

EC/A.Sathanur/HYC/June/2025

Date: 30.05.2025

To,
The Member Secretary,
State Level Environment Impact Assessment Authority,
Chennai Metro Rail Limited (Head office),
No.327, Anna Salai, Nandanam,
Chennai - 600 035.

Sir,

Sub: SIPCOT SEZ at A.Sathanur, Kallakurichi District – Submission of Half Yearly Compliance Report for June 2025 (for the period from October 2024 to March 2025) - Reg.

Ref: EC vide Letter No SEIAA-TN/F.No. 9898/8(b)/EC. No: 1001/2023, dated: 10.01.2024.

We hereby submit the Half Yearly Compliance Report for the Development of SIPCOT Special Economic Zone at A.Sathanur Village, Ulundurpet Taluk, Kallakurichi District, Tamil Nadu for June 2025 (for the period from October 2024 to March 2025) along with the supporting documents for your perusal.

Thanking you

Yours faithfully,

CONSULTANT (PROJECT MANAGEMENT)

Encl: As above.

Copy to:

1. The Director,
The Ministry of Environment and Forest & Climate Change,
Integrated Regional Office,
1st Floor, Additional Office Block for GPOA,
Shastri Bhawan, Haddows Road,
Nungambakkam, Chennai – 600 006.
2. The Director,
CPCB Zonal Office,
77-A, South Avenue Road,
Ambattur Industrial Estate,
Ambattur Taluk, Thiruvallur District,
Chennai - 600 058.

P.T.O.

State Industries Promotion Corporation of Tamil Nadu Limited
(A Government of Tamil Nadu Undertaking)

CIN I U74999TN1971SGC005967

Regd. Office : 19-A, Rukmani Lakshmipathy Road, Post Box No. 7223, Egmore, Chennai - 600 008.

Phone : 4526 1777, Fax : 4526 1796 Website : www.sipcot.tn.gov.in

3. The Chairman,
Tamil Nadu Pollution Control Board,
No-76, Mount Road, Guindy,
Chennai - 600 032.
4. The Project Officer
SIPCOT Industrial Park,
Eraiur.

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HALF YEARLY ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

For the Period of October 2024 – March 2024

For

**“DEVELOPMENT OF SPECIAL ECONOMIC ZONE (SEZ) AT
KALLAKURICHI DISTRICT Land area – 77.095 Ha. (190.42
Acres)”**

**EC Obtained vide Letter No SEIAA-TN/F.NO 9898/8(b)/EC. No: 1001/2023, dated:
10.01.2024**

**EC Amendment obtained vide Identification No. EC24B3813TN5337555A, File No.
9898 dated 18.06.2024**

Submitted by



**M/S. STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LTD
19/A, Rukmani Lakshmipathy Road,
Egmore, Chennai-600008.**

Prepared by



**ENVIRONMENTAL CONSULTANT HUBERT
ENVIRO CARE SYSTEMS (P) LTD CHENNAI**

May 2025

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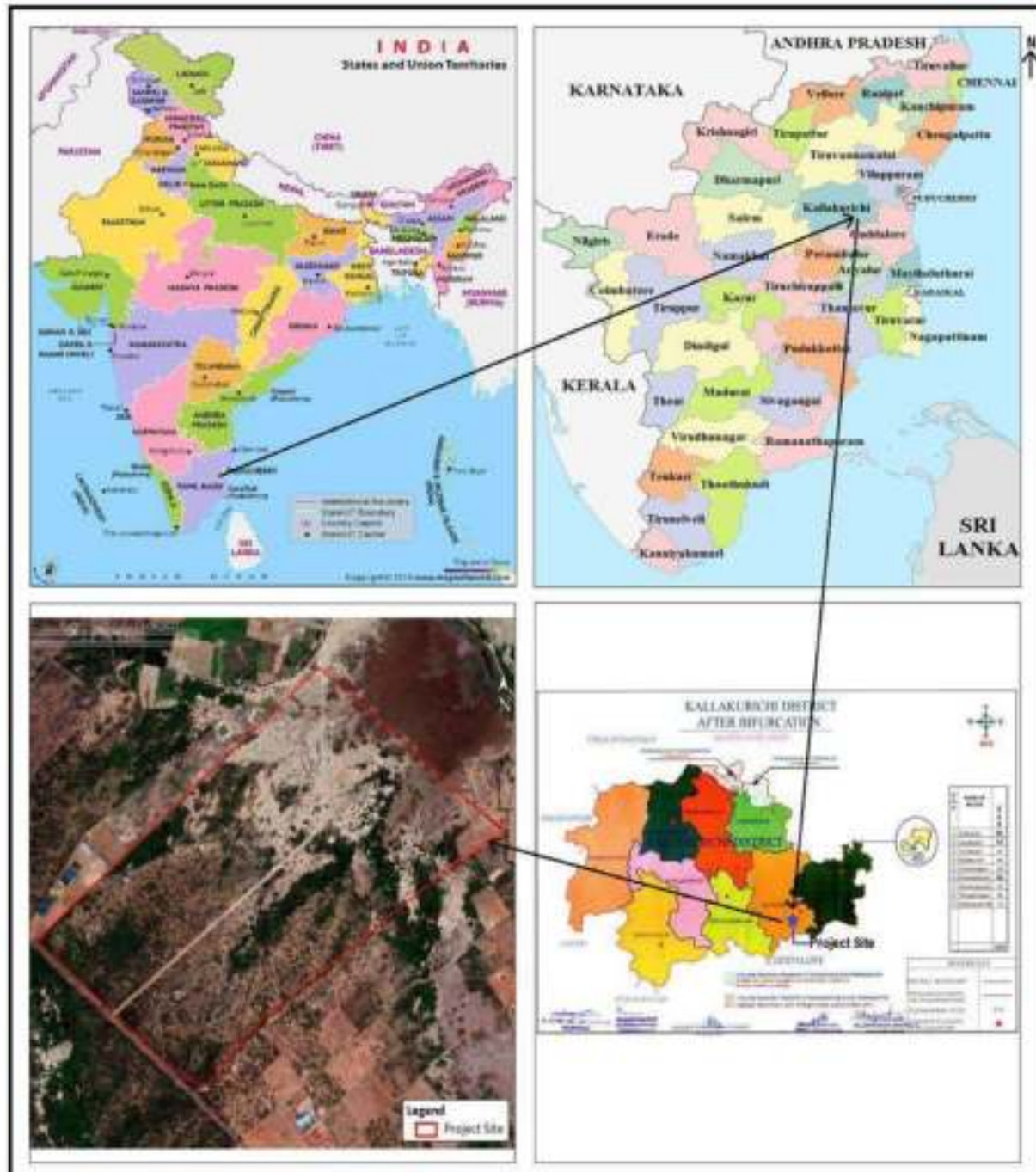
LIST OF ANNEXURE

S. No	List Of Contents
Annexure 1	Copy of Environmental Clearance
Annexure 2	Copy of EC Amendment
Annexure 3	Newspaper Advertisement
Annexure 4	Water supply letter from TWAD
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Annexure 7	Screenshot of EC details uploaded in website
Annexure 8	Screenshot of six monthly Compliance Report uploaded in website
Annexure 9	Acknowledgement on submission of Form V to TNPCB and screenshot of Environmental Statement uploaded in website
Annexure 10	Environment Monitoring Reports
Annexure 11	Storm water drain photograph

1. PROJECT DETAILS

Name of the Project	Proposed Development of Special Economic Zone (SEZ) at Kallakurichi District [Land Area 77.095 Ha. (190.42 Acres)]
Name of the Proponent	M/S. State Industries Promotion Corporation of Tamil Nadu Ltd.
Location	A.Sathanur Village, Ulundurpet Taluk, Kallakurichi District, Tamil Nadu.
EC. No	Lr No SEIAA-TN/F.NO 9898/8(b)/EC. No: 1001/2023, dated:10.01.2024 (Enclosed as Annexure 1) EC Amendment obtained vide Identification No. A, File No. 9898 dated 18.06.2024 (Enclosed as Annexure 2)
Total Extent	77.095 Ha. (190.42 Acres)
Water Requirements	2373 KLD
	Source: Letter from TWAD for the supply of 3.20 MLD Fresh water supply from 10.00 MLD dedicated Water supply scheme to AIIRLIVAS site at Thalaivasalkoot Road in Salem District vide Letter no. F.SIPCOT/JDO/RWS/SLM/2023/dated: 10.01.2023 (Enclosed as Annexure 4)
Project Cost	Rs.2302 Crore

2. LOCATION MAP



3. SITE PHOTOGRAPH



4. SIX MONTHLY ENVIRONMENTAL CLEARANCE COMPLIANCE STATEMENT

SEIAA Condition.

S.NO	CONDITIONS	STATUS OF COMPLIANCE
1.	The PP shall obtain fresh water supply commitment letter from the Competent authority before obtaining CTE from TNPCB	Water supply letter from TWAD Board is enclosed as Annexure 4

Climate Change

Annexure 'C'

S.NO	CONDITIONS	STATUS OF COMPLIANCE
1.	The proponent shall adopt strategies to decarbonize the building.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
2.	The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials).	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
3.	The proponent shall adopt strategies to reduce temperature including the Building Façade.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
4.	The proponent shall adopt methodology to control thermal environment and other shocks in the building.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
5.	The proponent shall adopt detailed plan to reduce carbon footprints and also develop strategies for climate proofing and climate mitigation.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
6.	The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
7.	The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

8.	The activities should in no way cause emission and build-up Green House Gases. All actions to be eco-friendly and support sustainable management of the natural resources within and outside the campus premises.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
9.	The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

Health

10.	The proponent shall adopt strategies to maintain the health of the inhabitants	Condition noted.
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Energy

11.	The proponent shall adopt strategies to reduce electricity demand and consumption.	Condition noted. All the member units will comply with.
12.	The proponent shall provide provisions for automated energy efficiency.	Condition noted. All the member units will comply with.
13.	The proponent shall provide provisions for controlled ventilation and lighting systems.	Condition noted. All the member units will comply with.
14.	The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.	Condition noted. Individual industries will Comply with.
15.	All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall ensure that carbon neutral building.	Condition noted. Individual industries will Comply with.
16.	The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation.	Condition noted. All the member units will comply with

Regulatory Frameworks

17.	The proponent shall adopt methodologies to effectively implement the Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended. Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.	<p>Condition noted.</p> <p>All the member industries will be instructed to follow necessary rules and guidelines.</p>
18.	The project proponent shall ensure to provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules. 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.	<p>Condition will be complied.</p> <p>All the member industries will be instructed to follow necessary rules and guidelines.</p>
19.	The proponent shall provide elevator as per rules CMDA/DTCP.	<p>Not applicable. it is an infrastructure development project. All the member units will be instructed to follow the applicable rules and guidelines.</p>

Database maintenance & audits

20.	The database record of environmental conditions of all the events from pre- construction, construction and post-construction should be maintained in digitized format.	Condition noted. All the member units will comply with.
21.	The proponent should maintain environmental audits to measure and mitigate environmental concerns.	Condition noted. All the member units will comply with.

Biodiversity

22.	There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc.	Condition noted. All the member units will comply with.
23.	The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.	Condition noted. All the member units will comply with.
24.	The proponent shall adopt sustainability criteria to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements.	Condition noted and Accepted. All the member units will be instructed to follow the applicable rules and guidelines.
25.	The proponent shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances.	Condition noted. All the member units will comply with.
26.	The proponent shall develop building-friendly pest control strategies by using non chemical measures so as to control the pest population thereby not losing beneficial organisms.	Condition noted. All the member units will comply with.
27.	The proponent shall adopt strategies to prevent bird hits. Safety measures	Condition noted. All the member units will comply with.
28.	The proponent should develop an emergency response plan in addition to the disaster management plan.	Condition noted. All the member units will comply with.

29.	The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan in emergencies.	Condition noted. All the member units will comply with.
30.	All bio-safety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as stipulated in EIA/EMP.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
31.	The disaster management and disaster mitigation standards to be seriously adhered to avoid any calamities.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
32.	The proponent shall provide the emergency exit in the buildings.	Condition noted. All the member units will comply with.
33.	The proponent shall adhere to the provision and norms regard to fire safety prescribed by competent authority.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

Water/Sewage

34.	The proponent shall ensure that no treated or untreated sewage shall be let outside the project site & shall find access to nearby water-bodies under any circumstances other than the permitted mode of disposal.	Condition noted. The project is under construction phase.
35.	The proponent shall provide STP of adequate capacity as committed and shall continuously & efficiently operate STP so as to satisfy the treated sewage discharge standards prescribed by the TNPCB time to time.	Condition noted. All the member units will comply with.
36.	The proponent shall periodically test the treated sewage the through TNPCB lab/NABL accredited laboratory and submit report to the TNPCB.	Condition noted. All the member units will comply with.

37.	The proponent shall periodically test the water sample for the general water quality core parameters including fecal coliform within the proposed project site through TNPCB Lab / NABL Accredited laboratory and submit report to the concerned authorities.	Condition noted. All the member units will comply with.
38.	The proponent shall ensure that provision should be given for proper utilization of recycled water.	Condition noted. All the member units will be mandated to have STP/ETP for treatment of sewage/effluent and to reuse the treated water within their premises
39.	The project proponent shall adhere to storm water management plan as committed.	Condition noted. All the member units will comply with.

Parking

40.	The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan as committed.	Condition noted. All the member units will comply with.
41.	The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.	Condition noted. All the member units will be instructed to follow all applicable rules and guidelines.
42.	The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.	Condition noted. All the member units will comply with.

EMP

43.	The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.	Condition noted. All the member units will comply with.
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44.	The proponent shall ensure that all activities of EMP shall be completed before obtaining CTO from TNPCB	Condition noted. All the member units will comply with.
45.	The proponent shall provide and ensure the green belt plan is implemented as indicated in EMP. Also, the proponent shall explore possibilities to provide sufficient grass lawns.	Condition noted. All the member units will comply with.
Others		
46.	As per the 'Polluter Pay Principle', the proponent will be held responsible for any environmental damage caused due to the proposed activity including withdrawal of EC and stoppage of work.	Condition noted. .
47.	The project proponent shall adhere to height of the buildings as committed.	Condition noted. All the member units will comply with.

CONDITIONS IMPOSED BY SEAC:

1.	The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.	Condition Noted.
2.	PP shall submit the commitment letter from the local body for supply of fresh water before issue of EC.	Water supply letter from TWAD Board is enclosed as Annexure-4
3.	STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.	Condition noted. All the member units will comply with.

4.	The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco- system.	Condition noted. All the member units will comply with.
5.	Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.	Condition noted. All the member units will comply with.
6.	Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP)	Condition noted. All the member units will comply with.
7.	The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.	Condition noted. All the member units will comply with.
8.	The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms.	Condition noted. All the member units will comply with.
9.	Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.	Condition noted. All the member units will comply with.

10.	Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF Lko/Director of Environment and other concerning authority regularly.	Condition noted. All the member units will comply with.
11.	Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.	Condition noted. All the member units will comply with.
12.	The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water.	Condition noted. All the member units will comply with.
13.	The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.	Condition noted. All the member units will comply with.

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.	Condition noted. All the member units will comply with.
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.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
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.	Condition noted.

4.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Condition noted.
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.	Condition will be complied.
6.	The project proponent shall obtain the necessary permission for drawing of ground water /surface water required for the project from the competent authority.	Letter for fresh water has been obtained from TWAD Board copy is it is enclosed as Annexure 4.
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	Condition noted. All the member units will comply with.
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.	Condition noted. All the member units will comply with.
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.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
10.	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

1. 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.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
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2.	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.	Condition noted. All the member units will comply with.
3.	The project proponent shall install a system to carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g.. PM10 and PM25) covering upwind and downwind directions during the construction period.	Condition noted. Ambient Air Quality monitoring report is enclosed as Annexure 10 .
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.	Condition noted. All the member units will comply with.
5.	Sand, murram, loose soil, cement, stored on site should be covered adequately so as to prevent dust pollution.	Condition noted. All the member units will comply with.
6.	Wet jet shall be provided for grinding and stone cutting.	Condition noted. All the member units will comply with.
7.	Unpaved surfaces and loose soil should be adequately sprinkled with water to suppress dust.	Condition noted. All the member units will comply with.
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.	Condition noted. All the member units will comply with.

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.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
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.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
11.	For indoor air quality the ventilation provisions as per National Building Code of India	Condition noted. All the member units will be instructed to follow applicable rules and guidelines

2. 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 rainwater.	Condition noted. All the member units will comply with.
2.	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.	Condition noted. All the member units will comply with.
3.	Total freshwater use shall not exceed the proposed requirement as provided in the project details.	Condition noted. All the member units will comply with.

4.	The quantity of freshwater 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 Half Yearly Compliance Reports (HYCR).	Condition noted. All the member units will comply with.
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.	Letter for fresh water has been obtained from TWAD Board copy is it is enclosed as Annexure 4.
6.	At least 20% of the open spaces as required by the local building byelaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
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.	Condition noted. All the member units shall comply with.
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	Condition noted. All the member units shall comply with.
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.	Condition noted. All the member units shall comply with.

