



सत्यमेव जयते

File No: 21-350/2017-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 21/02/2025



To,

Sh. Raju R Parihar
INDIAN INSTITUTE OF TECHNOLOGY
Indian Institute of Technology Hauz khas Delhi, SOUTH, DELHI, 110016
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Subject: Modification and Expansion of Indian Institute of Technology located at Hauz Khas, Delhi by M/s Indian Institute of Technology– For Grant of Environmental Clearance - reg.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/DL/INFRA2/479971/2024 dated 06/12/2024 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24B3813DL5842255N
(ii) File No.	21-350/2017-IA-III
(iii) Clearance Type	Fresh EC
(iv) Category	B1
(v) Project/Activity Included Schedule No.	8(b) Townships/ Area Development Projects / Rehabilitation Centres,8(b) Townships/ Area Development Projects / Rehabilitation Centres
(vi) Sector	INFRA-2
(vii) Name of Project	Modification and Expansion of Indian Insitute of Technology located at Hauz Khas, Delhi by Indian Insitute of Technology
(viii) Name of Company/Organization	INDIAN INSTITUTE OF TECHNOLOGY
(ix) Location of Project (District, State)	SOUTH, DELHI
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. The project/activity is covered under category 'B' item 8(b) 'Township and Area Development / Rehabilitation Project'

of the Schedule to the EIA Notification, 2006 as amended and requires appraisal at the State level. However, due to the temporary absence of SEIAA / SEAC in Delhi, the proposal has been appraised at the Central level by sectoral EAC as per the provisions of the OM No. IA3-22/10/2022-IA.III [E 177258] dated 02.08.2023.

4. Accordingly, the above-mentioned proposal for Environmental Clearance has been examined by the Expert Appraisal Committee (Infra-2) in its 135th meeting held on 17.12.2024 and 137th meeting held during 29-30 January, 2025.

5. The details of the project, as per the application form, documents submitted by the project proponent, and also as informed during the aforesaid meeting of EAC, are provided below for reference:

i. The project is Expansion & Modification

ii. The project is located at Hauz Khas, Delhi.

iii. The total plot area is 12,64,727 sq. m, FSI area is 8,37,290.86 sq. m. and total built-up area of 9,37,525.856 sq. m. The project should comprise of Academic block, Type VI Faculty Housing, Type Residential Quarter block, Girls Hostel & Boys Hostel etc. The expansion details are given below:

S. No.	Project Features (A)	Existing/As per EC letter no. 21-350/2017-IA-III dated 26.06.2018)	Proposed Modification & Expansion (C)	Total (Post Modification & Expansion) (D= B+C)
1	Project Cost (INR)	458.73 Cr	505.23Cr	963.96 Cr
2	Total plot area (sq. m)	12,64,727	No change	12,64,727
3	Built up area (sq. m)	7,70,563.07	1,66,962.786	9,37,525.856
4	Green belt area (sq. m)	5,89,916	-10,231.9	5,79,684.1
5	Population	27,162	5090	32, 252
6	Addition of Buildings	<ul style="list-style-type: none"> · Nalanda Hostel, · GH Keswani · Research Centre, · Boys Hostel `E', · Indoor Sports Complex, (e) · Activity Centre, · Research and Innovation Park, · Assistant Professor's Apartment, · New Girls Hostel, · Shopping Complex. 	<ul style="list-style-type: none"> · Academic Block-103, · Type VI Faculty Housing, · Type C Residential Quarter block · Boys Hostel · Girls hostel · Electric Substation 	<ul style="list-style-type: none"> · Academic Block-103, · Type VI Faculty Housing, · Type C Residential Quarter block · Electric Substation · Boys Hostel · Girls hostel · Nalanda Hostel, · GH Keswani · Research Centre, · Boys Hostel `E', · Indoor Sports Complex, (e) · Activity Centre, · Research and Innovation Park, · Assistant Professor's Apartment, · New Girls Hostel, · Shopping Complex.
6	Total Water Requirement (KLD)	5416	636	6052
7	Total Domestic Water (KLD)	3127	368	3495
8	Fresh Water (KLD)	2097	268	2365
9	Wastewater (KLD)	2502	314	2816
10	STP capacity (KLD)	3000	380	3380
11	ETP capacity (KLD)	50	-	50
12	RWH pits	141	17	158

