



File No: 21/78/2025-IA.III

Government of India

Ministry of Environment, Forest and Climate Change

IA Division

\*\*\*



Dated: 15/10/2025



To,

The Chief Executive Officer  
M/s ELECTRONICS TECHNOLOGY PARKS - KERALA  
Park Centre, Technopark Campus, Kariyavattom P.O., Thiruvananthapuram, Kerala-695581.,  
THIRUVANANTHAPURAM, KERALA, 695581  
ceo@technopark.org

**Subject: Proposed I.T. Office Building Construction under QUAD Project to be developed at Technopark Phase-IV (TechnoCity) Campus in Sy. Nos. 356(part), 360, 366 (part), Pallipuram Village, Andoorkonam Grama Panchayat, Thiruvananthapuram Taluk & District Kerala by M/s Electronics Technology Parks – Kerala (fully owned by Government of Kerala) - For Grant of Environmental Clearance - reg.**

**Sir/Madam,**

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006-regarding in respect of project Environmental Clearance for the Proposed I.T. Office Building Construction under QUAD Project to be developed by M/s Electronics Technology Parks – Kerala (fully owned by Government of Kerala). submitted to Ministry vide proposal number IA/KL/INFRA2/532766/2025 dated 04/04/2025.

2. The particulars of the proposal are as below:

<b>(i) EC Identification No.</b>	EC25C3803KL5422517N
<b>(ii) File No.</b>	21/78/2025-IA.III
<b>(iii) Clearance Type</b>	EC
<b>(iv) Category</b>	B2
<b>(v) Project/Activity Included Schedule No.</b>	8(a) Building / Construction
<b>(vi) Sector</b>	INFRA-2
<b>(vii) Name of Project</b>	Environmental Clearance for the Proposed I.T. Office Building Construction under QUAD Project to be developed by M/s Electronics Technology Parks – Kerala (fully owned by Government of Kerala).
<b>(viii) Name of Company/Organization</b>	ELECTRONICS TECHNOLOGY PARKS -

<b>(ix) Location of Project (District, State)</b>	KERALA
<b>(x) Issuing Authority</b>	THIRUVANANTHAPURAM, KERALA
<b>(xi) Applicability of General Conditions</b>	MoEF&CC
<b>(xii) Applicability of Specific Conditions</b>	no
	no

**3.** The project/ activity is covered under category 'B' of item 8(a) 'Building/Construction Projects' 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 Kerala. As per the provisions of the OM No. IA3-22/10/2022-IA.III [E 177258] dated 02.08.2023 the proposal has been appraised at the Central level by sectoral EAC.

**4.** Accordingly, the above-mentioned proposal for Environmental Clearance has been examined by the Expert Appraisal Committee (Infra-2) in its 150<sup>th</sup> meeting held during 27 – 28 August, 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:

- The project is new.
- The project is located at Pallipuram Village, Andoorkonam Grama Panchayat, Thiruvananthapuram Taluk & District, Kerala and the geographical coordinates are at 8°36'22.33"N (Latitude) and 76°50'55.37"E (Longitude).
- The total plot area is 22,516 sq. m, FSI area is 61,869 sq. m and total built-up area of 83,580.5 sq. m. The details of the building are as follows:

<b>S. No.</b>	<b>Particulars</b>	<b>Details of Capacity</b>
1	Total plot (site) area (sq. m)	22,516
	Plot area under Buildings (sq. m)	9,810.44
	Plot area for FAR Calculation (sq. m)	22,516
2	Net plot area	22,516
3	Permissible Ground Coverage (sq. m)	13,509.83
4	Proposed Ground Coverage (sq. m)	9,810.44
5	Permissible FAR (sq. m)	90,064
6	Proposed FAR(sq. m)	61,689
7	Non-FAR(sq. m)	21,891.5
8	Built-up area (sq. m)	83,580.50
9	Green area(sq. m)	4,851
10	Maximum height of the building (m)	43.60
11	Fresh Water requirement (KLD)	201
12	STP Capacity (KLD)	400
13	Rain Water Tank (No. & Capacity)/Pits (Nos)	Rain Water Tanks 570 KL (165 KL + 175 KL + 230 KL)
14	Solid Waste (MT)	1,212 kg/day
15	Solar	500 kWp
16	DG Sets (KVA)	1,500 kVA x 4 nos. + 500 kVA x 2 nos.