10.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Condition noted. All the member units shall comply with.
11.	The local bye-law provisions on rainwater 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 Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
12.	A rainwater 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 freshwater requirement shall be provided. In area where ground water recharging is not feasible, the rainwater should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines
13.	All recharges should be limited to shallow aquifer	Condition noted. All the member units shall comply with.
14.	No ground water shall be used during construction phase of the project	Condition noted.
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.	Condition noted. Fresh water will be sourced from TWAD. Water supply letter from TWAD Board is enclosed as Annexure - 4

16.	The quantity of freshwater 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 Half Yearly Compliance Reports (HYCR).	Condition noted. Industrial Park is in Construction Phase.
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 into municipal drain.	Condition noted. All the member units shall comply with.
18.	No sewage or untreated effluent water would be discharged through storm water drains.	Condition noted. All member units will comply with.
19.	Onsite sewage treatment of capacity of treating 100% wastewater 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 wastewater 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.	Condition noted. All member units will comply with.
20.	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be taken to mitigate the odor problem from STP.	Condition noted. All member units will comply with.
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.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

3. 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 measure shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.	Condition noted. Ambient noise monitoring report is enclosed as Annexure 10.
2.	Noise level survey shall be carried out as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of Half Yearly Compliance Report (HYCR).	Condition noted. Ambient noise monitoring report is enclosed as Annexure 10.
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.	Condition noted. All member units will comply with.

4. 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.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
2.	Outdoor and common area lighting shall be LED.	Condition noted. All member units will comply with.
3.	The proponent shall provide solar panels covering a minimum of 50% of terrace area as committed.	Condition Noted. All member units will comply with.

4.	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.	Condition noted. All member units will comply with.
5.	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.	Condition noted. All member units will comply with.
6.	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 byelaws requirement, whichever is higher.	Condition Noted.
7.	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 byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.	Condition Noted.

5. 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.	Condition noted. All member units will comply with.
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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.	Condition noted. All member units will comply with.
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.	Condition noted. All member units will comply with.
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.	Condition Noted. The project is in construction phase
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.	Condition noted. All member units will comply with.
6.	Any hazardous waste generated during construction phase shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
7.	Use of environmentally 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 environmentally friendly materials.	Condition Noted. All member units will comply with.
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 from time to time. Ready mixed concrete must be used in building construction.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

9.	Any wastes from construction and demolition activities related thereto shall be managed to strictly conform to the Construction and Demolition Rules, 2016.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
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.	Condition noted. All the member units shall comply with.

6. 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).	Condition noted. All the member units shall comply with.
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 invasive species should not be used for landscaping.	Condition noted.
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.	Condition noted.

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.	Condition noted. All the member units shall comply with.
5.	A wide range of indigenous plant species should be planted as given in the Appendix-1, in consultation with the Government Forest/Horticulture Departments and State Agriculture University.	Condition Noted.

7. Transport:

1.	<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.</p> <p>b. Traffic calming measures.</p> <p>c. Proper design of entry and exit points.</p> <p>d. Parking norms as per local regulation.</p>	Condition will be complied.
2.	Vehicles hired to bring 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.	Condition noted. All the member units shall comply with.

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.	Condition noted. All the member units shall comply with.
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8. 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.	Condition noted. All the member units shall comply with.
2.	For indoor air quality the ventilation provisions as per National Building Code of India.	Condition noted. All the member units shall comply with.
3.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Condition noted. All the member units shall comply with.

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.	Condition noted. All the member units shall comply with.
5.	Occupational health surveillance of the workers shall be done on a regular basis.	Condition Noted. All the member units shall comply with.
6.	A First Aid Room shall be provided in the project both during construction and operations of the project.	Condition will be complied. Member units shall comply with.

9. Corporate Environment Responsibility:

1.	The PP shall complete the CER activities, as committed, before obtaining CTE.	Condition noted.
2.	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe 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 Half Yearly Compliance Report (HYCR).	Condition noted.

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.	Condition complied. Separate environmental management cell has been assigned and will report to the General Manager, SIPCOT who will report directly to the Head of the Organization for implementation monitoring and compliance of the environmental safeguards. Details of Environmental Management Cell with Roles and Responsibilities are enclosed as Annexure-6
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 Half Yearly Compliance Report (HYCR).	Condition noted.

10. 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 Tamil language within seven days indicating that the project has been accorded environment clearance and the details of MOEFCC/SEIAA website where it is displayed.	Condition complied. Newspaper advertisement copy is enclosed as Annexure-3 .
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 must display the same for 30 days from the date of receipt.	Fresh water will be sourced from TWAD. Water supply letter from TWAD Board is enclosed as Annexure - 4

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.	Condition is being complied. Screenshot of compliance report uploaded in website is enclosed as Annexure -7.
4.	The project proponent shall submit Half Yearly Compliance Reports (HYCR) 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.	Condition being complied. Screenshot of compliance report uploaded in website is enclosed as Annexure -8.
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.	Condition is being Complied. Proof of dispatch of Form V to TNPCB and the screenshot of uploading the environmental statement in SIPCOT website is enclosed as Annexure – 9
6.	The project proponent shall inform the Authority (SEIAA) of 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.	Condition Noted.
7.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Condition Noted. All the member units will be instructed to follow applicable rules and guidelines.
8.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also during their presentation to the State Expert Appraisal Committee.	Condition noted.
9.	No further expansion or modifications to the plant shall be carried out without prior approval of the Authority (SEIAA).	Condition noted. All the member units shall comply with.

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.	Condition noted. All the member units shall comply with.
11.	The Authority (SEIAA) may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Condition noted.
12.	The Authority reserves the right to stipulate additional conditions if found necessary. The Company in a time-bound manner shall implement these conditions.	Condition noted.
13.	The Regional Office of the MoEF&CC 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.	Condition noted. We SIPCOT give full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
11.	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.	Condition noted. All the member units shall comply with.

STANDARD CONDITIONS

Part - A - Common conditions applicable for Pre-construction, Construction and Operational Phases:

1.	Any appeal against this Environmental Clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	No appeal lies against this Environmental Clearance
2.	The construction of STP, ETP, Solid Waste Management facility, E-waste management facility, IX sets, etc. should be made in the earmarked area only. In any case, the location of these utilities should not be changed later on.	Condition Noted. Construction will be carried out as per the layout approval.
3.	The Environmental safeguards contained in the application of the proponent (mentioned during the presentation before the State Level Environment Impact Assessment Authority/State Level Expert Appraisal Committee should be implemented in the letter and spirit.	SIPCOT shall comply with all the applicable conditions issued in the EC
4.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire and Rescue Services Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wild Life (Protection) Act, 1972, State Central Ground Water Authority, Coastal Regulatory Zone Authority, other statutory and other authorities as applicable to the project shall be obtained by project proponent from the concerned competent authorities.	Condition noted. All the member units will be instructed to obtain all necessary statutory clearances and approvals.
5.	The SEIAA reserves the right to add additional safeguard measures subsequently, if non-compliance of any of the EC conditions is found and to take action, including revoking of this Environmental Clearance as the case may be.	Condition noted.
6.	A proper record showing compliance of all the conditions of Environmental Clearance shall be maintained and made available at all the times.	Condition is being complied.

7.	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned	Condition is being complied. Proof of dispatch of Form V to TNPCB and the screenshot of uploading the environmental statement in SIPCOT website is enclosed as Annexure -9
	State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company. The status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Chennai by e-mail.	
8.	The Regional Office of the Ministry located at Chennai 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.	Condition will be complied.
9.	"Consent for Establishment shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be submitted to the SEIAA, CTE obtained from TNPCB and the copy to Tamil Nadu.	Condition will be complied.
10.	In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.	Condition Noted. There is no change in the scope of the project

11.	The conditions will 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, the Public Liability Insurance Act, 1991, along with their amendments, draft Minor Mineral Conservation & Development Rules, 2010 framed under MMDR Act 1957, National Commission for protection of Child Right Rules 2006 and rules made there under and also any other orders passed by Hon'ble Supreme Court of India/Hon'ble High Court of Madras and any other Courts of Law, including the Hon'ble National Green Tribunal relating to the subject matter.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
12.	The Environmental Clearance shall not be cited for relaxing the other applicable rules to this project.	Condition Noted.
13.	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act 1986.	Condition Noted.
14.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, Chennai, the respective Zonal Office of CPCH. Bengaluru and the TNPCB. The criteria pollutant levels namely: PM, PM, SO, NO, (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored.	Condition will be complied.

15.	The SEIAA, TN may cancel the Environmental Clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA TN that the project proponent has deliberately concealed and or submitted false or misleading information or inadequate data for obtaining the Environmental Clearance	Condition noted.
16.	The Environmental Clearance does not imply that the other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would be considering the project on merits and be taking decisions independently of the Environmental Clearance.	Condition noted.
17.	The SEIAA. TN may alter/modify the above conditions or stipulate any further condition in the interest of environment protection, even during the subsequent period.	Condition noted.
18.	The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.	Condition noted.
19.	Where the trees need to be cut, compensation plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree that is cut) should be done with the obligation to continue maintenance.	Condition noted.

20.	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive who will report directly to the Head of the Organization and the shortfall shall be strictly reviewed and addressed.	Condition complied. Separate environmental management cell has been assigned and will report to the General Manager, SIPCOT who will report directly to the Head of the Organization for implementation monitoring and compliance of the environmental safeguards. Details of Environmental Management Cell with Roles and Responsibilities are enclosed as Annexure-6 .
21.	The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually.	Condition noted.
22.	The Project Proponent has to provide adequate rain water harvesting pits as committed to recover and reuse the rain water during normal rains as reported.	Condition noted.
23.	The project activity should not cause any disturbance & deterioration of the local bio diversity.	Condition noted.
24.	The project activity should not impact the water bodies. A detailed inventory of the water bodies and forest should be evaluated and fact reported to the Forest Department & PWD for monitoring.	Condition will be complied. Surface water quality monitoring report is enclosed as Annexure -10 .
25.	All the assessed flora & fauna should be conserved and protected.	Condition will be complied.
26.	The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.	Condition will be complied.

27.	Necessary permission shall be obtained from the competent authority for the drawl/ outsourcing of fresh water before obtaining consent from TNPCB.	Condition noted. Water supply letter from TWAD Board is enclosed as Annexure 4.
28.	The proponent shall appoint an Environmental Engineer with necessary qualification for the operation and maintenance of STP (Sewage Treatment Plant) and GWTP (grey water Treatment Plant)	Condition noted. All the member units shall comply with.
29.	The Proponent shall provide the dispenser for the disposal of Sanitary Napkins.	Condition noted. All the member units shall comply with.
30.	All the mitigation measures committed by the proponent for the flood management, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.	Condition noted. All the member units shall comply with.
31.	No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.	Condition noted. All the member units shall comply with.
32.	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.	Condition noted. All the member units shall comply with.
33.	The safety measures proposed in the report should be strictly followed.	Condition noted. All the member units shall comply with.

Part-B-Specific Conditions - Pre construction phase:

1.	The project authorities should advertise with basic details at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of clearance. The press releases also mention that a copy of the clearance letter is available with the State Pollution Control Board and also at website of SEIAA, TN. The copy of the press release should be forwarded to the Regional Office of the Ministry of Environment and Forests located at Chennai and SEIAA-TN.	Newspaper advertisement copy is enclosed as Annexure-3.
2.	In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.	Condition noted. There is no change in the scope of the project
3.	A copy of the clearance letter shall be sent by the proponent to the Local Body. The clearance letter shall also be put on the website of the Proponent.	Condition being complied. Clearance letter uploaded in our website and the screenshot of Environmental Clearance uploaded in our website is attached as Annexure- 7
4.	The approval of the competent authority shall be obtained for structural safety of the buildings during earthquake, adequacy of fighting equipments, etc. as per National Building Code including protection measures from lightning etc. before commencement of the work.	Condition will be complied. All the member units will be instructed to obtain all necessary statutory clearances and approvals.
5.	All required sanitary and hygienic measures for the workers should be in place before starting construction activities and they have to be maintained throughout the construction phase.	Condition noted. All the member units shall comply with.
6.	Design of buildings should be in conformity with the Seismic Zone Classifications.	Condition noted. All the member units will be instructed to obtain all necessary statutory clearances and approvals.

7.	The Construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration.	Construction will be carried out as per the layout approval.
8.	No construction activity of any kind shall be taken up in the OSR area.	Condition noted.
9.	Consent of the local body concerned should be obtained for using the treated sewage in the OSR area for gardening purpose. The quality of treated sewage shall satisfy the bathing quality prescribed by the CPCB.	Condition Noted.
10.	The height and coverage of the constructions shall be in accordance with the existing FSI/FAR norms as per Coastal Regulation Zone Notification, 2011.	Condition is not applicable. Site does not fall in CRZ area.
11.	The Project Proponent shall provide car parking exclusively for the visiting guest in the proposed residential apartment as per CMDA norms	Condition is not applicable. Proposed project is an industrial park / SEZ.
12.	The project proponent shall ensure the entry of basement shall be above maximum flood level.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
13.	The proponent shall prepare completion plans showing Separate pipelines marked with different colours with the following details i. Location of STP, compost system, underground sewer line. ii. Pipe Line conveying the treated effluent for green belt development. iii. Pipe Line conveying the treated effluent for toilet flushing iv. Water supply pipeline v. Gas supply pipe line, if proposed vi. Telephone cable vii. Power cable	Condition applicable will be complied.

	viii. Storm water drains, and ix. Rain water harvesting system, etc. and it shall be made available to the owners.	
14.	A First Aid Room shall be provided in the project site during the entire construction and operation phases of the project.	Condition noted. All the member units shall comply with.
15.	The present land use surrounding the project site shall not be disturbed at any point of time.	Condition noted. All the member units shall comply with.
16.	The green belt area shall be planted with indigenous native trees.	Condition will be complied. Greenbelt will be developed with indigenous native species.
17.	Natural vegetation listed particularly the trees shall not be removed during the construction/operation phase. In case any trees are likely to be disturbed, shall be replanted.	Condition noted. All the member units shall comply with.
18.	During the construction and operation phase, there should be no disturbance to the aquatic ecosystem within and outside the area.	Condition noted. All the member units shall comply with.
19.	The Provisions of Forest conservation Act 1980, Wild Life Protection Act 1972 & Bio diversity Act 2002 should not be violated	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
20.	There should be Firefighting plan and all required safety plan.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
21.	Regular fire drills should be held to create awareness among owners/residents	Condition noted. All the member units shall comply with.

Part-C-Specific Conditions - Construction phase:

1. Construction Schedule:		
i)	The Project proponent shall have to furnish the probable date of commissioning of the project supported with necessary bar charts to SEIAA-TN	Condition noted.

2. Labour Welfare:		
i)	All the laborers to be engaged for construction should be screened for health and adequately treated before and during their employment on the work at the site.	Condition noted. All the member units shall comply with.
ii)	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contradictions due to exposure to dust and take corrective measures, if needed.	Condition noted. All the member units shall comply with.
iii)	Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. The workers shall be provided with personnel protective measures such as masks, gloves, boots etc.	Condition noted. All the member units shall comply with.
3. Water Supply:		
i)	The entire water requirement during construction phase may be met from private tankers	Condition noted. All the member units shall comply with.
ii)	Provision shall be made for the housing labour within the site with all necessary infrastructures 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.	Condition noted.
iii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The treatment and disposal of waste water	Condition noted. All the member units shall comply with.

	shall be through dispersion trench after treatment through septic tank. The MSW generated shall be disposed through Local Body and the identified dumpsite only.	
iv)	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices prevalent.	Condition noted. All the member units shall comply with.
v)	Fixtures for showers, toilet flushing and drinking water should be of low flow type by adopting the use of aerators/pressure reducing devises/sensor based control.	Condition noted. All the member units shall comply with.
4. Solid Waste Management:		
i)	In the solid waste management plan, the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be co-composted with biodegradables.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines
ii)	Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.	Condition noted. All the member units shall comply with.
iii)	Domestic solid wastes to be regularly collected in bins or waste handling receptacles and disposed as per the solid waste management rules 2016.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
iv)	No waste of any type to be disposed of in any watercourse including drains, Canals and the surrounding environment.	Condition noted. All the member units will be instructed to comply with.
v)	E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016 and subsequent amendment.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
5.	Top Soil Management:	

i)	All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.	Condition noted. All the member units shall comply with.
6.	Construction Debris disposal:	
i)	Disposal of construction debris during construction phase should not create any adverse effect on the neighboring communities and be disposed off only in approved sites, with the approval of Competent Authority with necessary precautions for general safety and health aspects of the people. The construction and demolition waste shall be managed as per Construction & Demolition Waste Management Rules, 2016.	Condition will be complied. All the member units will be instructed to follow all applicable rules and guidelines.
ii)	Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourses. The dump sites for such materials must be secured so that they should not leach into the adjacent land/lake/stream etc.	Condition will be complied. All the member units will be instructed to comply with.
7.	Diesel Generator sets:	
i)	Low Sulphur Diesel shall be used for operating diesel generator sets to be used during construction phase. The air and noise emission shall conform to the standards prescribed in the Rules under the Environment (Protection) Act 1986, and the Rules framed thereon.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
ii)	The diesel required for operating stand by DG sets shall be stored in barrels fulfilling the safety norms and if required, clearance from Chief Controller of Explosives shall be taken.	Condition noted. All the member units shall be instructed to obtain necessary approvals.
iii)	The acoustic enclosures shall be installed at all noise generating equipments such as DG sets, air conditioning systems, cooling water tower etc.	Condition noted. All the member units shall comply with.
8.	Air & Noise Pollution Control:	

i)	Vehicles hired for bringing construction materials to the site should be in good condition and should conform to air and noise emission standards, prescribed by TNPCB/CPCB. The vehicles should be operated only during non-peak hours.	Condition noted. All the member units shall comply with.
ii)	Ambient air and noise levels should conform to residential standards prescribed by the TNPCB, both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during the construction phase. The pollution abatement measures shall be strictly implemented.	Condition being complied. Ambient Air and Noise monitoring report is enclosed as Annexure – 10. All the member units will be instructed to follow applicable rules and guidelines.
iii)	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site shall be avoided. Parking shall be fully internalized and no public space should be utilized. Parking plan to be as per CMDA norms. The traffic department shall be consulted and any cost effective traffic regulative facility shall be met before commissioning.	Condition will be complied.
iv)	The buildings should have adequate distance between them to allow free movement of fresh air and passage of natural light, air and ventilation.	All the member units shall comply with.
v)	The project proponent should ensure that adequate Air Pollution Control measures shall be provided from buses and other vehicles, which will be entering the bus terminal. Further, water sprinkling system shall be provided and same shall be used at regular interval to control the dust emission within the project site.	Condition noted. All the member units shall comply with.
9. Building material:		

i)	Fly-ash blocks 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 Notification No. S.O. 2807 (E) dated: 03.11.2009.	All the member units will be instructed to follow applicable rules and guidelines.
ii)	Ready-mix concrete shall alone be used in building construction and necessary cube-tests should be conducted to ascertain their quality.	Condition will be complied.
iii)	Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, high quality double glass with special reflecting coating shall be used in windows.	Condition Noted.
10.	Storm Water Drainage:	
i)	Storm water management around the site and on site shall be established by following the guidelines laid down by the storm water manual.	Condition noted. All the member units shall comply with. Storm water drain photograph is enclosed as annexure. - 11
ii)	Storm water management plan shall be obtained by engaging the services of Anna University/IIT.	Condition Noted.
11.	Energy Conservation Measures:	
i)	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material, to fulfill the requirement.	All the member units will be instructed to follow applicable rules and guidelines.
ii)	Opaque wall should meet prescribed requirement as per Energy Conservation Building Code which is mandatory for all air conditioned spaces by use of appropriate thermal insulation material to fulfill the requirement.	All the member units will be instructed to follow applicable rules and guidelines.