13	Parking proposed (ECS)	8057	809 +1773 EV	8866+ 1773 EV
14	Electrical Load (kVA)	11250	8536	19,786
15	Power back-up	12 DG sets of 5,702.5 kVA capacity (1 x 750 kVA, 2 x 625 kVA, 5 x 500 kVA, 3 x 380 kVA & 62.5 kVA)	11 no. of DG set of capacity 7850 kVA. (1 x 100 kVA + 8 x 500 kVA + 5 x 750 kVA)	23 no. of DG set of capacity 13,552.5kVA (6 x 750 kVA, 2 x 625 kVA, 13 x 500 kVA, 3 x 380 kVA, 1x 100 KVA & 1x 62.5 kVA)
16	Total Solid waste (kg/day)	12,099	2218	14,317
17	Project Cost (INR)	458.73 Cr	505.23Cr	963.96 r

iv. During construction phase, total water requirement is expected to be 334 ML which should be met through STP treated water via private tankers. During the construction phase, STP should be provided for disposal of waste water. Temporary sanitary toilets should be provided during peak labor force.

v. During operation phase, the source of water supply should be Delhi Jal Board. The total water requirement for the project should be approx. 4088 KLD (Post Modification & Expansion) out of which domestic water demand is 2444 KLD (Post Modification & Expansion). The freshwater requirement should be 1788 KLD (Post Modification & Expansion). It is expected that the project should generate approx. 2086 KLD of wastewater. The wastewater should be treated in onsite STP of 2510 KLD (Post Modification & Expansion) capacity. The treated effluent should be reused for flushing, horticulture & HVAC.

vi. About 0.77 TPD solid wastes should be generated in the project. The biodegradable waste (0.462 TPD) should be processed in OWC and the non-biodegradable waste generated (0.308 TPD) should be handed over to authorized local vendor.

vii. The total power requirement during construction phase should be met from BSES and for power backup 23 no. of DG set of 13,552.5kVA (6 x 750 kVA, 2 x 625 kVA, 13 x 500 kVA, 3 x 380 kVA, 1x 100 KVA & 1x 62.5 kVA) has been proposed and total power requirement during operation phase is 19786 kVA (Post Modification & Expansion) and should be met from BSES.

viii. 158 Rainwater Harvesting pits (Post Modification & Expansion) are proposed for artificial ground water recharge and volume of each pit should be 60 m³.

ix. Parking facility is 8866+ 1773 EV including four wheelers (according to local norms).

x. Proposed energy saving measures would save about 10% of power.

xi. The project is not proposed to be located in a Critically Polluted Area

xii. The project is not proposed to be located within 10 Km boundary of any Eco Sensitive Zone

xiii. No NBWL clearance is required for the project

xiv. No Forest Clearance is required for the project.

xv. No Court Cases are pending against the project.

xvi. Details of commitment as mentioned in Form 1A/Conceptual Plan/EIA have been Submitted

xvii. Green belt development and Details of tree felling/transplantation: 5,79,684.1sq. m i.e. 45.83% (Post Modification & Expansion) of the plot area. Proposed Tree plantation is 1507 nos.

xviii. Employment potential is 33252 nos.

xix. The Benefits of the project is Employment Generation.

6. The committee has noted that earlier, the project proponent has obtained ToR from SEIAA, Delhi vide number. DPCC/SEIAA-IV/C-470 (TOR)/DL/2023/2041-2044 dated 12.03.2024 for plot built-up area of 7,70,563.07 sq. m. Thereafter, the project proponent planned to increase the build area 1,66,962.786 sq. m from 7,70,563.07 sq. m. Accordingly, the PP proposed for the addition of the above 2 blocks, after which the built-up area should increase to 9,37,525.856 sq. m. Therefore, the PP has obtained amendment in ToR from this Ministry vide number IA3-22/10/2022-IA.III [E 177258] dated 02.08.2023.