- Total water requirement and its source, Ground water withdrawal approval from CGWA, if any: Construction Phase 102 KL/Day for 3 years Source: Private Water Tanker, recycled water from STP / Stored rain water (tank) for construction purposes and Public supply for meeting the domestic water requirement expected to be 14 KLD. Operation Phase: 463 KLD/Day (fresh water 201 KLD + 262 KLD

recycled from STP) Source : 201 KLD fresh water from KWA supply / Rain Water Tanks and 262 KLD Recycled Water from STP.

v. Wastewater generation 291 KLD will be treated in STP Capacity 400 KLD and treated wastewater will be recycle and reuse in flushing and landscaping, HVAC which lead to the Zero Liquid Discharge (ZLD).

vi. About 1,212 kg/day solid wastes will be generated in the project. The biodegradable waste (606 kg/day) will be processed in OWC and the non-biodegradable waste generated (606 kg/day) will be handed over to authorized local vendor.

vii. The total power requirement during construction phase is 200 kW and will be met from Kerala State Electricity Board & DG Sets (standby) and total power requirement during the operation phase is 9,208.16 kW (connected load) and will be met from Kerala State Electricity Board & DG Sets (1,500 kVA x 4 nos. + 500 kVA x 2 nos.) (standby).

viii. There is provision of DG sets 1,500 kVA x 4 nos. + 500 kVA x 2 nos. for emergency power back up in the Project. The DG sets is equipped with acoustically lined D.G. room to minimize noise generation and adequate stack height for proper dispersion.

ix. Solar panels, LED based solar lighting and other energy saving fixtures (Transformers, Pumps, Motors etc.). Estimated energy saving will be 35%.

x. Rooftop rainwater of buildings will be collected in capacity for harvesting after filtration. 3 RWH tanks of total capacity 570 KL (165 KL + 175 KL + 230 KL) for harvesting after filtration.

xi. Parking facility for 619 Cars + 2,321 sq. m space for T.W. parking is proposed to be provided against the requirement of 619 Cars + 2,321 sq. m space for T.W. parking (according to local byelaws). The proposed project is not located in a Critically Polluted Area.

xii. Solid Waste Management: 1,212 kg/day (Biodegradable-606 kg/day will be managed in organic waste convertor, and the non-biodegradable waste generated (606 kg/day) will be handed over to authorized local vendor).

xiii. Hazardous Waste Management: 1000 L per annum of spent oil from DG servicing and 205 oil filters will be sold to authorized recyclers

xiv. The total proposed landscape area is 4,851 sq. m which is 22% of total plot area i.e. 22,516 sq. m, therefore no of trees required are approx. 282 (@1 tree per 80 sq. m). Total 60 nos. of existing trees (predominantly Acacia tree) are available within the site. Permission will be obtained from Forest Department before cutting of teak trees an undertaking to this effect is provided.

xv. The proposed project is also not located within 10 Km radius of any Eco Sensitive Zone:

xvi. The proposed project is not located in a CRZ area and does not require CRZ Clearances.

xvii. The project does not require diversion of forest land.

xviii. The project does not require Wildlife Clearances.

xix. This proposed project is not located in the ESZ/ESA Villages.

xx. The total cost of the project is Rs. 383.95 Crores.

xxi. Employment potential: 100 During Construction Phase and About 8,000 persons (Direct employment) and about 24,000 persons (Indirect employment) in Operation Phase.

xxii. Benefits of the project:

**Environment-Green belt, RWH & other EMP will aid in maintaining the environment.**

**Increase in Employment opportunities.**

**Revenue to the State.**

**6.** The proposed plot area of the project is 22,516 sq. m and total built-up area is 83,580.5 sq. m. The maximum height of the building is 43.60 m and the maximum no. of floors is 2B+G floor+9 floor. The PP has obtained a No Objection Certificate (NOC) from the Airports Authority of India (AAI) for building height clearance. The surface runoff is channelized to the drain in the NE direction which is connected to Kadinamkulam lake (about 1.5 km, SW).