iii)	All norms of Energy Conservation Building Code (ECBC) and National Building Code, 2005 as energy conservation have to be adopted Solar lights shall be provided for illumination of common areas.	All the member units will be instructed to follow applicable rules and guidelines.
iv)	Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting. A hybrids system or fully solar system for a portion of the apartments shall be provided.	All the member units will be instructed to follow applicable rules and guidelines.
v)	A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc. and submitted to the SEIAA in three months' time.	Condition Noted.
vi)	Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.	Condition will be complied. All the member units shall comply with.
12.	Fire Safety:	
i)	Adequate fire protection equipments and rescue arrangements should be made as per the prescribed standards.	Condition noted. All the member units shall comply with.
ii)	Proper and free approach road for fire-fighting vehicles upto the buildings and for rescue operations in the event of emergency shall be made.	Condition noted. All the member units shall comply with.
13.	Green Belt Development:	

i)	The Project Proponent shall plant tree species with large potential for carbon capture in the proposed green belt area based on the recommendation of the Forest department well before the project is completed.	Condition noted. All the member units shall comply with.
ii)	The proponent has to earmark the greenbelt area with dimension and GPS coordinates for the green belt area all along the boundary of the project site with at least 3 meter wide and the same shall be included in the layout out plan to be submitted for CMDA/DTCP approval.	Condition will be complied. Greenbelt will be developed as per the Layout Approval.
iii)	The proponent shall develop the green belt as per the plan furnished and area earmarked for the greenbelt shall not be alter at any point of time for any other purpose.	Condition will be complied. Greenbelt will be developed as per the Layout Approval.
14. Sewage Treatment Plant:		
i)	The Sewage Treatment Plant (STP) installed should be certified by an independent expert/ reputed Academic institutions for its adequacy and a report in this regard should be submitted to the SEIAA, TN before the project is commissioned for operation. Explore the less power consuming systems viz baffle reactor, etc., for the treatment of sewage.	All the member Industries will be mandated to provide adequate capacity of STP and the treated sewage will be reused for their greenbelt development.
ii)	The Proponent shall install STP as furnished. Any alteration to satisfy the bathing quality shall be informed to SEIAA-TN	All the member Industries will be mandated to provide adequate capacity of STP and the treated sewage will be reused for their greenbelt.
iii)	The project proponent shall operate and maintain the Sewage treatment Plant and Effluent treatment plant effectively to meet out the standards prescribed by the CPCB.	All the member Industries will be mandated to provide adequate capacity of STP and the treated sewage will be reused for their greenbelt development.

iv)	The project proponent shall continuously operate and maintain the Sewage treatment plant and Effluent treatment plant to achieve the standards prescribed by the CPCB.	All the member Industries will be mandated to provide adequate capacity of STP and the treated sewage will be reused for their greenbelt development.
v)	The project proponent has to ensure the complete recycling of treated Sewage & Effluent water after achieving the standards prescribed by the CPCB.	All the member Industries will be mandated to provide adequate capacity of STP and ETP to treat sewage and effluent. Treated sewage will be reused for their greenbelt and treated Effluent will be reused for process and utilities.
vi)	The project proponent has to provide separate Stand by D.G set for the STP/GWTP for the continuous operation of the STP/GWTP in case of power failure.	Condition noted.
15.	Rain Water Harvesting:	
i)	The proponent shall ensure that roof rain water collected from the covered roof of the buildings, etc shall be harvested so as to ensure the maximum beneficiation of rain water harvesting by constructing adequate sumps so that 100% of the harvested water shall be reused.	Condition noted. All the member units shall comply with.
ii)	Rain water harvesting for surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment with screens, settlers etc, must be done to remove suspended matter, oil and grease, etc.	Condition noted. All the member units shall comply with.
iii)	The Project Proponent has to provide adequate rain water harvesting pits as committed to recover and reuse the rain water during normal rains as reported.	Condition noted. All the member units shall comply with.
iv)	The project activity should not cause any disturbance & deterioration of the local bio diversity.	Condition will be complied.
16.	Building Safety:	

	Lightning arrester shall be properly designed and installed at top of the building and where ever is necessary.	Condition noted. All the member units shall comply with.
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Part-D-Specific Conditions - Operational Phase/Post constructional phase/Entire life of the project:

Not Applicable – Since the project is under construction phase.

5.0 ENVIRONMENTAL MONITORING DETAILS

It is mandatory to submit Six Monthly Compliance Report (Half Yearly Compliance) to MoEF & CC Regional Office by the proponent. For the purpose of submitting Six-Monthly Compliance report, environmental monitoring was carried out at site by M/s. Hubert Enviro Care Systems Pvt. Ltd. an NABL Accredited Laboratory during the period of October 2024 – March 2025.

5.1 Ambient Air Quality monitoring

The ambient air quality parameters such as suspended Particulate matter (PM₁₀), Respirable Particulate matter (PM_{2.5}), Sulphur dioxide, Oxides of Nitrogen (NO_x), Ammonia, Ozone and Carbon monoxide were monitored. The test report of ambient air quality for the period of October 2024 – March 2025 is enclosed as **Annexure - 10**.

5.2 Ambient Noise level monitoring

Ambient noise levels were monitored and the test report of ambient noise recorded during the period of October 2024 – March 2025 is enclosed as **Annexure 10**.

5.3 Soil quality monitoring

Soil samples were collected and analyzed for nutrients and heavy metals. The test report of soil samples collected and analyzed during the period of October 2024 – March 2025 is enclosed as **Annexure - 10**.

5.4 Ground water quality monitoring

Ground water was tested for various water quality parameters during the period of October 2024 – March 2025. The test report of bore well water collected and analyzed is enclosed as **Annexure- 10**.

5.5 Surface water quality monitoring

The surface water was collected and tested for various water quality parameters during the period of October 2024 – March 2025. The test report of surface water collected and analyzed is enclosed as **Annexure-10**.

6.0 CONCLUSION

1. The environmental monitoring was carried out at site during the period of October 2024 – March 2025.
2. All the conditions stipulated in Environmental Clearance are being complied/ will be complied.



Dr. RAJKUMAR SAMUEL
Director Technical

N

ame: Dr. Rajkumar Samuel

Designation: Director Technical

**Company Name: Hubert Enviro Care
Systems Private Limited**

ENVIRONMENTAL
CLEARANCE

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

To,

The Managing Director
 STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU
 LIMITED (SIPCOT)
 19-A,Rukmani Lakshmiipathy Road, Egmore,Chennai -600008

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/TN/INFRA2/451103/2023 dated 14 Dec 2023. The particulars of the
 environmental clearance granted to the project are as below.

- | | |
|---|---|
| 1. EC Identification No. | EC24B039TN182418 |
| 2. File No. | 9898 |
| 3. Project Type | New |
| 4. Category | B |
| 5. Project/Activity including
Schedule No. | 8(b) Townships and Area Development
projects. |
| 6. Name of Project | DEVELOPMENT OF SPECIAL
ECONOMIC ZONE (SEZ) AT
KALLAKURICHI DISTRICT Land area –
77.09 Ha. (190.42 Acres) |
| 7. Name of Company/Organization | STATE INDUSTRIES PROMOTION
CORPORATION OF TAMILNADU
LIMITED (SIPCOT) |
| 8. Location of Project | TAMIL NADU |
| 9. TOR Date | N/A |

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

Date: 25/01/2024

(e-signed)
Thiru.Deepak S.Bilgi
 Member Secretary
 SEIAA - (TAMIL NADU)

*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)*





**THIRU.DEEPAK S.BILGI, I.F.S.,
MEMBER SECRETARY**

**STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY-TAMILNADU**

3rd Floor, Panagal Maaligai,
No.1, Jeenis Road, Saidapet,
Chennai-15,
Phone No. 044-24359973
Fax No. 044-24359975

ENVIRONMENTAL CLEARANCE

Lr.No. SEIAA-TN/F.No.9898/8(b)/EC. No:1001/2023, dated:10.01.2024.

Sir/Madam

Sub: SEIAA, TN – Proposed Development of Special Economic Zone (SEZ) at Kallakurichi District over an extent of 77.095 Ha (190.42 Acres) at Survey No: 213/2, 213/3 & 213/4 of A, Sathanur Village, Ulundurpet Taluk, Kallakurichi District, Tamil Nadu by – M/s. State Industries Promotion Corporation of Tamil Nadu Limited(SIPCOT) Under Project Category “B1” and Schedule S.No.8(b) “Township and Area Development Projects”-Issue of Environmental Clearance – Regarding.

Ref:

1. Terms of reference issued by SEIAA-TN vide Lr No. SEIAA - TN/F.No.9898/SEAC/8(b)/ToR-1430/2023 dated:21.04.2023.
2. Online Proposal No SIA/TN/INFRA2/451103/2023 dated 02.11.2023.
3. EIA report submitted dated:03.11.2023.
4. Minutes of the 431st Meeting of SEAC held on 15.12.2023.
5. Minutes of the 688th Meeting of SEIAA held on 10.01.2024.

This has reference to your application 2nd & 3rd cited, the Proposed Development of Special Economic Zone (SEZ) at Kallakurichi District over an extent of 77.095 Ha (190.42 Acres) at Survey No: 213/2, 213/3 & 213/4 of A, Sathanur Village, Ulundurpet Taluk, Kallakurichi


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SEIAA-TN**



District - under Category B1 and Schedule S.No.8(b) under the Environment Impact Assessment Notification, 2006, as amended.

The Competent Authority and Authorized Signatory furnished the detailed information in Form 1, Form 1A, Conceptual plan and liquidate enclosures are as Annexures.

Annexure 1

S. No	Description	Details					
1.	Name of the Project	"Proposed Development of Special Economic Zone (SEZ) at Kallakurichi District [Land Area – 77.095 Ha. (190.42 Acres)]" by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).					
2.	Location	Survey No: 213/2, 213/3 & 213/4, A.Sathanur Village, Ulundurpet Taluk, Kallakurichi District and Tamil Nadu state.					
3.	Type of Project	Category – 8(b)					
4.	Latitude & Longitude	S.No	Latitude	Longitude	S.No	Latitude	Longitude
		1	11°40'56.63"N	79°14'46.49"E	6	11°40'21.55"N	79°14'30.20"E
		2	11°40'42.03"N	79°15'5.91"E	7	11°40'29.92"N	79°14'19.85"E
		3	11°40'40.44"N	79°15'2.48"E	8	11°40'32.25"N	79°14'16.98"E
		4	11°40'25.31"N	79°14'40.52"E	9	11°40'40.19"N	79°14'26.44"E
		5	11°40'19.21"N	79°14'34.38"E	10	11°40'52.37"N	79°14'41.33"E
5.	Total Plot Area (in sq. m)	77.095 Ha (190.42 Acres)					
6.	Brief description of the project	The Environmental Clearance is sought for "Proposed Development of Special Economic Zone (SEZ) at Kallakurichi District [Land Area – 77.095 Ha. (190.42 Acres)]" by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT)					

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7.	Built up area details	Not applicable – It is infrastructure development project
8.	Maximum height of the project	18.2m (Since the proposed Project is development of SEZ)
9.	Maximum number of floors	SEZ - based on industrial units Industrial Dormitory- 3 Floors
10.	No. of blocks	SEZ - based on industrial units Industrial Dormitory – 4 towers
11.	Permissible FSI area	-
12.	Proposed FSI area	-
13.	Cost of Project	INR. 2302 crores
14.	No. of Saleable Units	Not applicable. Total developable area is 190.42Acres (77.095 Ha) which includes SEZ plot area, Dormitory, Other Common facilities, Greenbelt, SWM, Road, Storm Water Drain, OSR and such other infrastructure facilities.
15.	Expected Population	Construction phase - 100 Nos. Operation phase - 23000 Nos (including 100Nos for Dormitory during operation phase)
16.	a) Water requirement (in KLD)	2373 KLD (Fresh Water -1144.70 KLD and Recycled Water 1228.30 KLD)
	b) Source	Letter from TWAD for the supply of 3.20 MLD Fresh water supply from 10.00 MLD dedicated Water supply scheme to AIIRLIVAS site at Thalaivasalkoot Road in Salem District vide Letter no. F.SIPCOT/JDO/RWS/SLM/2023/dated: 10.01.2023
17.	Details of Sewage generation and Treatment	Total Sewage generation: 1080.4 KLD Treatment Method: <ul style="list-style-type: none"> Sewage from Industries & Dormitory - Will be treated through CSTP of 1200 KLD and treated sewage used for flushing & green belt development within the SEZ.


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18.	Details of greywater / Effluent generation and Treatment	Total Effluent Generation: 148 KLD Treatment Method: <ul style="list-style-type: none">Effluent from Industries -Will be treated through CETP (160 KLD) and reused for process, utilities, greenbelt and flushing and ZLD will be maintained. In exceptional case, the water (treated water as per TNPCB norms) will be let out into the Highway storm water drain and nearby water bodies during heavy flood with necessary precautions										
19.	Mode of Disposal of treated sewage / effluent	<ul style="list-style-type: none">Treated effluent will be used by individual units for their Process & UtilitiesTreated sewage will be used for greenbelt & Flushing.										
20.	Quantity of Solid Waste generation, Mode of treatment and Disposal	Total Solid Waste Generation	11.123	TPD								
		Organic waste	6.983	TPD								
		Mode of Treatment & Disposal	For SEZ: Individual industries will segregate the waste and organic waste will be composted and used as manure or be collected and sold to TNPCB authorized recyclers/ vendors. For Dormitory: Organic wastes will be composted in Organic Waste Converter and the compost will be used as manure for green belt development or it will be collected and sold to TNPCB authorized recyclers/ vendors									
21.	Quantity of E-Waste generation, Mode of treatment and Disposal	Approximate E-waste (used PC, equipment, sensor, controller, etc) generated from the proposed project is ~1.4 Ton/Year. 82.00 Sq.m area will be earmarked for e-waste storage. The same will be disposed through TNPCB Authorized E-waste Vendor by Individual units as per E-waste Management Rules 2016.										
22.	Quantity of Biomedical Waste generation, Mode of	Biomedical waste generation and management (from Health centre within SEZ) <table><tr><th>Waste Schedule</th><th>Waste Type</th><th>Quantity</th><th>Method of Disposal</th></tr><tr><td></td><td></td><td></td><td></td></tr></table>			Waste Schedule	Waste Type	Quantity	Method of Disposal				
Waste Schedule	Waste Type	Quantity	Method of Disposal									


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	treatment and Disposal	Yellow	Soiled wastes	80 kg/Year	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for Incineration
		Yellow	Expired/Discarded Medicines	40 kg/Year	Will be sent back to the supplier for Incineration
		Red	Contaminated wastes	300 kg/Year	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for sterilization
		White	Waste sharps including metals	30 kg/Year	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for shredding & disposal
		Blue	Glassware	15 kg/year	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for disinfection & recycling
23.	Quantity of Hazardous Waste generation, Mode of treatment and Disposal	Hazardous waste generation from SEZ & its management			
		Hazardous waste schedule & type		Quantity	Method of Disposal
		5.1 - Used /Spent Oil		9.5KL/A	Will be sent to TNPCB authorized recyclers/vendors
		33.1-Empty barrels/ containers/ liners contaminated with hazardous chemicals/wastes		280 Kg/day	Will be sent to TNPCB authorized recyclers/vendors
		35.3 Chemical Sludge from waste water treatment (TPA)		505Kg/day	Generation, Collection, Storage, Disposal through Authorized TSDF
		20.2 Spent solvents		468 Kg/day	Will be sent to TNPCB authorized recyclers/vendors
		33.2 Contaminated cotton rags or other cleaning materials		690 Kg/day	Will be sent to TNPCB authorized recyclers/vendors


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		12.1 Acidic and alkaline residues	138kg/day	Will be sent to TNPCB authorized recyclers/vendors		
24.	Power requirement	20 MVA (Source: TANGEDCO)				
25.	Details of solar energy	<p>SIPCOT may insist the individual industries to commit that their renewable energy will account for no less than 35% of the total energy utilization rate by 2030, and it is expected to be fully operational by 2030. Renewable energy will be a combination of RTS (Rooftop Solar), REC (Renewable Energy Certificate) and DPPA (Direct Power Purchase Agreement), etc., depending on the feasibility study for each solution.</p> <p>The individual industries may utilize Renewable Energy (Solar, DPPA, REC...) for illumination of common area like Street lighting, etc., as per the regulatory norms</p>				
26.	Details of D.G. set with Capacity	<p>Individual industries will have their own power back up:</p> <ul style="list-style-type: none">• 1x250 kVA DGs will act as power back up for Dormitory facilities.• SIPCOT will not propose any power back up for other common facilities.				
27.	<p>Details of Green Belt Area</p> <p>i) Total area of green belt</p> <p>ii) No. of trees existing within the project site</p> <p>iii) No. of trees proposed to be planted</p> <p>iv) No. of trees to be transplanted / cut</p>	<p>I. OSR/Greenbelt Area – 25.58 Ha (63.19 Acres)</p> <p>II. Existing Tree - 48 Nos.</p> <p>III. Tree cut - 18 Nos.</p> <p>IV. Tree going to be planted - 38370 Nos.</p>				
28.	Details of OSR Area	6.05 Ha (14.94 acres)				
29.	Details of Parking Area		Details	Area in Sq.m	Area in Acres	
			Bike Parking Area (Total 960)	8615	2.13	

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		Bus Parking Area (Total 168)	20340	5.03
		Trucks Parking Area (Total 20)	4205	1.04
30.	Provision for rain water harvesting	<ul style="list-style-type: none"> Rain water Harvesting pond capacity = 19376.28 KL/m3. The capacity of the Rain water storage tank has been calculated as 1215 KL and two sumps are proposed, so the total capacity of the Rain water storage tank is 2430 KL. Total runoff collected through the drain channel will stored in rain water collection tanks and rain water harvesting pond. 		
31.	EMP Cost (Rs.)	Capital Cost- Rs. 120.668 Crores Recurring cost- Rs. 54 Lakhs/annum		
32.	CER Cost	Rs. 5 crores The PP shall spend the amount as committed, for the Govt. Schools including Tribal Schools towards (i) Tree plantation, (ii) Library, books, in addition to that the amount shall be spent for Public Health Centre for tree plantation, small play area for children etc., Action plan -Within 12 months from the date of issue of EC.		

