2021	395.0	µS/cm
3.	Moisture	IS 2720 (P-2):2020	10.4	% by mass
4.	Water Holding Capacity	IRDH/SOP-SL/07	20.22	%
5.	Specific Gravity	IS 2720 (P-3):2021	1.93	-
6.	Bulk density	IRDH/SOP-SL/06	1.42	gm/cc
7.	Chloride	IRDH/SOP-SL/14	265.0	mg/kg
8.	Calcium	IRDH/SOP-SL/17	1272.0	mg/kg
9.	Sodium	IRDH/SOP-SL/11	153.0	mg/kg
10.	Potassium	IRDH/SOP-SL/12	41.6	mg/kg
11.	Magnesium	IRDH/SOP-SL/16	218.0	mg/kg
12.	Organic matter	IS 2720 (P-22):2020	0.50	% by mass
13.	Cation Exchange Capacity(CEC)	IRDH/SOP-SL/09	14.2	meq/100gm
14.	Available nitrogen	IS 14684:2005	46.5	mg/kg
15.	Available Phosphorous	IRDH/SOP-SL/10	7.17	mg/kg

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TC No. 14384

Report No. – IRDH-0325-COM-SL-752

Page: 2/2

S. No.	Parameter	Test Method	Results	Unit
16.	Iron as Fe	IRDH/SOP-SL/22	1365.0	mg/kg
17.	Copper as Cu	IRDH/SOP-SL/21	16.6	mg/kg
18.	Zinc as Zn	IRDH/SOP-SL/20	28.2	mg/kg
19.	Texture	IRDH/SOP-SL/08		% by mass
	Sand		60.4	
	Clay		24.1	
	Silt		15.5	
20.	Sodium Adsorption Ratio(SAR)	IRDH/SOP-SL/13	1.04	By calculation

\*End of Report\*

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## TEST REPORT (Ambient Air)


Report No	IRDH-0325-COM-AAQ-752
Date of Reporting	11/03/2025
Issued to	M/s Ind Tech House Consult, G-8/6, Ground Floor, Sector-11, Rohini, Delhi-110085
Project Name	Proposed Institutional project "Indian Institute of Technology" located at Kanpur ,UP.
Location	Project site
Date of Sampling	04/03/2025 to 05/03/2025
Type of Monitoring	Ambient Air Monitoring (24 hourly)
Parameters to be sampled	PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub> , CO
Weather condition	Clear sky
Method of sampling	As per standard Method
Sample drawn by	IR&DH Team

## RESULTS

S. No	Parameter	Method	Results	Unit	Requirement (CPCB limits)*
1.	Particulate Matter as PM <sub>2.5</sub>	IS 5182 (P-24):2019	82.6	µg/m <sup>3</sup>	60
2.	Particulate Matter as PM <sub>10</sub>	IS 5182 (P-23):2022	172.0	µg/m <sup>3</sup>	100
3.	Sulphur dioxide as SO <sub>2</sub>	IS 5182 (P-2):2023	8.22	µg/m <sup>3</sup>	80
4.	Nitrogen dioxide as NO <sub>2</sub>	IS 5182 (P-6):2022	23.4	µg/m <sup>3</sup>	80
5.	Carbon monoxide as CO	IS 5182 (P-10):2019	0.86	mg/m <sup>3</sup>	4.0

\*Gazette notification published by MoEF&CC, New Delhi on 18 Nov. 2009

\*End of Report\*

  
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TC No. 14384

## TEST REPORT (Ambient Noise)

Report No	IRDH-0325-COM-ANQ-752
Date of Reporting	11/03/2025
Issued to	M/s Ind Tech House Consult, G-8/6, Ground Floor, Sector-11, Rohini, Delhi-110085
Project Name	Proposed Institutional project "Indian Institute of Technology" located at Kanpur ,UP.
Location	Near Main Gate(ANQ 1)
Date of Sampling	04/03/2025 to 05/03/2025
Type of Monitoring	Ambient Noise Monitoring
Method of sampling	As per standard Method
Sampling Protocol	IRDH/SOP-NS/22
Duration of Monitoring	24 hourly
Sample drawn by	IR&DH Team

### RESULTS

All values are in dB (A)

Sr. No.	Locations	Day Time (Lday) 06:00AM - 10:00PM	Night Time (Lnight) 10:00PM - 06:00AM
ANQ -1	Near Main Gate	52.7	43.1

### CPCB Limits

Sr. No		Day Time	Night Time
1.	Industrial area	75	70
2.	Commercial area	65	55
3.	Residential area	55	45
4.	Silence Zone	50	40