**7.** The PP has submitted that no construction work has been carried out at project site. Further, the project site is not in the ESA village of Western Ghats and not in ESZ of any ecologically protected area. Also, it does not attract the provisions of CRZ Notification, 2019.

**8.** The PP presented a drone video of the proposed site and provided an explanation of the existing and nearby facilities in the area. The committee has noted that the presence of land vegetation, existing developments, and other physical features within and around the proposed site. The committee also noted the surrounding land-use pattern, accessibility to infrastructure facilities, and the extent of environmental sensitivity of the area. Based on the presentation, the committee emphasized that these aspects will be critically examined while assessing the suitability of the proposed site for the project.

**9.** The committee has observed that the land is under the ownership of Technopark, and the land use of the project site is in conformity with the Local Land Use Plan. The Committee observed that the PP will construct the building with two basements. In this regard, the committee has desired that PP shall not intersect the groundwater table due to the basement construction. Further, there is no withdrawal of groundwater, and the source of water is from a dedicated water supply from Kerala Water Authority (KWA) to the Technopark Campus. Also, it is observed that the excess excavated ordinary earth will be stored within the Technopark Phase-IV campus, and no transportation of ordinary earth/soil outside the Technopark campus.

**10.** It was further observed that solar panels of 500 kWp capacity shall be installed at the site, which will result in 5.4% savings of the total energy load. The Committee directed the PP to additionally purchase 5% energy from renewable energy sources.

**11.** The Committee also deliberated that the proposed project is a commercial IT building, wherein the PP proposes to use a glass facade. Thus, the committee suggested to follow Ministry's EC condition and accordingly, PP shall not exceed 40% for the use of glass facade in the proposed project, and accordingly, the design plan shall be revised. The Committee also deliberated on the traffic impact of the proposed project and found the study submitted by the PP to be in order. Further, the Committee instructed the PP to provide a wheel washing facility at the entry of the project site during the construction phase.

**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 the 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 Environmental Clearance to Proposed I.T. Office Building Construction under QUAD Project to be developed at Technopark Phase-IV (Techno City) Campus in Sy. Nos. 356(part), 360, 366 (part), Pallipuram Village, Andoorkonam Grama Panchayat, Thiruvananthapuram Taluk & District Kerala by M/s Electronics Technology Parks, 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 as **Annexure -1**.

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

**Copy To**

1. The Secretary, Directorate of Environment & Climate Change (DoECC) 4th Floor, K.S.R.T.C Bus Terminal Thampanoor, Thiruvananthapuram – 695 001.
2. The DDG (C), Ministry of Environment, Forest and Climate Change, Regional Office(SZ), Kendriya Sadan, 4th Floor, E&F, Wings, 17th Main Road, Koramangala II Block, Bangalore – 560 034.
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, Kerala State Pollution Control Board, Head Office, Pattom PO, Thiruvananthapuram, Kerala – 695 004.
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 (Building / Construction)****1. Specific Conditions**

S. No	EC Conditions
1.1	As per Ministry's OM dated 14 <sup>th</sup> 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 <sup>th</sup> January, 2025.
1.2	PP shall comply with the budget of the Environment Management Plan for Construction Phase (Capital Cost = Rs 19.5 Lakhs Lakh; Recurring Cost- Rs 5.4 lakhs/ year and during operation phase Capital Cost = Rs 523.55 Lakhs; Recurring Cost = Rs 72.5 Lakhs /year).
1.3	PP shall obtain all related other clearances from the Competent Authority, if required.
1.4	The PP shall not transport excavated earth outside of the project site.
1.5	Freshwater requirements shall not exceed 201 KLD during the operational phase. Approval/Permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities. SPCB concerned shall not issue CTO till the PP obtains such permission.
1.6	As proposed, wastewater shall be treated onsite in STP (Moving Bed Biofilm Reactor (MBBR) Technology with Tertiary Treatment) of 400 KLD capacity and the project shall be ZLD. Also, energy meter shall be installed in STP.
1.7	The project proponents would commission a third-party study from Environment Auditors/Premier Institutes on the implementation of all EC conditions in every 2 years. This study shall also include details related to 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
1.8	Area for greenery shall be provided as per the details provided in the project document i.e., the area