AFFIDAVIT FURNISHED BY THE PROPONENT

I, Thiru. Dr. K. Senthil Raj, L.A.S., Managing Director, Authorized Signatory, representing M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) having registered office at 19-A, Rukmani Lakshmiipathy Road, Egmore, Chennai – 600008, for proposed “Development of Special Economic Zone (SEZ) at Kallakurichi District over an extent of 77,095 Ha. (190.42 Acres)” at Survey No: 213/2, 213/3 & 213/4 of A.Sathanur Village, Ulundurpet Taluk, Kallakurichi District and Tamil Nadu, hereby take oath and state as under in this affidavit:

- I. The total water requirement of the park is estimated at 2373 KLD (Fresh water: 1144.70 KLD and Recycled water: 1228.30 KLD). Fresh water requirement for the SEZ is proposed to be sourced from Tamil Nadu Water Supply and Drainage (TWAD) Board.
- II. Power Supply (20 MVA) will be ensured from Tamil Nadu Generation and Distribution Co. Ltd. (TANGEDCO) Facility as a common supply system by SIPCOT to all member

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industries. Individual industries will have back up DG sets as per their requirement. Further 1x250 kVA DG will act as power back up for common facilities of Dormitory during power failure.

- III. Storm water drainage system will be provided along the road ensuring proper rain water harvesting. All member industries will be instructed to provide rain water harvesting structures as per norms.
- IV. All individual industries will be instructed to have their own Solid waste and Hazardous waste storage facility. Inorganic wastes will be sold to TNPCB authorized recyclers by Individual Industries. For Dormitory, Organic waste will be composted and used as manure for Greenbelt development or it will be collected and sold to TNPCB authorized recyclers/vendors. Inorganic waste will be sold to TNPCB authorized recyclers/local vendors.
- V. Separate area will be earmarked for E-waste storage. The same will be disposed by individual units through TNPCB Authorized recyclers / vendor as per E-waste Management Rules, 2016.
- VI. All member industries will be mandated to dispose the hazardous waste generated within their premises as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- VII. Sewage generated from SEZ / Dormitory will be treated through CSTP and treated sewage will be used for greenbelt development. Effluent from SEZ will be treated through CETP and treated effluent will be used for process, utilities, flushing, etc. and ZLD will be maintained.
- VIII. Overall Greenbelt area of the SEZ would be 25.58 Ha. (i.e. 33.18% of developable area i.e., 77,095 Ha).
- IX. Tentative EMP cost of the park is INR 120,668 Crores. Details are given below:


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S.No	Project Components	Tentative Capital Cost (INR Crores)
1	Storm Water drains, culverts & rainwater harvesting systems	63.91804
2	CETP with ZLD	5.65
3	Sewerage system and CSTP	19.3
4	Solid and Hazardous waste Management	7.2
5	Green belt development	17
6	Solar lighting in internal road	4
7	DG sets Acoustics and Stack (for dormitory)	3.6
	Total EMP Cost	120.66804 (say 121)

X. As per the MoEF&CC Office Memorandum No. 22-65/2017-IA.III, dated 25.02.2021, SIPCOT will allocate INR 120.668 Crores towards Environment Management Plan (EMP) instead of allocation of funds under Corporate Environment Responsibility (CER). However as per the direction of SEAC, an amount of INR. 5.0 crores will be allocated for CER Activities.

DISCUSSION BY SEIAA AND THE REMARKS: -

The proposal was placed in the 688th Authority meeting held on 10.01.2024. The Authority noted that the subject was appraised in the 431st SEAC meeting held on 15.12.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the conditions stated therein.

After detailed discussions, the Authority accepts the recommendation of SEAC and **decided to grant Environmental Clearance** subject to the conditions as recommended by SEAC & normal conditions and conditions in **Annexure 'C'** of this minutes in addition to the following conditions.

1. The PP shall obtain fresh water supply commitment letter from the Competent authority before obtaining CTE from TNPCB.

Annexure 'C'


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Climate Change

1. The proponent shall adopt strategies to decarbonize the building.
2. The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials).
3. The proponent shall adopt strategies to reduce temperature including the Building Façade.
4. The proponent shall adopt methodology to control thermal environment and other shocks in the building.
5. The proponent shall adopt detailed plan to reduce carbon footprints and also develop strategies for climate proofing and climate mitigation.
6. The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands.
7. The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues.
8. The activities should in no way cause emission and build-up Green House Gases. All actions to be eco-friendly and support sustainable management of the natural resources within and outside the campus premises.
9. The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building.

Health

10. The proponent shall adopt strategies to maintain the health of the inhabitants.

Energy

11. The proponent shall adopt strategies to reduce electricity demand and consumption.
12. The proponent shall provide provisions for automated energy efficiency.
13. The proponent shall provide provisions for controlled ventilation and lighting systems.
14. The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.
15. All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall ensure that carbon neutral building.
16. The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation.

Regulatory Frameworks


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17. The proponent shall adopt methodologies to effectively implement the Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.
18. The project proponent shall ensure to provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.
19. The proponent shall provide elevator as per rules CMDA/DTCP.

Database maintenance & audits

20. The database record of environmental conditions of all the events from pre-construction, construction and post-construction should be maintained in digitized format.
21. The proponent should maintain environmental audits to measure and mitigate environmental concerns.

Biodiversity

22. There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc.,
23. The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.
24. The proponent shall adopt sustainability criteria to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements.
25. The proponent shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances.


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26. The proponent shall develop building-friendly pest control strategies by using non chemical measures so as to control the pest population thereby not losing beneficial organisms.
27. The proponent shall adopt strategies to prevent bird hits.

Safety measures

28. The proponent should develop an emergency response plan in addition to the disaster management plan.
29. The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan in emergencies.
30. All bio-safety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as stipulated in EIA/EMP.
31. The disaster management and disaster mitigation standards to be seriously adhered to avoid any calamities.
32. The proponent shall provide the emergency exit in the buildings.
33. The proponent shall adhere to the provision and norms regard to fire safety prescribed by competent authority.

Water/Sewage

34. The proponent shall ensure that no treated or untreated sewage shall be let outside the project site & shall find access to nearby water-bodies under any circumstances other than the permitted mode of disposal.
35. The proponent shall provide STP of adequate capacity as committed and shall continuously & efficiently operate STP so as to satisfy the treated sewage discharge standards prescribed by the TNPCB time to time.
36. The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB.
37. The proponent shall periodically test the water sample for the general water quality core parameters including fecal coliform within the proposed project site through TNPCB lab /NABL accredited laboratory and submit report to the concerned authorities.
38. The proponent shall ensure that provision should be given for proper utilization of recycled water.
39. The project proponent shall adhere to storm water management plan as committed.

Parking


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40. The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan as committed.

Solid waste Management

41. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.
42. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.

EMP

43. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
44. The proponent shall ensure that all activities of EMP shall be completed before obtaining CTO from TNPCB.
45. The proponent shall provide and ensure the green belt plan is implemented as indicated in EMP. Also, the proponent shall explore possibilities to provide sufficient grass lawns.

Others

46. As per the 'Polluter Pay Principle', the proponent will be held responsible for any environmental damage caused due to the proposed activity including withdrawal of EC and stoppage of work.
47. The project proponent shall adhere to height of the buildings as committed.

Environmental Clearance along with the conditions containing four parts namely

Part - A – Common conditions applicable for Pre-construction, Construction and Operational Phases

Part - B – Specific Conditions – Pre construction phase

Part - C – Specific Conditions – Construction phase

Part - D – Specific Conditions – Operational Phase/Post constructional Phase / Entire life of the project.

Validity:


The SEIAA hereby accords Environmental Clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 as amended, with validity for Seven years from the date of issue of EC, subject to the compliance of the terms and


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conditions stipulated below:

CONDITIONS IMPOSED BY SEAC:

1. The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.
2. PP shall submit the commitment letter from the local body for supply of fresh water before issue of EC.
3. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.
4. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.
5. Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.
6. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
7. The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.
8. The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms.
9. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.


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10. Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF Lko/Director of Environment and other concerning authority regularly.
11. Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.
12. The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water.
13. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

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 drawing 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.


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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.
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.

1. 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 a system to carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM25) 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
5. Sand, murrum, loose soil, cement, stored on site should 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 should 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.


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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.

2. 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 rainwater.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total freshwater use shall not exceed the proposed requirement as provided in the project details.
4. The quantity of freshwater 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 Half Yearly Compliance Reports (HYCR).
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 byelaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.


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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 rainwater 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. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
12. A rainwater 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 freshwater requirement shall be provided. In areas where ground water recharging is not feasible, the rainwater should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
13. All recharges 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 freshwater 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 Half Yearly Compliance Reports (HYCR).


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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 into 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% wastewater 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 wastewater 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 taken 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.

3. 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 out as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of Half Yearly Compliance Report (HYCR).
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.

4. Energy Conservation Measures:


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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. The proponent shall provide solar panels covering a minimum of 50% of terrace area as committed.
 4. 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. 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.
 6. 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 byelaws requirement, whichever is higher.
 7. 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 byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- 5. 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 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.


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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 of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
7. Use of environmentally 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 environmentally 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 from time to time. Ready mixed concrete must be used in building construction.
9. Any wastes from construction and demolition activities related thereto shall be managed 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.

6. 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.


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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.
5. A wide range of indigenous plant species should be planted as given in the Appendix-I, in consultation with the Government Forest/Horticulture Departments and State Agriculture University.

7. 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 to bring 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


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the implementation of components of the plan which involve the participation of these departments.

8. 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.

9. Corporate Environment Responsibility:

1. The PP shall complete the CER activities, as committed, before obtaining CTE.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe 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 Half Yearly Compliance Report (HYCR).
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


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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 Half Yearly Compliance Report (HYCR).

10. 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 Tamil 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 must 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 Half Yearly Compliance Reports (HYCR) 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 Authority (SEIAA) of 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 and also during their presentation to the State Expert Appraisal Committee.


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9. No further expansion or modifications to the plant shall be carried out without prior approval of the Authority (SEIAA).
 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 Authority (SEIAA) may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 12. The Authority 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 the MoEF&CC 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. 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.

STANDARD CONDITIONS

Part - A – Common conditions applicable for Pre-construction, Construction and Operational Phases:

1. Any appeal against this Environmental Clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
2. The construction of STP, ETP, Solid Waste Management facility, E-waste management facility, DG sets, etc., should be made in the earmarked area only. In any case, the location of these utilities should not be changed later on.
3. The Environmental safeguards contained in the application of the proponent /mentioned during the presentation before the State Level Environment Impact Assessment


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Authority / State Level Expert Appraisal Committee should be implemented in the letter and spirit.

4. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire and Rescue Services Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wild Life (Protection) Act, 1972, State / Central Ground Water Authority, Coastal Regulatory Zone Authority, other statutory and other authorities as applicable to the project shall be obtained by project proponent from the concerned competent authorities.
5. The SEIAA reserves the right to add additional safeguard measures subsequently, if non-compliance of any of the EC conditions is found and to take action, including revoking of this Environmental Clearance as the case may be.
6. A proper record showing compliance of all the conditions of Environmental Clearance shall be maintained and made available at all the times.
7. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company. The status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Chennai by e-mail.
8. The Regional Office of the Ministry located at Chennai 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.
9. "Consent for Establishment" shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be submitted to the SEIAA, Tamil Nadu.
10. In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.
11. The conditions will 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, the Public Liability Insurance Act, 1991, along with their amendments, draft Minor Mineral Conservation & Development Rules, 2010 framed under MMDR Act 1957, National Commission for


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protection of Child Right Rules ,2006 and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/Hon'ble High Court of Madras and any other Courts of Law, including the Hon'ble National Green Tribunal relating to the subject matter.

12. The Environmental Clearance shall not be cited for relaxing the other applicable rules to this project.
13. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
14. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, Chennai, the respective Zonal Office of CPCB, Bengaluru and the TNPCB. The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored.
15. The SEIAA, TN may cancel the Environmental Clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the Environmental Clearance.
16. The Environmental Clearance does not imply that the other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would be considering the project on merits and be taking decisions independently of the Environmental Clearance.
17. The SEIAA, TN may alter/modify the above conditions or stipulate any further condition in the interest of environment protection, even during the subsequent period.
18. The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.
19. Where the trees need to be cut, compensation plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree that is cut) should be done with the obligation to continue maintenance.


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20. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive who will report directly to the Head of the Organization and the shortfall shall be strictly reviewed and addressed.
21. The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually.
22. The Project Proponent has to provide adequate rain water harvesting pits as committed s to recover and reuse the rain water during normal rains as reported.
23. The project activity should not cause any disturbance & deterioration of the local bio diversity.
24. The project activity should not impact the water bodies. A detailed inventory of the water bodies and forest should be evaluated and fact reported to the Forest Department & PWD for monitoring.
25. All the assessed flora & fauna should be conserved and protected.
26. The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.
27. Necessary permission shall be obtained from the competent authority for the drawl / outsourcing of fresh water before obtaining consent from TNPCB.
28. The proponent shall appoint an Environmental Engineer with necessary qualification for the operation and maintenance of STP (Sewage Treatment Plant) and GWTP (grey water Treatment Plant)
29. The Proponent shall provide the dispenser for the disposal of Sanitary Napkins.
30. All the mitigation measures committed by the proponent for the flood management, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.
31. No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.
32. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.
33. The safety measures proposed in the report should be strictly followed.

Part - B – Specific Conditions – Pre construction phase:


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1. The project authorities should advertise with basic details at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of clearance. The press releases also mention that a copy of the clearance letter is available with the State Pollution Control Board and also at website of SEIAA, TN. The copy of the press release should be forwarded to the Regional Office of the Ministry of Environment and Forests located at Chennai and SEIAA-TN.
2. In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.
3. A copy of the clearance letter shall be sent by the proponent to the Local Body. The clearance letter shall also be put on the website of the Proponent.
4. The approval of the competent authority shall be obtained for structural safety of the buildings during earthquake, adequacy of firefighting equipments, etc. as per National Building Code including protection measures from lightning etc. before commencement of the work.
5. All required sanitary and hygienic measures for the workers should be in place before starting construction activities and they have to be maintained throughout the construction phase.
6. Design of buildings should be in conformity with the Seismic Zone Classifications.
7. The Construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration.
8. No construction activity of any kind shall be taken up in the OSR area.
9. Consent of the local body concerned should be obtained for using the treated sewage in the OSR area for gardening purpose. The quality of treated sewage shall satisfy the bathing quality prescribed by the CPCB.
10. The height and coverage of the constructions shall be in accordance with the existing FSI/FAR norms as per Coastal Regulation Zone Notification, 2011.
11. The Project Proponent shall provide car parking exclusively for the visiting guest in the proposed residential apartments as per CMDA norms.
12. The project proponent shall ensure the entry of basement shall be above maximum flood level.


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13. The proponent shall prepare completion plans showing Separate pipelines marked with different colours with the following details

- i. Location of STP, compost system, underground sewer line.
- ii. Pipe Line conveying the treated effluent for green belt development.
- iii. Pipe Line conveying the treated effluent for toilet flushing
- iv. Water supply pipeline
- v. Gas supply pipe line, if proposed
- vi. Telephone cable
- vii. Power cable
- viii. Storm water drains, and
- ix. Rain water harvesting system, etc. and it shall be made available to the owners

14. A First Aid Room shall be provided in the project site during the entire construction and operation phases of the project.

15. The present land use surrounding the project site shall not be disturbed at any point of time.

16. The green belt area shall be planted with indigenous native trees.

17. Natural vegetation listed particularly the trees shall not be removed during the construction/operation phase. In case any trees are likely to be disturbed, shall be replanted.

18. During the construction and operation phase, there should be no disturbance to the aquatic eco-system within and outside the area.

19. The Provisions of Forest conservation Act 1980, Wild Life Protection Act 1972 & Bio diversity Act 2002 should not be violated.