7. The committee during the meeting noted that this is an expansion project where the total plot area for the campus is 12,64,727 sq. m in which the total built-up area up until now is 9,37,525.856 sq. m and the proposed greenbelt area is 5,79,684.1 sq. m. The baseline data from October 2023 to December 2023. The PP has obtained CCR from Ministry's Regional office.

Further, the committee has noted that earlier, this proposed project was considered by the EAC in its 135th meeting held

on 17.12.2024. After detailed deliberation, the proposal was deferred for further submission of details and compliance on certain observations. Accordingly, the project proponent has submitted the reply through the PARIVESH portal. Therefore, the EAC reconsidered this proposal in its 137th meeting held during 29 - 30 January, 2025.

8. The committee has observed that proposal for tree felling/transplantation proposed earlier for this project was due to the unavailability of sufficient land within IIT Delhi campus. However, the application for tree cutting permission was returned by the Forest Department to PP. In order to reduce the number of trees felling, certain options are being explored including shifting of building footprints, etc. The PP has committed to minimize the number of the tree affected (cut/transplanted) to fewer than 100 for all five projects, adhering only to statutory requirements such as fire tender, peripheral roads etc. The committee observed that tree transplantation/felling comes under the Delhi Tree Preservation Act, 1994 and there are various court orders from Hon'ble Supreme Court and Hon'ble Delhi High Court. PP must ensure the compliance of these order and guidelines prior to felling/transplantation of trees. Accordingly, it was advised that no tree cutting should be done prior to statutory permissions.

9. Further, with regard to the observations raised in Certified Compliance Report for compliance the existing EC, the committee observed the commitment of project proponent for installation of the Effluent Treatment Plant (ETP) i.e within the next six months. This was delayed due to non-implementation the said laboratory which was proposed to generate wastewater.

10. The committee desired that project proponent shall adhere to the Environmental Management Plan (EMP) and allocate the proposed funds for environmental managing activities under separate category/head. The background concentration of Delhi exceeds the ambient air quality standards. However, to improve the air quality inside the campus maximum 30% ground coverage shall be used for building construction to reduce vehicular emission. IIT Delhi mandates that no residential students which are around 8000 students shall use motor vehicle in the campus. IIT Delhi ensured to follow all the government base recommendations in the campus. Institute has a zero-waste burning policy on the campus. Further, PP ensured mechanized sweeping along with water spray to reduce suspended road dust. Use of smoke guns and proper barricading of 12m height are being implemented for the construction projects. Earlier the capital cost for EMP was 4.30 Cr and recurring cost was 1.95 Cr. Now, new budgetary allocation would be 4.80 Cr for EMP and recurring cost would be 2.20Cr.

11. Further, the committee has observed that there shall be 23 DG sets (12 DG existing + 11 DG proposed) to be used during the power cuts only. The PP has submitted that DGs are provided with a dual fuel system as per the notification of the Commission for Air Quality Management in the National Capital Region and adjoining areas, issued vide F.NO. A-11018/01/2021-CAQM/15322-15331 dated 29.09.2023. Installation of New HT DG sets are in process and after the complete installation of these DGs, the total number of DGs shall be reduced to less than 15. Accordingly, the committee desired that the PP should use a dual fuel system power generator instead of the Diesel-based power generator.

12. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussion held on all the issues, recommended granting Environmental Clearance to this proposed project, under the provisions of EIA Notifications, 2006 and its amendments therein, subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity.

13. Based on recommendations of EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the Modification and Expansion of Indian Institute of Technology located at Hauz Khas, Delhi by M/s Indian Institute of Technology, under the provisions of EIA Notifications, 2006 and its amendments therein, subject to the following specific conditions and other Standard (General) EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity are enclosed as **Annexure 1**.