S. No	EC Conditions
	under plantation / greenery should be 4,851 sq. m out of total plot area of 22,516 sq. m, which is equivalent to 22% of total plot area. The landscape planning should include the plantation of 250 numbers of native tree species as proposed. 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.
1.9	Project Proponent shall strive to enhance the Green Belt beyond 22% and that the 250 trees planted in this regard would be planted under the campaign “एकपेडमांकेनाम” and the details of the trees planted would be uploaded on the portal <a href="https://merilife.nic.in">https://merilife.nic.in</a> .
1.10	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, total capacity of 570 KL (165 KL +175 KL + 230 KL) rainwater storage tanks shall be provided by PP for using of rainwater harvesting after filtration.
1.11	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.
1.12	As committed 619 Cars + 2,321 sq. m. space for Two-wheeler parking areas is to be provided and 20% of Electronic vehicle charging points are to be provided. The project proponent shall essentially comply with all parking norms and standards as applicable.
1.13	Proponent shall ensure the installation of solar panels 500 kWp for renewal energy.
1.14	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 mode to vehicular mode to have the least impact on energy and the environment.
1.15	The project proponent shall provide wheel washing facility at the entry gate.
1.16	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.
1.17	The PP shall constitute the Environment Monitoring Cell (EMC) with qualified environmental person for taking care of the project during construction and operation phase of the project.
1.18	Approval/Permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities. SPCB concerned shall not issue CTO till the PP obtains such permission
1.19	The plantation under Green Credit Program by the Project Proponent shall not be eligible for site specific plantation clearance forming part of Environment Clearance.
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	PP shall be responsible for establishment, operation and maintenance of all common facilities like

S. No	EC Conditions
	STP, OWC, Green belt development, Solar, Rainwater Harvesting, and other such amenities provided within the project site for a period of 5 years after handed over to the bona fide Residential Welfare Association or any other such association and also for compliance of EC conditions during operation stage. Responsibility of comply EC conditions shall be with Project Proponent only till the EC is transferred to Residents Welfare Association/Society/Committee. Agreement between Project Proponent and bona fide Residents Welfare Association/Society/Committee during handover of assets/infrastructure shall clearly mentioned the responsibility of complying EC Condition.

#### Standard EC Conditions for (Building / Construction)

##### 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 ECSBC-2024/ENS (ECSBC-2024)/ECSBC-2024/ENS (ECSBC-2024) 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
2.6	Sand, murram, 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.
<b>3.13</b>	All recharge should be limited to shallow aquifer.
<b>3.14</b>	No ground water shall be used during construction phase of the project.
<b>3.15</b>	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.
<b>3.16</b>	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.
<b>3.17</b>	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.
<b>3.18</b>	No sewage or untreated effluent water would be discharged through storm water drains.
<b>3.19</b>	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.
<b>3.20</b>	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
<b>3.21</b>	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
<b>4.1</b>	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.
<b>4.2</b>	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 Sustainable Building Code (ECSBC-2024/ENS (ECSBC-2024)) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECSBC-2024/ENS (ECSBC-2024), shall comply with the State ECSBC-2024/ENS (ECSBC-2024).
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 ECSBC-2024/ENS (ECSBC-2024) 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.

S. No	EC Conditions
6.4	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
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
<b>11.12</b>	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).
<b>11.13</b>	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.
<b>11.14</b>	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
<b>11.15</b>	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
<b>11.16</b>	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.
<b>11.17</b>	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.
<b>11.18</b>	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