20. There should be Firefighting plan and all required safety plan.

21. Regular fire drills should be held to create awareness among owners/ residents.

Part - C - Specific Conditions – Construction phase:

1. Construction Schedule:

- i) The Project proponent shall have to furnish the probable date of commissioning of the project supported with necessary bar charts to SEIAA-TN.

2. Labour Welfare:


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SEIAA-TN

- i) All the laborers to be engaged for construction should be screened for health and adequately treated before and during their employment on the work at the site.
- ii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contradictions due to exposure to dust and take corrective measures, if needed.
- iii) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. The workers shall be provided with personnel protective measures such as masks, gloves, boots etc.

3. Water Supply:

- i) The entire water requirement during construction phase may be met from private tankers.
- ii) Provision shall be made for the housing labour within the site with all necessary infrastructures 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.
- iii) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The treatment and disposal of waste water shall be through dispersion trench after treatment through septic tank. The MSW generated shall be disposed through Local Body and the identified dumpsite only.
- iv) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices prevalent.
- v) Fixtures for showers, toilet flushing and drinking water should be of low flow type by adopting the use of aerators / pressure reducing devices / sensor based control.

4. Solid Waste Management:


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SEIAA-TN



- i) In the solid waste management plan, the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be co-composted with biodegradables.
- ii) Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.
- iii) Domestic solid wastes to be regularly collected in bins or waste handling receptacles and disposed as per the solid waste management rules 2016.
- iv) No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.
- v) E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016 and subsequent amendment.

5. Top Soil Management:

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

6. Construction Debris disposal:

- i) Disposal of construction debris during construction phase should not create any adverse effect on the neighboring communities and be disposed off only in approved sites, with the approval of Competent Authority with necessary precautions for general safety and health aspects of the people. The construction and demolition waste shall be managed as per Construction & Demolition Waste Management Rules, 2016.
- ii) Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourses. The dump sites for such materials must be secured so that they should not leach into the adjacent land/ lake/ stream etc.

7. Diesel Generator sets:

- i) Low Sulphur Diesel shall be used for operating diesel generator sets to be used during construction phase. The air and noise emission shall conform to the standards prescribed in the Rules under the Environment (Protection) Act, 1986, and the Rules framed thereon.


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SEIAA-TN

- ii) The diesel required for operating stand by DG sets shall be stored in barrels fulfilling the safety norms and if required, clearance from Chief Controller of Explosives shall be taken.
- iii) The acoustic enclosures shall be installed at all noise generating equipments such as DG sets, air conditioning systems, cooling water tower etc.

8. Air & Noise Pollution Control:

- i) Vehicles hired for bringing construction materials to the site should be in good condition and should conform to air and noise emission standards, prescribed by TNPCB/CPCB. The vehicles should be operated only during non-peak hours.
- ii) Ambient air and noise levels should conform to residential standards prescribed by the TNPCB, both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during the construction phase. The pollution abatement measures shall be strictly implemented.
- iii) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site shall be avoided. Parking shall be fully internalized and no public space should be utilized. Parking plan to be as per CMDA norms. The traffic department shall be consulted and any cost effective traffic regulative facility shall be met before commissioning.
- iv) The buildings should have adequate distance between them to allow free movement of fresh air and passage of natural light, air and ventilation.
- v) The project proponent should ensure that adequate Air Pollution Control measures shall be provided from buses and other vehicles, which will be entering the bus terminal. Further, water sprinkling system shall be provided and same shall be used at regular interval to control the dust emission within the project site.

9. Building material:

- i) Fly-ash blocks 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 Notification No. S.O. 2807 (E) dated: 03.11.2009.


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- ii) Ready-mix concrete shall alone be used in building construction and necessary cube-tests should be conducted to ascertain their quality.
- iii) Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, high quality double glass with special reflecting coating shall be used in windows.

10. Storm Water Drainage:

- i) Storm water management around the site and on site shall be established by following the guidelines laid down by the storm water manual.
- ii) Storm water management plan shall be obtained by engaging the services of Anna University/IIT.

11. Energy Conservation Measures:

- i) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material, to fulfill the requirement.
- ii) Opaque wall should meet prescribed requirement as per Energy Conservation Building Code which is mandatory for all air conditioned spaces by use of appropriate thermal insulation material to fulfill the requirement.
- iii) All norms of Energy Conservation Building Code (ECBC) and National Building Code, 2005 as energy conservation have to be adopted Solar lights shall be provided for illumination of common areas.
- iv) Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting. A hybrids system or fully solar system for a portion of the apartments shall be provided.
- v) A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc and submitted to the SEIAA in three month's time.
- vi) Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

12. Fire Safety:


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SEIAA-TN

- i) Adequate fire protection equipments and rescue arrangements should be made as per the prescribed standards.
- ii) Proper and free approach road for fire-fighting vehicles upto the buildings and for rescue operations in the event of emergency shall be made.

13. Green Belt Development:

- i) The Project Proponent shall plant tree species with large potential for carbon capture in the proposed green belt area based on the recommendation of the Forest department well before the project is completed.
- ii) The proponent has to earmark the greenbelt area with dimension and GPS coordinates for the green belt area all along the boundary of the project site with at least 3 meter wide and the same shall be included in the layout out plan to be submitted for CMDA/DTCP approval.
- iii) The proponent shall develop the green belt as per the plan furnished and area earmarked for the greenbelt shall not be alter at any point of time for any other purpose.

14. Sewage Treatment Plant:

- i) The Sewage Treatment Plant (STP) installed should be certified by an independent expert/ reputed Academic institutions for its adequacy and a report in this regard should be submitted to the SEIAA, TN before the project is commissioned for operation. Explore the less power consuming systems viz baffle reactor, etc., for the treatment of sewage.
- ii) The Proponent shall install STP as furnished. Any alteration to satisfy the bathing quality shall be informed to SEIAA-TN.
- iii) The project proponent shall operate and maintain the Sewage treatment Plant and Effluent treatment plant effectively to meet out the standards prescribed by the CPCB.
- iv) The project proponent shall continuously operate and maintain the Sewage treatment plant and Effluent treatment plant to achieve the standards prescribed by the CPCB.
- v) The project proponent has to ensure the complete recycling of treated Sewage & Effluent water after achieving the standards prescribed by the CPCB.


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SEIAA-TN



- vi) The project proponent has to provide separate standby D.G set for the STP/GWTP for the continuous operation of the STP/GWTP in case of power failure.

15. Rain Water Harvesting:

- i) The proponent shall ensure that roof rain water collected from the covered roof of the buildings, etc shall be harvested so as to ensure the maximum beneficiation of rain water harvesting by constructing adequate sumps so that 100% of the harvested water shall be reused.
- ii) Rain water harvesting for surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment with screens, settlers etc. must be done to remove suspended matter, oil and grease, etc.
- iii) The Project Proponent has to provide adequate rain water harvesting pits as committed to recover and reuse the rain water during normal rains as reported.
- i) The project activity should not cause any disturbance & deterioration of the local bio diversity.

16. Building Safety:

Lightning arrester shall be properly designed and installed at top of the building and where ever is necessary.

Part – D - Specific Conditions – Operational Phase/Post constructional phase/Entire life of the project:

1. There should be Firefighting plan and all required safety plan.
2. Regular fire drills should be held to create awareness among owners/ residents.
3. Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.
4. The building should not spoil the green views and aesthetics of surroundings and should provide enough clean air space.
5. Solar energy saving shall be increased to atleast 10% of total energy utilization.
6. The Project proponent has to spend the CER as committed in the affidavit. The above activity shall be carried out before obtaining CTO from TNPCB.


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SEIAA-TN

7. The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually
8. The EMP cost shall be printed in the Brochure / Pamphlet for the preparation of the sale of the property and should also mention the component involved.
9. The Project proponent shall get due permission from the wetland Authority before the commencement of the work, if applicable.
10. The Project proponent should discuss with the wet land Authority, Tamil Nadu Forest Department, PWD and support lake restoration cum improvement, awareness and conservation programs.
11. The project activities should in no way disturb the manmade structures.
12. The Proponent shall do afforestation/ restoration programme contemplated to strengthen the open spaces shall preferably include native species along with the financial forecast for planting and maintenance for 5 years.
13. "Consent to Operate" should be obtained from the Tamil Nadu pollution Control Board before the start of the operation of the project and copy shall be submitted to the SEIAA-TN.
14. Raw water quality to be checked for portability and if necessary RO plant shall be provided.
15. The Proponent should be responsible for the maintenance of common facilities including greening, rain water harvesting, sewage treatment and disposal, solid waste disposal and environmental monitoring including terrace gardening for a period of 3 years. Within one year after handing over the flats to all allottees a viable society or an association among the allottees shall be formed to take responsibility of continuous maintenance of all facilities with required agreements for compliance of all conditions furnished in Environment Clearance (EC) order issued by the SEIAA-TN or the Proponent himself shall maintain all the above facilities for the entire period. The copy of MOU between the buyers Association and proponent shall be communicated to SEIAA-TN.
16. The ground water level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.


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SEIAA-TN



17. Treated effluent emanating from STP shall be recycled / reused to the maximum extent possible. The treated sewage shall conform to the norms and standards for bathing quality laid down by CPCB irrespective of any use. Necessary measures should be made to mitigate the odour and mosquito problem from STP.
18. The Proponent shall operate STP continuously by providing stand by DG set in case of power failure.
19. It is the sole responsibility of the proponent that the treated sewage water disposed for green belt development/ avenue plantation should not pollute the soil/ ground water/ adjacent canals/ lakes/ ponds, etc
20. Adequate measures should be taken to prevent odour emanating from solid waste processing plant and STP.
21. The e - waste generated should be collected and disposed to a nearby authorized e-waste centre as per E- waste (Management & Handling), Rules 2016 as amended.
22. Diesel power generating sets proposed as source of back-up power during operation phase 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.
23. The noise level shall be maintained as per MoEF/CPCB/TNPCB guidelines/norms both during day and night time.
24. Spent oil from D.G sets should be stored in HDPE drums in an isolated covered facility and disposed as per the Hazardous & other Wastes (Management & Transboundary Movement) Rules 2016. Spent oil from D.G sets should be disposed off through registered recyclers.
25. The proponent is required to provide a house hold hazardous waste / E-waste collection and disposal mechanism.
26. The proponent shall ensure that storm water drain provided at the project site shall be maintained without choking or without causing stagnation and should also ensure that the storm water shall be properly disposed off in the natural drainage / channels without disrupting the adjacent public. Adequate harvesting of the storm water should also be ensured.


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SEIAA-TN

27. 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.
28. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
29. The Environmental Clearance is issued based on the documents furnished by the project proponent. In case any documents found to be incorrect/not in order at a later date the Environmental Clearance issued to the project will be deemed to be revoked/ cancelled.


MEMBER SECRETARY
SEIAA-TN



Copy to:

1. The Principal Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032.
4. The APCCF (C), Regional Office, Ministry of Environment & Forest (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai - 34.
5. Monitoring Cell, I A Division, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110003.
6. Stock File.

Signature Not Verified

Digitally signed by: Thiru. Deepak S. Bilgi
Designation: Member Secretary
Date and Time: 1/25/2024 2:05:33 PM
Page 40 of 40



File No.: 9898
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), TAMIL NADU)



Dated 18/06/2024



To,

Managing Director
 STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED (SIPCOT)
 19-A, Rukmani Lakshmi pathy Road, Egmore, Chennai , Egmore, CHENNAI, TAMIL NADU, Egmore,
 600008
 projects@sipcot.in

Subject: Amendment in Environmental Clearance (EC) dated 23/05/2024 granted to the project under the provision of the EIA Notification 2006 and as amended thereof-regarding.

Sir/Madam,

This is in reference to your application submitted to SEIAA vide proposal number SIA/TN/INFRA2/467287/2024 dated 23/05/2024 for grant of an amendment in prior Environmental Clearance (EC) to the project Proposed Development of Special Economic Zone (SEZ) at Kallakurichi District over an extent of 77.095 Ha (190.42 Acres) at Survey No: 213/2, 213/3 & 213/4 of A.Sathanur Village, Ulundurpet Taluk, Kallakurichi District, under the provision of the EIA Notification 2006-and as amended thereof.

Ref:

1. Earlier EC issued by SEIAA-TN vide Lr.No.SEIAA-TN/F.No.9898/ 8(b)/EC.No.1001/2023 dated:10.01.2024.
2. Online proposal No. SIA/TN/INFRA2/467287/2024 dated:26.04.2024.
3. Proponent application for EC Amendment dated: 29.04.2024.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24B3813TN5337555A
(ii) File No.	9898
(iii) Clearance Type	Amendment in EC
(iv) Category	B1
(v) Schedule No./ Project Activity	8(b) Townships/ Area Development Projects / Rehabilitation Centres
(vii) Name of Project	DEVELOPMENT OF SPECIAL ECONOMIC ZONE (SEZ) AT KALLAKURICHI DISTRICT Land area – 77.09 Ha. (190.42 Acres)

(viii) Location of Project (District, State)	KALLAKURICHI, TAMIL NADU
(ix) Issuing Authority	SEIAA
(x) EC Date	18/06/2024
(xi) Applicability of General Conditions	NO
(xiii) Status of implementation of the project	

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-4(Part A, B and C) were submitted to the SEIAA for an appraisal by the State Environment Impact Assessment Authority (SEIAA) Appraisal Committee SEIAA under the provision of EIA notification 2006 and its subsequent amendments.

4. The SEAC, based on information submitted viz: Form-4(Part A, B and C) and other report etc., & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and compliance thereto furnished by the Project Proponent, recommended the proposal for grant Amendment of Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of Specific and Standard EC conditions as detailed in the point below

5. The SEAC noted the following:

1) Earlier, the Proponent has obtained EC vide Lr.No.SEIAA-TN/F.No.9898/8(b)/EC.No.1001/2023 dated:10.01.2024 for the Proposed Development of Special Economic Zone (SEZ) at Kallakurichi District over an extent of 77.095 Ha (190.42 Acres) at Survey No: 213/2, 213/3 & 213/4 of A.Sathanur Village, Ulundurpet Taluk, Kallakurichi District, Tamil Nadu.

2) The project/activity is covered under Category “B1” of Item 8(b) “Townships and Area Development Projects” of the Schedule to the EIA Notification, 2006.

3) Now, the proponent has submitted an application in Form – 4 vide Proposal No. SIA/TN/INFRA2/467287/2024 Dated:26.04.2024 seeking the following amendments in the above-mentioned EC dated:10.01.2024.

S. No	EC Page	Details as per EC	Amendment sought	Remarks																				
Annexure-C																								
1.	11	Energy 14. The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.	The proponent shall utilize not less than 35% of renewable energy by 2030 and shall ensure the buildings are energy efficient.	Based on the request received from potential investor. Road map for the utilization of Renewable energy is given hereunder:																				
				<table> <tr> <th>Renewable Energy (%)</th><th>2027</th><th>2028</th><th>2029</th><th>2030</th></tr> <tr> <td>Rooftop Solar (%)</td><td>3%</td><td>6%</td><td>9%</td><td>12%</td></tr> <tr> <td>DPPA & REC (%)</td><td>-</td><td>-</td><td>-</td><td>23%</td></tr> <tr> <td>Total (%)</td><td>3%</td><td>6%</td><td>9%</td><td>35%</td></tr> </table>	Renewable Energy (%)	2027	2028	2029	2030	Rooftop Solar (%)	3%	6%	9%	12%	DPPA & REC (%)	-	-	-	23%	Total (%)	3%	6%	9%	35%
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2.	11	Energy 15. All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall ensure that carbon neutral building.	Further, Renewable energy will be a combination of RTS (Rooftop Solar), REC (Renewable Energy Certificate) and DPPA (Direct Power Purchase Agreement), etc., specific implementation will depend on the feasibility study for each solution. The proponent shall mandate individual industries to adopt to the building norms for their Industrial sheds	In light of above, amendment sought may be considered.																				

			and buildings.																					
Conditions Imposed by SEAC																								
3.	15	1. The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.	The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating for Dormitory.	Based on the request received from potential investor. In light of above, amendment sought may be considered.																				
Water quality Monitoring and Prevention																								
4.	19	12. A rainwater 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 freshwater requirement shall be provided.	A rainwater harvesting plan i.e., Rainwater harvesting pond / tank, under normal weather conditions, needs to be designed in such a way that storage capacity is <u>Rainwater Harvesting (RWH) pond of capacity 19376.28 KL and RWH tank of capacity 2430 KL (2X1215KL)</u> .	As per the EIA report, we have proposed to develop Rainwater Harvesting (RWH) pond of capacity 19376.28KL/m ³ and RWH tank of capacity 2430 KL (2X1215KL).																				
5.	19	14. No ground water shall be used during construction phase of the project.	The proponent shall obtain proper approval from PWD/TWAD before using ground water for construction, if required.	Based on the request received from potential investor. In light of above, amendment sought may be considered.																				
Energy Conservation Measures																								
6.	21	3. The proponent shall provide solar panels covering a minimum of 50% of terrace area as committed.	The proponent shall utilize not less than 35% of renewable energy by 2030. Renewable energy	Based on the request received from potential investor. Road map for the utilization of Renewable energy is given hereunder:																				
7.	21	6. 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 byelaws requirement, whichever is higher.	will be a combination of RTS (Rooftop Solar), REC (Renewable Energy Certificate) and DPPA (Direct Power Purchase Agreement), etc., specific implementation will depend on the feasibility study for each solution.	<table border="1"> <thead> <tr> <th>Renewable Energy (%)</th><th>2027</th><th>2028</th><th>2029</th><th>2030</th></tr> </thead> <tbody> <tr> <td>Rooftop Solar (%)</td><td>3%</td><td>6%</td><td>9%</td><td>12%</td></tr> <tr> <td>DPPA & REC (%)</td><td>-</td><td>-</td><td>-</td><td>23%</td></tr> <tr> <td>Total (%)</td><td>3%</td><td>6%</td><td>9%</td><td>35%</td></tr> </tbody> </table>	Renewable Energy (%)	2027	2028	2029	2030	Rooftop Solar (%)	3%	6%	9%	12%	DPPA & REC (%)	-	-	-	23%	Total (%)	3%	6%	9%	35%
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Total (%)	3%	6%	9%	35%																				
8.	21	7. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Solar water heating	Solar water heating shall be provided to meet the hot water demand of dormitory as per the local	Based on the request received from potential investor. In light of above, amendment sought may be considered.																				