14. This issues with the approval of the Competent Authority.

Copy To

1. The Principal Secretary, Environment Department, Government of National capital territory Delhi, Environment Department 6th Level, C-Wing, IP Estate, Delhi Secretariat, Delhi - 110002
2. The DDG (C), Ministry of Environment, Forest and Climate Change, Regional Office (WZ), Kendriya Bhawan, Sector

H, Sector-A, Aliganj, Lucknow, Uttar Pradesh 260224

3. The Member Secretary, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi – 110 032.

4. The Member Secretary, Delhi Pollution Control Committee, Building, 6th floor, C wing, Delhi Secretariat, I P Estate, Delhi – 110 002.

5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhawan, New Delhi.

6. Guard File/ Record File/ Notice Board/MoEF&CC website.

Annexure 1

Specific EC Conditions for (Townships/ Area Development Projects / Rehabilitation Centres)

1. Specific Conditions

S. No	EC Conditions
1.1	As per Ministry's OM dated 14th January, 2025, projects shall obtain the environmental safeguards required for the establishment of the Project/Activity, from the concerned SPCB/PCC within 30 days of this OM, after payment of requisite fees. The same shall be appended to the EC later and the project proponent shall file six monthly compliance for the safeguards, along with the EC conditions. SPCB shall follow the provisions of Ministry's OM dated 14 th January, 2025.
1.2	As committed, less than 100 nos of trees (if required in rare case) are proposed for felling/transplanting for all five projects/structures to maintain the fire services and other utilities. No extra tree cutting shall be done. Further, PP shall follow the provisions of Delhi Preservation of Trees Act, 1994 and the existing orders of the Hon'ble Supreme Court prior to any tree felling and transplanting. No trees shall be felled without these prior permissions and state authorities shall ensure the same.
1.3	PP shall comply the directions of Hon'ble Supreme Court vide order dated 19.12.2024 in WP No. 4677/1985 regarding permission for tree cutting. As per the order, permission for tree cutting granted by Tree Officers under the 1994 Act, shall not be acted upon unless the same is approved by the Central Empowered Committee (CEC).
1.4	PP shall comply with the revised budget of the Environment Management Plan with Capital cost of 4.80 Cr and recurring cost of 2.20Cr.
1.5	PP shall complete the entire plantation as per the plan before the occupancy certificate is issued. The local authority should verify the Green Belt area before issuing the occupancy certificate and consent to operate (CTO).
1.6	PP shall strictly follow the Graded Response Action Plan (GRAP) Guidelines for Delhi & NCR area.
1.7	Fire Safety certification from Fire Department and also height clearance from the Airports Authority of India shall be obtained prior to construction activity and submit the same to the concerned Regional Office of the Ministry within six months of the issue of the EC letter.
1.8	No groundwater shall be extracted for any purpose and only water provided by Delhi Jal Board/local body through pipeline shall be used. Water meters shall be installed at major consumption points to optimize the water consumption in the Institute.

S. No	EC Conditions
1.9	Freshwater requirements shall not exceed 2365 KLD during the operational phase.
1.10	As proposed, wastewater shall be treated onsite in STP of 3380 KLD capacity and ETP of 50 KLD capacity.
1.11	The project proponents would commission a third-party study on the implementation of conditions related to the quality and quantity of recycling and reuse of treated water, the efficiency of treatment systems, the quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
1.12	Area for greenery already provided 5,79,684.1 sq. m out of total plot area of 12, 64,727 sq. m, which is equivalent to 45.83% of total plot area (15809 nos of trees). PP shall conduct gap filling this plantation based on survival rate of the trees, accordingly atleast 500 nos of trees shall be planted as and when the suitable area is available. A minimum of 01 tree for every 80 sq. m of the total land area of the project should be maintained taking the existing trees into account.
1.13	Project Proponent shall strive to enhance the Green Belt beyond 45.83% and that the trees planted in this regard would be planted under the campaign "एक पेड़ माँ के नाम" and the details of the trees planted would be uploaded on the portal https://merilife.nic.in .
1.14	The local bye-law provisions on rainwater harvesting should be followed. If local bylaws provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Housing and Urban Affairs (erstwhile Ministry of Urban Development), Model Building Byelaws, 2016. As proposed, 158 (141 Existing + 17 proposed) Rainwater Harvesting pits (Post Modification & Expansion) should be proposed for artificial ground water recharge and volume of each pit should be 155.8 m ³ .
1.15	The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate areas earmarked for segregation of solid waste, as per SWM Rules, 2016.
1.16	As committed, biodegradable waste shall be utilized through the OWC to be installed within the site. Inert waste shall be disposed of as per norms at the authorized site.
1.17	Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
1.18	As committed Parking facility is 8,866 ECS and 1,773 ECS with EV charging points are to be provided.
1.19	Proponent shall ensure the installation of solar lights for energy saving measures to save about 10% of power.
1.20	The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals / clearances under any other Acts / Regulations or Statutes as applicable to the project.
1.21	Proponent shall ensure that requirements of accessibility particularly universal accessibility and more particularly pedestrian requirements are provided. Street and road sections should have a mandatory provision of cross-section elements and footpaths so as to minimize the shift from walk