\*End of Report\*

  
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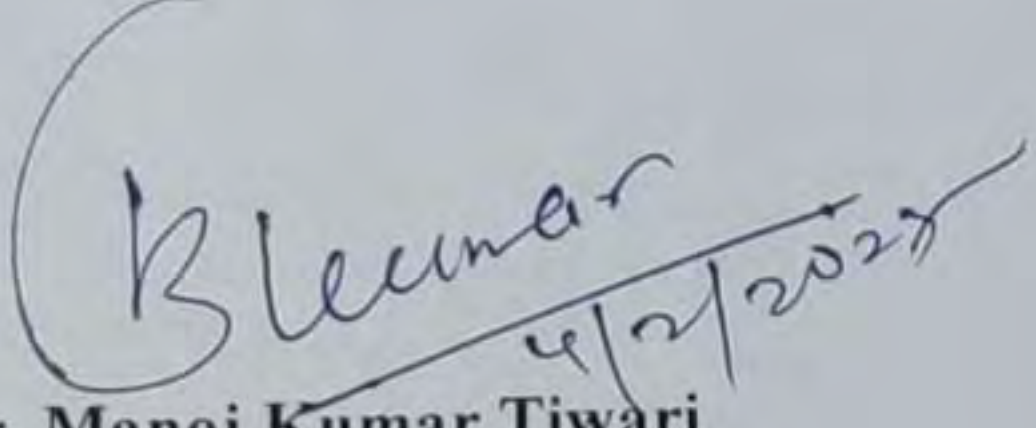
## REPORT

### Effluent Treatment Plant

Parameters	ETP (IW)	ETP (TW)
pH	8.26	8.11
DO	3.23	4.69
BOD	78	5.8
COD	189	62
TDS	945	869

Except pH all parameters in mg/l  
IW - Inlet Water  
TW- Treated Water

Sampling Location: Effluent Treatment Plant installed at Health Centre.  
Sampling Date: 26<sup>th</sup> December, 2024

  
Dr. Manoj Kumar Tiwari

Head / Co-ordinator  
Centre for Environmental Science and Engineering  
Indian Institute of Technology Kanpur



Testing Report of Sewage Treatment Plants

Table-1

Parameters	IW1	TW1	IW2	TW2	IW3	TW3	IW4	TW4
pH	7.72	8.29	7.81	8.37	7.31	7.64	7.93	8.29
D O	3.34	4.56	3.26	4.12	3.47	4.81	3.17	4.92
BOD	62	5.8	59	5.3	74	5.5	69	5.4
COD	167	60	183	57	175	66	161	69
Fluoride	0.748	0.732	0.687	0.614	0.782	0.679	0.638	0.625
TDS	680	547	748	721	635	641	775	737
Chloride	165	220	235	245	185	225	240	250
Sulphate	42	28	45	31	34	27	48	36
Chromium	0.0017	0.0015	0.0013	0.0014	0.0019	0.0017	0.0012	0.0011
Iron	0.16	0.17	0.20	0.19	0.18	0.20	0.19	0.18
Copper	0.0036	0.0017	0.0032	0.0027	0.0041	0.0038	0.0028	0.0030
Arsenic	0.0021	0.0019	0.0025	0.0018	0.0022	0.0023	0.0017	0.0012
Lead	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc	0.0075	0.0049	0.0081	0.0067	0.0038	0.0031	0.0045	0.0048

Table 2

Parameters	IW6	TW6	IW7	TW7	IW10	TW10	IW11	TW11
pH	8.25	8.16	7.76	8.31	7.93	7.69	7.26	7.81
D O	3.58	4.72	3.19	3.98	3.68	4.87	3.38	4.98
BOD	81	6.2	77	5.9	84	6.1	72	5.7
COD	195	63	179	53	157	59	185	67
Fluoride	0.612	0.587	0.716	0.687	0.571	0.566	0.607	0.568
TDS	775	769	720	674	933	921	979	845
Chloride	265	270	255	265	325	320	345	360
Sulphate	30	24	37	26	46	43	48	28
Chromium	0.0021	0.0018	0.0015	0.0012	0.0025	0.0022	0.0019	0.0018
Iron	0.20	0.21	0.19	0.20	0.16	0.18	0.17	0.19
Copper	0.0034	0.0021	0.0048	0.0031	0.0025	0.0022	0.0045	0.0041
Arsenic	0.0027	0.0018	0.0024	0.0015	0.0026	0.0028	0.0031	0.0023
Lead	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc	0.0057	0.0051	0.0071	0.0063	0.0044	0.0036	0.0069	0.0058



भारतीय प्रौद्योगिकी संस्थान कानपुर  
Indian Institute of Technology Kanpur

पर्यावरण विज्ञान और इंजीनियरिंग केन्द्र

CENTRE FOR ENVIRONMENTAL SCIENCE AND ENGINEERING

Except pH all parameters in mg/l

BDL-Below Detection Limit

TW - Treated Water

IW - Inlet Water

**Sampling Location:** Sewage Treatment Plant No.1, 2, 3, 4, 6, 7, 10, 11.

**Sampling Date:** 26<sup>th</sup> December, 2024

*Manoj Kumar Tiwari*  
4/2/2025

**Dr. Manoj Kumar Tiwari**

Head / Co-ordinator

Centre for Environmental Science and Engineering

Indian Institute of Technology Kanpur

# **ANNEXURE IX**

# SITE PHOTOGRAPH











Kanpur Uttar Pradesh Jul 9, 2025, 16:34.