		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 byelaws, whichever is higher.	building byelaws.	
Waste Management				
9.	22	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.	The proponent shall dispose all kinds of organic waste will be used as manure for greenbelt development or it will be collected and sold to TNPCB authorized recyclers vendors	Based on the request received from potential investor. In light of above, amendment sought may be considered.
10	22	7. Use of environmentally friendly materials in bricks blocks and other construction materials shall be required for at least 20% of the construction material quantity.	Use of environmentally friendly materials in bricks blocks and other construction materials shall be utilised by individual industries as per their requirement.	Based on the request received from potential investor. In light of above, amendment sought may be considered.
Part – B: Specific Condition – Pre construction phase				
11	30	9. Consent of the local body concerned should be obtained for using the treated sewage in the OSR area for gardening purpose. The quality of treated sewage shall satisfy the bathing quality prescribed by the CPCB.	The quality of treated sewage shall satisfy the quality prescribed by the TNPCB/CPCB norms for the utilisation of OSR/Greenbelt development.	Based on the request received from potential investor since treated sewage will not be used for bathing. In light of above, amendment sought may be considered.
Part – C: Specific Condition – Construction phase				
12	33	4.Solid waste Management i) In the solid waste management plan, the STP the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be co-composted with biodegradables.	STP sludge will be used as manure for greenbelt development or it will be collected and sold to TNPCB authorized recyclers vendors.	Based on the request received from potential investor. In light of above, amendment sought may be considered.
13	35	9. Building Material	Use of double glass	Based on the request received from potential investor.

		iii) Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary high quality double glass with special reflecting coating shall be used in windows.	with special reflecting coating in building shall be utilised as per design approval from concerned authority.	In light of above, amendment sought may be considered.
14	35	10. Storm water Drainage ii) Storm water management plan shall be obtained by engaging the services of Anna university/ IIT.	Storm water management plan shall be obtained by engaging the services of Anna university/ IIT / any other reputed government organisation.	Based on the request received from potential investor. In light of above, amendment sought may be considered.
15.	35	11. Energy Conservation Measures v) A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc. and submitted to the SEIAA in three months' time	A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc. and submitted to the SEIAA in three months' time / before work commencement – for dormitory	Based on the request received from potential investor. Same was provided in EIA report. In light of above, amendment sought may be considered.
14. Sewage Treatment Plant				
16	37	6. The project proponent has to provide separate standby DG set for the STP/GWTP for the continuous operation of the STP/GWTP in case of power failure.	Proponent will ensure the separate standby DG set for the STP for the continuous operation of the STP in case of power failure. The standby DG operation could be centralized or stand-alone in individual industry area.	Based on the request received from potential investor. In light of above, amendment sought may be considered.
Part – D: Specific Conditions – Operational phase/Post constructional phase/Entire Life of the project				
17	37	5. Solar energy saving shall be increased to at	Solar energy consumption shall	Based on the request received from potential investor. Same was provided in EIA report.

		least 10% of total energy utilization.	be at least 10% of total energy utilization.	In light of above, amendment sought may be considered.
18	38	16. The ground water level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.	The ground water level and its quality should be monitored and recorded regularly in consultation with PWD/TWAD- if ground water is used.	Based on the request received from potential investor. In light of above, amendment sought may be considered.

Based on the presentation & documents furnished by the PP, SEAC decided to **recommend the following amendments in the Environmental Clearance.**

S. No	EC Page	Details as per EC	Amendment recommended				
Annexure-C							
1.	11	<u>Energy</u> 14. The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.	The proponent shall utilize not less than 35% of renewable energy by 2030 and shall ensure the buildings are energy efficient. Further, Renewable energy will be a combination of RTS (Rooftop Solar), REC (Renewable Energy Certificate) and DPPA (Direct Power Purchase Agreement), etc., specific implementation will depend on the feasibility study for each solution.				
2.	11	<u>Energy</u> 15. All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall ensure that carbon neutral building.	The proponent shall mandate individual industries to adopt to the building norms for their Industrial sheds and buildings. Road map for the utilization of Renewable energy is given hereunder:				
			Renewable Energy (%)	2027	2028	2029	2030
			Rooftop Solar (%)	3%	6%	9%	12%
			DPPA & REC (%)	-	-	-	23%
			Total (%)	3%	6%	9%	35%
Conditions Imposed by SEAC							
3.	15	1.The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.	The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating for Dormitory.				
Water quality Monitoring and Prevention							
4.	19	12. A rainwater 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 freshwater requirement shall be provided.	A rainwater harvesting plan i.e., Rainwater harvesting pond / tank, under normal weather conditions, needs to be designed in such a way that storage capacity is <u>Rainwater Harvesting (RWH) pond of capacity 19376.28KL and RWH tank of capacity 2430 KL (2X1215KL).</u>				
5.	19	14. No ground water shall be used during construction phase of the project.	The proponent shall obtain proper approval from PWD/TWRD before using ground water for construction, if required.				
Energy Conservation Measures							

6.	21	3. The proponent shall provide solar panels covering a minimum of 50% of terrace area as committed.	The proponent shall utilize not less than 35% of renewable energy by 2030. Renewable energy will be a combination of RTS (Rooftop Solar), REC (Renewable Energy Certificate) and DPPA (Direct Power Purchase Agreement), etc., specific implementation will depend on the feasibility study for each solution.				
7.	21	6. 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 byelaws requirement, whichever is higher.	Road map for the utilization of Renewable energy is given hereunder:				
			Renewable Energy (%)	2027	2028	2029	2030
			Rooftop Solar (%)	3%	6%	9%	12%
			DPPA & REC (%)	-	-	-	23%
			Total (%)	3%	6%	9%	35%
8.	21	7. Solar power shall be used for lighting in the apartment to reduce the power load on grid. 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 byelaws, whichever is higher.	Solar water heating shall be provided to meet the hot water demand of dormitory as per the local building byelaws.				
Waste Management							
9.	22	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.	The proponent shall dispose all kinds of organic waste will be used as manure for greenbelt development or it will be collected and sold to TNPCB authorized recyclers vendors.				
10	22	7. Use of environmentally friendly materials in bricks blocks and other construction materials shall be required for at least 20% of the construction material quantity.	Use of environmentally friendly materials in bricks blocks and other construction materials shall be utilised by individual industries as per their requirement.				
Part – B: Specific Condition – Pre construction phase							
11	30	9. Consent of the local body concerned should be obtained for using the treated sewage in the OSR area for gardening purpose. The quality of treated sewage shall satisfy the bathing quality prescribed by the CPCB.	The quality of treated sewage shall satisfy the quality prescribed by the TNPCB/CPCB norms for the utilisation of OSR/Greenbelt development.				
Part – C: Specific Condition – Construction phase							
12	33	4.Solid waste Management i) In the solid waste management plan, the STP the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be co-composted with biodegradables.	STP sludge will be used as manure for greenbelt development or it will be collected and sold to TNPCB authorized recyclers vendors.				
13	35	9. Building Material iii) Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air	Use of double glass with special reflecting coating in building shall be utilised as per design approval from concerned authority.				

		conditioning. If necessary high quality double glass with special reflecting coating shall be used in windows.	
14	35	10. Storm water Drainage ii) Storm water management plan shall be obtained by engaging the services of Anna university/ IIT.	Storm water management plan shall be obtained by engaging the services of Anna university/ IIT / any other reputed government organisation.
15.	35	11. Energy Conservation Measures v) A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc. and submitted to the SEIAA in three months' time	A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc. and submitted to the SEIAA in three months' time / before work commencement – for dormitory
14. Sewage Treatment Plant			
16	37	6. The project proponent has to provide separate standby DG set for the STP/GWTP for the continuous operation of the STP/GWTP in case of power failure.	Proponent will ensure the separate standby DG set for the STP for the continuous operation of the STP in case of power failure. The standby DG operation could be centralized or stand-alone in individual industry area.
Part – D: Specific Conditions – Operational phase/Post constructional phase/Entire Life of the project			
17	37	5. Solar energy saving shall be increased to at least 10% of total energy utilization.	The proponent shall utilize not less than 35% of renewable energy by 2030.
18	38	16. The ground water level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.	The ground water level and its quality should be monitored and recorded regularly in consultation with PWD/TWAD- if ground water is used.

The remaining conditions stipulated vide Lr.No.SEIAA-TN/F.No.9898/8(b)/EC.No.1001/2023 dated:10.01.2024 will remain unaltered.

6. The SEIAA has examined the proposal in accordance with the extant provisions of the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on recommendation of SEAC hereby accords amendment in Environment Clearance dated 29/04/2024 for the instant proposal to M/s. Managing Director under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of EC conditions, general instructions issued vide EC letter dated and EC identification number SIA/TN/INFRA2/467287/2024 and following additional specific conditions as mentioned below:
7. After detailed discussion accepts the recommendation of SEAC and decided to grant Amendment in the Environmental Clearance as follows subject to grant the existing conditions as mentioned in the EC vide SEIAA-TN/F.No. 9898/8(b)/EC.No.1001/2023 dated:10.01.2024 are remains unaltered.

S. No	EC Page	Details as per EC	Amendment granted
Annexure-C			
1.	11	Energy 14. The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.	The proponent shall utilize not less than 35% of renewable energy by 2030 and shall ensure the buildings are energy efficient.
2.	11	Energy 15. All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall	Further, Renewable energy will be a combination of RTS (Rooftop Solar), REC (Renewable Energy Certificate) and DPPA (Direct Power Purchase Agreement), etc., specific implementation will depend on the feasibility study for each solution.

		ensure that carbon neutral building.	The proponent shall mandate individual industries to adopt to the building norms for their Industrial sheds and buildings. Road map for the utilization of Renewable energy is given hereunder:				
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Water quality Monitoring and Prevention							
4.	19	12. A rainwater 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 freshwater requirement shall be provided.	A rainwater harvesting plan i.e., Rainwater harvesting pond / tank, under normal weather conditions, needs to be designed in such a way that storage capacity is <u>Rainwater Harvesting (RWH) pond of capacity 19376.28KL and RWH tank of capacity 2430 KL (2X1215KL).</u>				
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Waste Management			
9.	22	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.	The proponent shall dispose all kinds of organic waste will be used as manure for greenbelt development or it will be collected and sold to TNPCB authorized recyclers vendors.
10	22	7. Use of environmentally friendly materials in bricks blocks and other construction materials shall be required for at least 20% of the construction material quantity.	Use of environmentally friendly materials in bricks blocks and other construction materials shall be utilised by individual industries as per their requirement.
Part – B: Specific Condition – Pre construction phase			
11	30	9. Consent of the local body concerned should be obtained for using the treated sewage in the OSR area for gardening purpose. The quality of treated sewage shall satisfy the bathing quality prescribed by the CPCB.	The quality of treated sewage shall satisfy the quality prescribed by the TNPCB/CPCB norms for the utilisation of OSR/Greenbelt development.
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13	35	9. Building Material iii) Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary high quality double glass with special reflecting coating shall be used in windows.	Use of double glass with special reflecting coating in building shall be utilised as per design approval from concerned authority.
14	35	10. Storm water Drainage ii) Storm water management plan shall be obtained by engaging the services of Anna university/ IIT.	Storm water management plan shall be obtained by engaging the services of Anna university/ IIT / any other reputed government organisation.
15.	35	11. Energy Conservation Measures v) A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc. and submitted to the SEIAA in three months' time	A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc. and submitted to the SEIAA in three months' time / before work commencement – for dormitory
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Part – D: Specific Conditions – Operational phase/Post constructional phase/Entire Life of the project			

17	37	5. Solar energy saving shall be increased to at least 10% of total energy utilization.	The proponent shall utilize not less than 35% of renewable energy by 2030.
18	38	16. The ground water level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.	The ground water level and its quality should be monitored and recorded regularly in consultation with PWD/TWAD- if ground water is used.

8. This issues with the approval of the Competent Authority

Copy To

1. The Principal Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Forest st. George, Chennai- 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032.
4. The APCCF (C), Regional Office, Ministry of Environment & Forest (SZ),34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai - 34.
5. Monitoring Cell, I A Division, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110003.
6. Stock File.

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

1. Seiaa Speciffic Conditions:

S. No	EC Conditions
1.1	The Authority after detailed discussion accepts the recommendation of SEAC and decided to grant Amendment in the Environmental Clearance as follows subject to grant the existing conditions as mentioned in the EC vide SEIAA-TN/F.No. 9898/8(b)/EC.No.1001/2023 dated:10.01.2024 are remains unaltered.

சுற்றுச்சூழல் 01.02.2024.



தமிழ்நாடு தொழில் முன்னேற்ற நிறுவனம்

19-ஏ, ருக்குமணி இலட்சுமிபதி சாலை,
எழும்பூர், சென்னை - 600 008.

CIN U74999TN1971SGC005967

100
1994-2023

**சிப்காட் சிறப்பு பொருளாதார மண்டலம்
சுற்றுச்சூழல் இசைவாணை**

மாநில சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையம்,
தமிழ்நாடு கடித எண் **SEIAA-TN/F.No.9898/8 (b) /**
EC.No : 1001/2023 தேதி : **10.01.2024** மூலம்
கள்ளக்குறிச்சி மாவட்டம், உளுந்தூர்பேட்டை தாலுக்காவில்
உள்ள அ.சாத்தனூர் கிராமத்தில் “சிறப்பு பொருளாதார
மண்டலம்” அமைப்பதற்கான சுற்றுச்சூழல் இசைவாணை
வழங்கியுள்ளது.

இவ்விசைவாணையின் முழுவிவரங்களை
www.sipcot.tn.gov.in என்னும் சிப்காட் இணைய
தளத்திலும், சுற்றுச்சூழல், வனம் மற்றும் காலநிலை
மாற்றம் அமைச்சகம் மற்றும் மாநில சுற்றுச்சூழல் தாக்க
மதிப்பீட்டு ஆணையத்தின் இணையதளத்திலும்
பெற்றுக்கொள்ளலாம்.

மேலாண்மை இயக்குநர்

Indian Express

01.02.2024



**STATE INDUSTRIES PROMOTION
CORPORATION OF TAMIL NADU LIMITED**



19-A, RUKMANI LAKSHMIPATHY ROAD,
EGMORE, CHENNAI - 600 008.
CIN U74999TN1971SGC005967

SIPCOT SPECIAL ECONOMIC ZONE ENVIRONMENTAL CLEARANCE

Environmental Clearance has been obtained for the proposed Development of Special Economic Zone at A.Sathanur Village, Ulundurpet Taluk, Kallakurichi District, Tamil Nadu from the State Environment Impact Assessment Authority (SEIAA), Tamil Nadu vide Letter No. **SEIAA-TN/F.No.9898/8(b)/EC.No:1001/2023 dated 10.01.2024.**

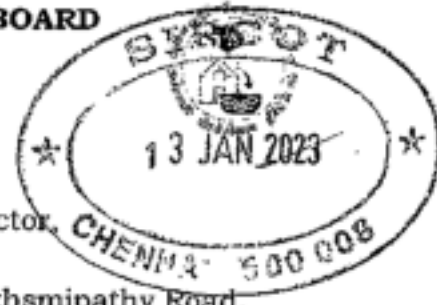
The Environmental Clearance (EC) letter can be downloaded from the SIPCOT website **www.sipcot.tn.gov.in**. The Clearance Letter is also available in the website of Ministry of Environment, Forest and Climate Change (MoEF&CC) / SEIAA.


TAMIL NADU WATER SUPPLY AND DRAINAGE BOARD

E- Mail: eerwsslm2010@gmail.com

Phone: 0427-2448261

981/2023


From

 Er.C.Mathiyalagan.M.E.,
 Executive Engineer, TWAD
 RWS Division,
 No.24, Palaniyappa Nagar;
 Salem

To

 The Managing Director, SIPCOT,
 19-A, Rukmani Lakshmipathy Road,
 Post Box No. 7223, Egmore,
 Chennai - 600 008

Lr No.F.SIPCOT /JDO/RWS/SLM/2023/Dated.10.01.2023

Sir,

Sub: TWAD Board - RWS Division - Salem - Providing 3.20 MLD Water supply from 10.00 MLD Dedicated water supply scheme to AIIRLIVAS site at Thalaivasal Koot Road in Salem District - Request for obtaining concurrence by SIPCOT for drawal of 3.20 MLD from AIIRLIVAS belonging to Animal Husbandary Department - Reg.

- Ref
1. Managing Director, SIPCOT Lr. No. CD/KKC/WSS/2022/Dt. 01.12.2022
 2. EODB Application No. TWAD 20220081 Dt. 08.11.2022
 3. G.O.(Ms) No. 183 / Animal Husbandry, Dairying and Fisheries (AH2) Department /Dt. 16.12.2019

I kindly submit that TWAD Board has been requested for providing 3.20 MLD Water supply to SIPCOT Industrial park at A. Sathanur in Ulunthurpet Taluk from 10.00 MLD dedicated Water supply scheme to Advanced Institute for Integrated Research on Livestock and Animal Sciences (AIIRLIVAS) Institute at Thalaivasal koot road in Salem District vide reference 1st cited. Necessary application has been filed in EoDB on 08.11.2022 vide reference 2nd cited.