S. No	EC Conditions
	mode to vehicular mode to have the least impact on energy and the environment.
1.22	The project proponent shall ensure that there is more than one entry / exit from different directions however it should be checked that it does not create road safety hazards.

Standard EC Conditions for (Townships/ Area Development Projects / Rehabilitation Centres)

1. Statutory Compliance

S. No	EC Conditions
1.1	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.
1.2	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.
1.3	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.5	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.
1.6	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
1.7	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.
1.8	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.
1.9	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
1.10	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

S. No	EC Conditions
2.1	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.
2.2	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
2.3	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.
2.4	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
2.5	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.
2.6	Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
2.7	Wet jet shall be provided for grinding and stone cutting.
2.8	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
2.9	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.
2.10	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
2.11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
2.12	For indoor air quality the ventilation provisions as per National Building Code of India.

3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	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.
3.2	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3.3	Total fresh water use shall not exceed the proposed requirement as provided in the project details.
3.4	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.
3.5	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.
3.6	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.
3.7	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.
3.8	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.
3.9	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
3.10	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
3.11	The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
3.12	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

S. No	EC Conditions
	withdrawn without approval from the Competent Authority.
3.13	All recharge should be limited to shallow aquifer.
3.14	No ground water shall be used during construction phase of the project.
3.15	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.
3.16	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.
3.17	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, no treated water shall be disposed in to municipal drain.
3.18	No sewage or untreated effluent water would be discharged through storm water drains.
3.19	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.
3.20	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
3.21	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.

4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	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.
4.2	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.

S. No	EC Conditions
4.3	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

S. No	EC Conditions
5.1	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.
5.2	Outdoor and common area lighting shall be LED.
5.3	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.
5.4	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.
5.5	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.
5.6	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

S. No	EC Conditions
6.1	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.
6.2	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
6.3	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.
6.4	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a

S. No	EC Conditions
	minimum capacity of 0.3 kg /person/day must be installed.
6.5	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6.6	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.
6.7	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.
6.8	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.
6.9	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
6.10	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

S. No	EC Conditions
7.1	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).
7.2	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.
7.3	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.
7.4	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

S. No	EC Conditions
8.1	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.
8.2	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.

9.

S. No	EC Conditions
9.1	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.

10. Human Health Issues

S. No	EC Conditions
10.1	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.
10.2	For indoor air quality the ventilation provisions as per National Building Code of India.
10.3	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
10.4	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.
10.5	Occupational health surveillance of the workers shall be done on a regular basis.
10.6	A First Aid Room shall be provided in the project both during construction and operations of the project.

11. Miscellaneous

S. No	EC Conditions
11.1	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.
11.2	ii. 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.
11.3	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.
11.4	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.
11.5	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.
11.6	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
11.7	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
11.8	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.
11.9	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.
11.10	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11.11	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.

S. No	EC Conditions
11.12	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
11.13	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.
11.14	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11.15	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
11.16	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.
11.17	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.
11.18	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.

Additional EC Conditions

N/A