In this regard, I kindly submit that dedicated water supply scheme has been executed by TWAD Board as per the administrative sanction vide reference 3rd cited as deposit work exclusively for AIIRLIVAS belonging to Animal Husbandary department. Hence I request that necessary concurrence for drawal of 3.20 MLD water from Water Supply Scheme to AIIRLIVAS may kindly be obtained by SIPCOT for further processing of the above water supply requirement.

 C. V. S. 10-1-23
 Executive Engineer, TWAD
 RWS Division, Salem

9/10/23

1348

17559/2023.

ந.க.எண்.8587/ILP/2022

இயக்குநர் அலுவலகம்

கால்நடை பராமரிப்பு மற்றும் மருத்துவப் பணிகள்

கால்நடை பன்முக மருத்துவமனை வளாகம்

571, அண்ணா சாலை, நந்தனம்,

சென்னை - 35. நாள்: 24.04.2023.

அனுப்புநர்:

திருமதி. எம்.லக்ஷ்மி, இ.ஆ.ப.,

இயக்குநர்

கால்நடை பராமரிப்பு மற்றும் மருத்துவப் பணிகள்

சென்னை - 35.



பெறுநர்:

மேலாண் இயக்குநர்,

தமிழ்நாடு அரசு தொழில் முன்னேற்றக் கழகம் (SIPCOT),

19A, ருக்மணி லக்ஷ்மிபதி ரோடு,

எழும்பூர், சென்னை.

Handwritten signature/initials.

TAI
29/4

பொருள் :	தமிழ்நாடு அரசு தொழில் முன்னேற்றக் கழகம் (SIPCOT) சாத்தனூர் தொழிற்பூங்கா - கால்நடை மற்றும் விலங்கின அறிவியலுக்கான ஒருங்கிணைந்த உயர் ஆராய்ச்சி நிலையத்தின் (AIRLIVAS) செயல்பாட்டிற்காக 10MLD தண்ணீர் பயன்படுத்தும் திட்டம் - 3.2MLD தண்ணீர் - தொழிற்பூங்காவிற்கு ஆணை வழங்குதல் தொடர்பாக.
பார்க்கை :	1. தமிழ்நாடு அரசு தொழில் முன்னேற்றக் கழகம் (SIPCOT) Lr.No.CD/KKC/WSS/2023 நாள்: 19.01.2023. 2. புரிந்துணர்வு ஒப்பந்தம் - தமிழ்நாடு குடிநீர் வடிகால் வாரியம் மற்றும் கால்நடை பராமரிப்புத்துறை, நாள் : 29.05.2020 3. T.O.Lr.No.CD/KKC/WSS/2022 Dated. 26.09.2022 and 01.12.2022 addressed to the Managing Director TWAD Board, Chennai-5. 4. E.E/TWAD/RWSDivision/Salem/Lr.No.F.SIPCOT/JDO/RWS/SLM/2023 Dated 10.01.2023 addressed to the Managing Director, SIPCOT. 5. TWAD BOARD B.P.Ms.No.88, நாள் : 08.11.2017.

சேலம் மாவட்டம், தலைவாசல் கூட்டுறோட்டிற்கு அருகில் தேசிய

நெடுஞ்சாலை எண்.79-ஐ ஒட்டி அமைந்துள்ள கால்நடை பராமரிப்புத்துறைக்கு

சொந்தமான 1102.25 ஏக்கர் பரப்பில் கால்நடை பராமரிப்பு, பால்வளம் மற்றும் மீன்வள

new,
one copy N/o. to. CT-IWC. on 21/5/23.

நடைமுறைகள் மற்றும் தொழில்நுட்பங்களை உள்ளடக்கிய ஒருங்கிணைந்த பஸ்துறை பஸ்தோக்குடன் கூடிய கால்நடை மற்றும் விலங்கின அறிவியலுக்கான ஒருங்கிணைந்த உயர் ஆராய்ச்சி நிலையம் (AIRLIVAS) ரூ564.44 கோடி மதிப்பீட்டில் நிறுவப்பட்டுவருகிறது.

இந்நிலையத்திற்காக தமிழ்நாடு குடிநீர் வடிகால் வாரியம் மூலம் ரூ262.16 கோடி மதிப்பீட்டில் மேட்டூர் அணையிலிருந்து சுமார் 156 கிலோ மீட்டர் தூரம் குழாய்கள் மற்றும் Pumping Station, Water Purification Plant, Ridge Sump, Three Break Pressure Tank ஆகிய கட்டமைப்புகள் மூலம் தண்ணீர் பெற்றிட பணிகள் செய்து முடிக்கப்பட்டுள்ளது. இத்தண்ணீரை சேமிக்க 60 (25+25+10) இலட்சம் லிட்டர் கொள்ளளவு கொண்ட 3 மேல்நிலை தண்ணீர் தொட்டிகள் அமைக்கப்பட்டுள்ளது.

கால்நடை மற்றும் விலங்கின அறிவியலுக்கான ஒருங்கிணைந்த உயர் ஆராய்ச்சி நிலையம் 2023ஆம் ஆண்டு பயன்பாட்டிற்கு கொண்டுவருவதற்கான ஆயத்தப்பணிகள் நடைபெற்றுவருகிறது.

இந்நிலையில் பார்வை 1ல் காணும் தமிழ்நாடு அரசு தொழில் முன்னேற்றக் கழகத்தின் (SIPCOT) கடிதத்தின் படி கள்ளக்குறிச்சி மாவட்டம் A சாத்தனூரில் அமைக்கப்படவுள்ள தொழிற்பூங்காவிற்கு 3.2 MLD (3.2 Million Litres per day) தண்ணீர் வழங்கிட கால்நடை பராமரிப்புத்துறையின் ஒப்புதல் கோரப்பட்டுள்ளது.

தமிழ்நாடு குடிநீர் வடிகால் வாரியமானது அரசு, தொழில் மற்றும் வணிக ரீதியான நிறுவனங்களுக்கு தண்ணீர் வழங்குவது தொடர்பாக பார்வை 5-ன் வழி கீழ்க்கண்டவாறு கட்டணம் நிர்ணயம் செய்துள்ளதாக தெரியவருகிறது.


வ.எண்	நிறுவனம்	கட்டண விகிதம்
1	அரசு நிறுவனங்கள்	ரூ30/1000 லிட்டர்
2	தொழில் மற்றும் வணிக ரீதியான நிறுவனங்கள்	ரூ60/1000 லிட்டர்

கால்நடை மற்றும் விலங்கின அறிவியலுக்கான ஒருங்கிணைந்த உயர் ஆராய்ச்சி நிலையத்திற்கு நான் ஒன்றிற்கு 10MLD (18hrs/Day) தண்ணீர் தேவைப்படும். இந்த 10MLD தண்ணீர், 18 மணி நேரம் பம்பிங் செய்வதன் மூலம் பெறப்படும். மேலும் பார்வை 1ல் காணும் SIPCOT நிறுவன கடிதவழி, கோரப்பட்டுள்ள 3.2MLD தண்ணீர்,

எஞ்சிய 6 மணி நேரம் பம்பிங் செய்வதன் மூலம், பெற்று பயன்படுத்திட இதன்வழி இசைவு தெரிவிக்கப்படுகிறது. அதற்குரிய கட்டணத்தினை தமிழ்நாடு குடிநீர் வடிகால் வாரியம் வழிகாட்டுதலின்படி செலுத்தவேண்டும் எனவும் தெரிவிக்கப்படுகிறது.

ஓம்/- எம்.லக்ஷ்மி
இயக்குநர்
கால்நடை பராமரிப்பு (ம) மருத்துவப் பணிகள்
சென்னை - 35.

// உண்மை நகல் // அனுப்பப்படுகிறது


கூடுதல் இயக்குநர் (பணிகளைகள்)
இயக்குநர் அலுவலகம்
கால்நடை பராமரிப்பு (ம) மருத்துவப் பணிகள்
சென்னை - 35.

நகல் அனுப்பப்படுகிறது.

செயலியாறியாளர்,
தமிழ்நாடு குடிநீர் வடிகால் வாரியம்,
RWS திரிவு,
எண். 84, பழனியா நகர்,
சேலம்.

SIPCOT – KALLAKURICHI
MONITORING PHOTOGRAPHS

AMBIENT AIR QUALITY MONITORING PHOTOS:

NEAR PROJECT AREA



Kanaiyar



Ulundurpettai



Pallidangal



Sathanur



26.03.2025

GROUND WATER SAMPLING PHOTOS

Near Project area



Kanaiyar



Ulundurpettai



NOISE SAMPLING PHOTOGRAPH

NEAR PROJECT AREA



Kanaivar



Ulundurpettai



Pallidangal



Sathanur



SOIL MONTORING PHOTOGRAPH

NEAR PROJECT AREA



Kanaiyar



Ulundurpettai



Pallidangal



Sathanur



SURFACE WATER SAMPLING PHOTOGRAPH

Kunamangalam Lake



26.03.2025

Lake near Ajees Nagar



26.03.2025

ENVIRONMENTAL MANAGEMENT CELL

1. INTRODUCTION:

- 1.1. For effective implementation and monitoring of environmental management system, it is necessary to have a permanent organizational set-up as Environmental Management Cell (EMC). This is done by assigning responsibility to the concerned personnel for implementation of environmental control measures.
- 1.2. SIPCOT Environmental Management Cell consist of 7 team members headed by SIPCOT Managing Director, General Manager (Projects), Manager and two Environmental Consultants assisted by two Office Staffs which will enforce and implement the Environmental Plan.
- 1.3. The Organization of Environmental Management Cell (EMC) proposed is given in **Figure - 1**.



Figure - 1 Organogram for Environmental Management Cell

2. RESPONSIBILITIES OF ENVIRONMENTAL MANAGEMENT CELL:

- 2.1. Environmental Management Cell (EMC) shall obtain all applicable statutory clearances and approvals as mandated by the regulatory authorities and maintain the Industrial Parks in compliance with all applicable rules and regulations.
- 2.2. Other responsibilities of the cell will include:
 - a) Review the progress of regulatory compliance of SIPCOT and initiate necessary action for the compliance of the same.
 - b) The EMC will review, implement, update, and comply with the Environment Policy to ensure the effective implementation of environmental safeguard measures.
 - c) Keeping the Board updated on regular basis about the activities carried out under environmental measures and suggests measures to improve environment preservation and protection.
 - d) Encourages allottee units to implement, adopt and use of green and sustainable technologies such as Solar, Wind, Thermal, Biomass, Electric & Hybrid vehicles, etc. to achieve more resource-efficient, clean and resilient growth towards reducing pollution during their process, manufacturing and transportation of goods and encourages energy recovery for self sustainability from their Industrial process.
 - e) Mandate industries to reduce the use of one time use plastics, Styrofoam, and other plastic material during the packing and delivery of goods.

Table – 1: Roles and responsibilities of EMC

S.No.	Designation	Responsibilities
1	Managing Director	<ul style="list-style-type: none">➤ Responsible for overall environmental management.➤ Regularly conduct meeting with EMC and take feedback regarding all the activities performed under Environmental Management and give directions to succeeding component.➤ Approval of funds for carrying out environmental management activities.
2	GM – Projects	<ul style="list-style-type: none">➤ Keep aware about all the activities performed under EMC in the industrial parks.➤ Issuing direction to Project officers for implementing Greenbelt development, Storm water management, rain water harvesting, etc.➤ To deal with legal entity pertaining to environmental issues.
3	Manager	<ul style="list-style-type: none">➤ To prepare and allocate budget for Environment Management Plan.➤ Ensuring compliance to the conditions prescribed by statutory authority.➤ Mandating member industries to comply with the conditions stipulated in the statutory approvals and non-compliance if any shall be reported to GM and immediately required action will be taken.
4	Environmental Consultants (Two)	<ul style="list-style-type: none">➤ Obtaining Statutory Approvals from MoEF&CC / SEIAA / TNPCB, etc.➤ Addressing the various queries received from statutory authorities on environmental front.➤ Submitting Environmental compliance report and coordinating with project officers for Environmental monitoring, audit, etc.➤ Compliance with the environmental laws and implications which dynamically changes from time to time due to the emerging challenges.

SIPCOT - State Industries Promotion Corporation of Tamil Nadu

http://sipcotweb.tn.gov.in/Environment/Download

Home About Us Why SIPCOT? Land Information Industrial Parks Special Projects Tenders Resources Login Contact Us

29	Theothukudi - II	Theothukudi	Download
30	Nemili	Kancheepuram	Download
31	Manthandapalli (Hosur Phase IV)	Krishnagiri	Download
32	Mambakkam	Kancheepuram	Download
33	Theni	Theni	Download
34	Virudhunagar	Virudhunagar	Download
35	Nedumpalli	Ranipet	Download
36	A. Satharur	Kallakurichi	Download
37	Variamallee	Thiruvallur	Download
38	Venapatti	Coimbatore	Download
39	Dharmapuri	Dharmapuri	Download

English Note

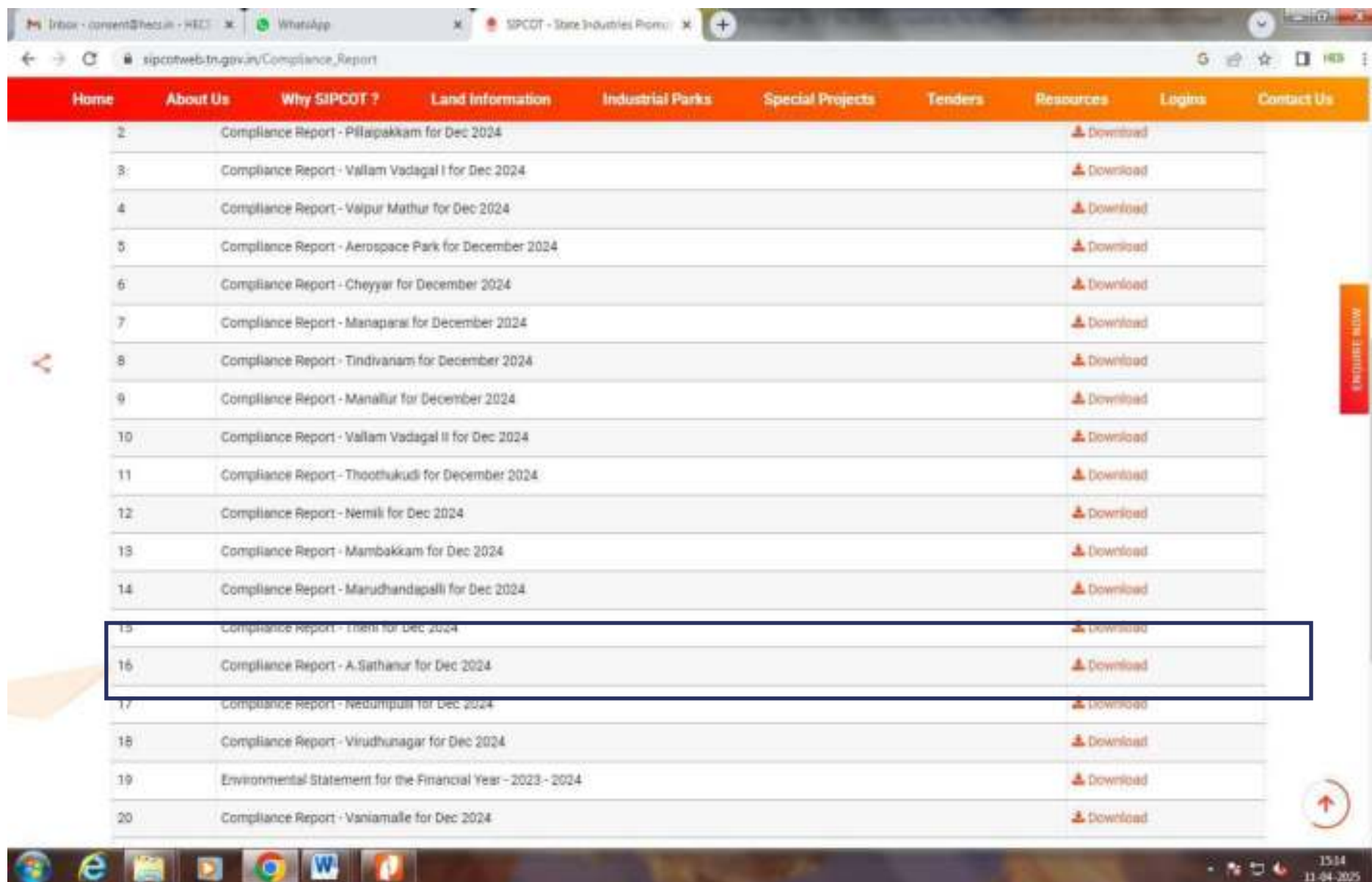
SIPCOT
Govt. of Tamil Nadu

Newsletter Mandatories Map

JPC
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11-11-2024



The screenshot displays the SIPCOT website's 'Compliance_Report' page. The page features a navigation bar with links to Home, About Us, Why SIPCOT?, Land Information, Industrial Parks, Special Projects, Tenders, Resources, Logins, and Contact Us. Below the navigation bar is a table listing 20 compliance reports for December 2024. Each row includes a serial number, the report title, and a 'Download' link. The report for 'A. Sathanur' (row 16) is highlighted with a blue box. A red 'ENQUIRE NOW' button is visible on the right side of the table. The Windows taskbar at the bottom shows the time as 15:14 on 11-04-2025.

Serial No.	Report Title	Action
2	Compliance Report - Pillaipakkam for Dec 2024	Download
3	Compliance Report - Vallam Vadagal I for Dec 2024	Download
4	Compliance Report - Valpur Mathur for Dec 2024	Download
5	Compliance Report - Aerospace Park for December 2024	Download
6	Compliance Report - Cheyyar for December 2024	Download
7	Compliance Report - Manaparai for December 2024	Download
8	Compliance Report - Tindivanam for December 2024	Download
9	Compliance Report - Manaliur for December 2024	Download
10	Compliance Report - Vallam Vadagal II for Dec 2024	Download
11	Compliance Report - Thoothukudi for December 2024	Download
12	Compliance Report - Nemili for Dec 2024	Download
13	Compliance Report - Mambakkam for Dec 2024	Download
14	Compliance Report - Marudhandapalli for Dec 2024	Download
15	Compliance Report - Thenni for Dec 2024	Download
16	Compliance Report - A. Sathanur for Dec 2024	Download
17	Compliance Report - Nedumpalli for Dec 2024	Download
18	Compliance Report - Virudhunagar for Dec 2024	Download
19	Environmental Statement for the Financial Year - 2023 - 2024	Download
20	Compliance Report - Vaniamaile for Dec 2024	Download

P-IV/EC/I/179105/2024/KKI

Date: 30.09.2024

To,
The Member Secretary,
Tamil Nadu Pollution Control Board,
No.76, Mount Salai, Guindy,
Chennai - 600 032.

(By RPNP)

Sir,

Sub: SIPCOT SEZ at A.Sathanur, Kallakurichi - Environmental Statement for the Financial Year ending 31st March 2024 - Submitted - Reg.

Ref: SEIAA EC Letter No.SEIAA-TN/F.No.9898/8(b)/EC.No.:1001/2023 dated 10.01.2024.

With reference to the above, we hereby submit the Environmental Statement in Form-V as prescribed under the Environmental (Protection) Rules, 1986 and its subsequent amendment in respect of Development Special Economic Zone (SEZ) at A.Sathanur Village, Ulundurpet Taluk, Kallakurichi District, Tamil Nadu for the Financial Year ending 31st March 2024.

Yours faithfully,
Sd/-
MANAGING DIRECTOR

Encl: As above.

/Forwarded by Order/

ASSISTANT GENERAL MANAGER (P-IV)

Sir,
Accompanied
O/c.
Jed.
30/9/24

S I P C O T	DESPATCHED	
	09 OCT 2024	
	72	
	S.L. No.	

Hubert Enviro Care Systems (P) Ltd.

A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax : 42985500

E-mail : labsales@hecs.in



Laboratory Services Division

(Chemical & Biological Testing)
Recognized by CPCB (MoEF & CC)
BIS FSSAI Notified Laboratory
ISO 9001, 14001 & 45001 Certified.



TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Project Area

Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0

Sampling Method & Plan : IS 5182 Part 5 & Part 14

ULR : TC1231025000016333F

Report No. : HECS/AP/101/260325

Sample ID No : 260325157

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 04/04/2025

Report Date : 04/04/2025

Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	µg/m3	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benz(a) pyrene-AAQ	ng/m ³	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH ₃	µg/m ³	15.12	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/ m ³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO ₂	µg/m ³	24.07	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O ₃	µg/m ³	17.00	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m ³	72.48	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m ³	25.76	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO ₂	µg/m ³	14.34	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, µg/m³- Micrograms per cubic meter, mg/m³-Milligrams per cubic meter, ng/m³-Nanograms per cubic meter.

Remarks: The Tested Parameters as above are within the Limits of NAAQ Standards 2009.

End of Report



D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax : 42985500

E-mail : labsales@hecs.in

Laboratory Services Division

(Chemical & Biological Testing)

Recognized by CPCB (MoEF & CC)

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ISO 9001, 14001 & 45001 Certified.

TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT
Address of the Client : kallakurichi
Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Project Area
Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Report No. : HECS/AP/101/260325/N
Sample ID No : 260325157
Sampling Date : 26/03/2025
Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 04/04/2025
Report Date : 04/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	TVOC	ppmv	BLQ(LOQ 0.1)	HECS-G/ENV/AAQ/SOP/005 Issue No.:01 Issue Date:02-07 2020

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, ppmv- Parts per million by Volume.

End of Report



D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.

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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanaiyar

Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0

Sampling Method & Plan : IS 5182 Part 5 & Part 14

ULR : TC1231025000016334F

Report No. : HECS/AP/102/260325

Sample ID No : 260325158

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 04/04/2025

Report Date : 04/04/2025

Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	µg/m3	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene-AAQ	ng/m3	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	µg/m3	BLQ(LOQ 5)	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/ m3	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	µg/m3	20.62	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m3	BLQ(LOQ 10)	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m3	79.31	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m3	28.69	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m3	12.08	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, µg/m³- Micrograms per cubic meter, ng/m³-Nanograms per cubic meter.

Remarks: The Tested Parameters as above are within the Limits of NAAQ Standards 2009.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanniyar

Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0

Sampling Method & Plan : IS 5182 Part 5 & Part 14

Report No. : HECS/AP/102/260325/N

Sample ID No : 260325158

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 04/04/2025

Report Date : 04/04/2025

Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	TVOC	ppmv	BLQ(LOQ 0.1)	HECS-G/ENV/AAQ/SOP/005 Issue No.:01 Issue Date:02:07 2020

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, ppmv- Parts per million by Volume.

End of Report



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Laboratory Services Division

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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : Ulundurpettai
Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

ULR : TC1231025000016335F
Report No. : HECS/AP/103/260325
Sample ID No : 260325159
Sampling Date : 26/03/2025

Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 04/04/2025
Report Date : 04/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	µg/m3	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene-AAQ	ng/m ³	BLQ (LOQ: 0.1)	IS : 5182 Part 13: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	µg/m ³	0.50	IS 5182 (Part 35) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/ m ³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	µg/m ³	26.95	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m ³	12.14	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m ³	89.47	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m ³	27.47	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m ³	12.31	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, µg/m³- Micrograms per cubic meter, mg/m³-Milligrams per cubic meter, ng/m³-Nanograms per cubic meter.

Remarks: The Tested Parameters as above are within the Limits of NAAQ Standards 2009.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT
Address of the Client : kallakurichi
Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : Ulundurpettai
Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Report No. : HECS/AP/103/260325/N
Sample ID No : 260325159
Sampling Date : 26/03/2025
Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 04/04/2025
Report Date : 04/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	TVOC	ppmv	BLQ(LOQ 0.1)	HECS-G/ENV/AAQ/SOP/005 Issue No. 01 Issue Date: 02/07/2020

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, ppmv- Parts per million by Volume.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Pallidangal

Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0

Sampling Method & Plan : IS 5182 Part 5 & Part 14

ULR : TC1231025000016336F

Report No. : HECS/AP/104/260325

Sample ID No : 260325160

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 04/04/2025

Report Date : 04/04/2025

Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene -AAQ	ug/m3	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzene (a) pyrene -AAQ	ng/m3	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	ug/m3	7.39	IS 5182 (Part 23) 2016	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/ m3	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	ug/m3	24.67	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	ug/m3	13.18	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	ug/m3	95.99	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	ug/m3	32.84	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	ug/m3	12.33	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	ug/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, µg/m³- Micrograms per cubic meter, mg/m³-Milligrams per cubic meter, ng/m³-Nanograms per cubic meter.

Remarks: The Tested Parameters as above are within the Limits of NAAQ Standards 2009.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Pallidangal

Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0

Sampling Method & Plan : IS 5182 Part 5 & Part 14

Report No. : HECS/AP/104/260325/N

Sample ID No : 260325160

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 04/04/2025

Report Date : 04/04/2025

Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	TVOC	ppmv	BLQ(LOQ 0.1)	HECS-G/ENV/AAQ/SOP/005 Issue No.:01 Issue Date:02-07 2020

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, ppmv- Parts per million by Volume.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Sathanur

Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0

Sampling Method & Plan : IS 5182 Part 5 & Part 14

ULR : TC1231025000016337F

Report No. : HECS/AP/105/260325

Sample ID No : 260325161

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 04/04/2025

Report Date : 04/04/2025

Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene -AAQ	µg/m3	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene -AAQ	ng/m3	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	µg/m3	10.18	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/ m3	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	µg/m3	25.72	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m3	16.27	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m3	104.56	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m3	34.42	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m3	16.58	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, µg/m³- Micrograms per cubic meter, mg/m³-Milligrams per cubic meter, ng/m³-Nanograms per cubic meter.

Remarks: The Tested Parameters as above are within the Limits of NAAQ Standards 2009.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Sathanur

Environmental Condition : Temperature (°C) : 31.4 | Humidity (%) : 53.0

Sampling Method & Plan : IS 5182 Part 5 & Part 14

Report No. : HECS/AP/105/260325/N

Sample ID No : 260325161

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 04/04/2025

Report Date : 04/04/2025

Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	TVOC	ppmv	BLQ(LOQ 0.1)	HECS-G/ENV/AAQ/SOP/005 Issue No.:01 Issue Date:02-07 2020

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, ppmv- Parts per million by Volume.

End of Report

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TEST REPORT

Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Project area

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017014F
Report No. : HECSL/WT/026/260325
Sample ID No : 260325162
Sampling Date : 26/03/2025

Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Bi carbonate	mg/l	451.4	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/l	52.10	IS 3025 Part 40: 1991(FI3TA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	39.59	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
6	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
7	Electrical Conductivity at 25°C	µS/cm	886.0	IS 3025 Part-14: 2013	NA	NA
8	Fluoride as F	mg/l	0.33	APHA 23rd edition (Method 4500F-B, D): 2017	1.0	1.5
9	Iron as Fe	mg/l	0.038	IS 3025 (Part 53): 2003	1.0	No relaxation
10	Magnesium as Mg	mg/l	31.59	IS 3025 Part 46: 1994 (Valumetric Method using EDTA)	30	100
11	Nitrate as NO3	mg/l	2.07	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
12	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
13	pH at 25°C	-	7.78	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation



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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Project area

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

U/LR : TC1231025000017014F

Report No. : HECS1/WT/026/260325

Sample ID No : 260325162

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
14	Potassium as K	mg/l	10.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	90.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
16	Sulphate as SO ₄	mg/l	11.74	IS 3025 Part 24 Sec 1: 2022 (Turbidity Method) (Turbidity Method)	200	400
17	Total dissolved solids	mg/l	511.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorus as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
20	Total hardness as CaCO ₃	mg/l	260.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
23	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
24	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
25	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
26	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Project area

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

U/LR : TC1231025000017014F

Report No. : HECSL/WT/026/260325

Sample ID No : 260325162

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
27	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
28	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
29	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
30	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
31	Phenolic compounds as C ₆ H ₅ OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
32	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B, C): 2017	0.2	1
33	Percent Sodium	%	41.60	HECS /WT/SOP/002: 2019	NA	NA
34	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
35	Ammonia as NH ₃	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
36	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit)	2.4	IS 11624 : 2019	NA	NA
37	Dissolved oxygen	mg/l	6.5	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Project area

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017014F

Report No. : HECSL/WT/026/260325

Sample ID No : 260325162

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
38	Biological Oxygen Demand (BOD) _{@ 27°C} For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
39	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
40	Phosphate as PO ₄	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA	NA
41	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
42	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
43	Total alkalinity as CaCO ₃	mg/l	370.0	IS 3025 (Part 23): 1986	200	600

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit, mg/l- Milligrams per litre, NA - Not Applicable.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Project area

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

Report No : HECSL/WT/026/260325N

Sample ID No : 260325162

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Hexavalent Chromium as Cr6+	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 52 Clause 6: 2003

Note:- BLQ : Below Limit of Quantification, LOQ: Limit of Quantification, mg/l: milligram per Litre.

End of Report



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TEST REPORT

Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Ulundurpettai

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017015F

Report No. : HECSL/WT/027/260325

Sample ID No : 260325163

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Bi carbonate	mg/l	585.6	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/l	76.15	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	217.74	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
6	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
7	Electrical Conductivity at 25°C	µS/cm	2105.	IS 3025 Part-14: 2013	NA	NA
8	Fluoride as F	mg/l	0.48	APHA 23rd edition (Method 4500F-B , D): 2017	1.0	1.5
9	Iron as Fe	mg/l	0.042	IS 3025 (Part 53): 2003	1.0	No relaxation
10	Magnesium as Mg	mg/l	38.88	IS 3025 Part 46: 1994 (Volumetric Method using EDTA)	30	100
11	Nitrate as NO3	mg/l	37.24	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
12	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
13	pH at 25°C	-	7.81	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation



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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Ulundurpettai

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017015F

Report No. : HECS1/WT/027/260325

Sample ID No : 260325163

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
14	Potassium as K	mg/l	24.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	274.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	122.48	IS 3025 Part 24 Sec 1: 2022 (Turbidity Method) (Turbidity Method)	200	400
17	Total dissolved solids	mg/l	1096.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	0.691	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	350.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
23	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
24	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
25	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
26	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Ulundurpettai

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017015F

Report No. : HECSL/WT/027/260325

Sample ID No : 260325163

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
27	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
28	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
29	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
30	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	10
31	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
32	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B, C): 2017	0.2	1
33	Percent Sodium	%	60.86	HECS /WT/SOP/002: 2019	NA	NA
34	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
35	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
36	Sodium Adsorption Ratio(SAR)	Squire root of (millimole/lit)	6.3	IS 11624 : 2019	NA	NA
37	Dissolved oxygen	mg/l	6.5	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Ulundurpettai

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017015F

Report No. : HECSL/WT/027/260325

Sample ID No : 260325163

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
38	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
39	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
40	Phosphate as PO4	mg/l	0.001	IS 3025 Part 31 Sec 1: 2022	NA	NA
41	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
42	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
43	Total alkalinity as CaCO3	mg/l	480.0	IS 3025 (Part 23): 1986	200	600

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit, mg/l- Milligramm per litre, NA - Not Applicable.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Ulundurpettai

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

Report No. : HECSL/WT/027/260325N

Sample ID No : 260325163

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres.

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Hexavalent Chromium as Cr6+	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 52 Clause 6: 2003

Note:- BLQ : Below Limit of Quantification, LOQ: Limit of Quantification, mg/l: milligram per Litre.

End of Report

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TEST REPORT

Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanaliyar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017016F

Report No. : HECSL/WT/028/260325

Sample ID No : 260325164

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Bi carbonate	mg/l	463.6	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/l	88.18	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	148.46	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
6	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec I: 2021	0.05	No relaxation
7	Electrical Conductivity at 25°C	µS/cm	1387.0	IS 3025 Part-14: 2013	NA	NA
8	Fluoride as F	mg/l	0.44	APHA 23rd edition (Method 4500F-B , D): 2017	1.0	1.5
9	Iron as Fe	mg/l	0.047	IS 3025 (Part 53): 2003	1.0	No relaxation
10	Magnesium as Mg	mg/l	53.46	IS 3025 Part 46: 1994 (Valumetric Method using EDTA)	30	100
11	Nitrate as NO3	mg/l	15.61	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
12	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
13	pH at 25°C	-	7.66	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation



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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanalyar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017016F

Report No. : HECSL/WT/028/260325

Sample ID No : 260325164

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
14	Potassium as K	mg/l	11.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	98.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	85.36	IS 3025 Part 24 Sec 1: 2021 (Turbidity Method & Turbidity Method)	200	400
17	Total dissolved solids	mg/l	746.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	0.083	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	440.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
23	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
24	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
25	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
26	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanaiyar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

U/LR : TC1231025000017016F

Report No. : HECSL/WT/028/260325

Sample ID No : 260325164

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
27	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
28	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
29	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
3	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
31	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
32	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B, C): 2017	0.2	1
33	Percent Sodium	%	31.78	HECS/WT/SOP/002: 2019	NA	NA
34	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
35	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
36	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit)	2.0	IS 11624 : 2019	NA	NA
37	Dissolved oxygen	mg/l	6.6	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanaiyar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017016F

Report No. : HECSL/WT/028/260325

Sample ID No : 260325164

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
38	Biological Oxygen Demand (BOD) _{@ 27°C} For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
39	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
40	Phosphate as PO ₄	mg/l	0.083	IS 3025 Part 31 Sec 1: 2022	NA	NA
41	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
42	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
43	Total alkalinity as CaCO ₃	mg/l	180.0	IS 3025 (Part 23): 1986	200	600

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit, mg/l- Milligrams per litre, NA - Not Applicable.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Ground Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanaiyar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

Report No. : HECSL/WT/028/260325N

Sample ID No : 260325164

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Hexavalent Chromium as Cr6+	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 52 Clause 6: 2003

Note:- BLQ : Below Limit of Quantification, LOQ: Limit of Quantification, mg/l: milligram per Litre.

End of Report

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TEST REPORT

Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kunamangalam Lake

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

U.L.R : TC1231025000017034F

Report No. : HECSL/WT/029/260325

Sample ID No : 260325165

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discipline : Chemical					
1	Total alkalinity as CaCO ₃	mg/l	90.0	IS 3025 Part 23: 1986	NA
2	Bi carbonate	mg/l	109.8	IS 3025 Part 51: 2001	NA
3	Biological Oxygen Demand (BOD) ₅ @ 20°C For 5 days	mg/l	2.0	IS 3025 Part 44: 1993	10
4	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 (Circumn Method)	NA
5	Calcium as Ca	mg/l	16.03	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA
6	Chemical Oxygen Demand (COD)	mg/l	16.0	IS 3025 Part 58: 2006	250
7	Chloride as Cl	mg/l	12.37	IS 3025 Part 32: 1988 (Argentometric Method)	NA
8	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	NA
9	Dissolved oxygen	mg/l	6.0	IS 3025 Part 38: 1989	NA
10	Electrical Conductivity at 25°C	µS/cm	250.0	IS:3025 Part 14: 2013	NA
11	Fluoride as F	mg/l	0.22	APHA 23rd edition Method 4500 F-B,D: 2017	2.0
12	Iron as Fe	mg/l	0.238	IS 3025 Part 53: 2003	3.0
13	Nitrate as NO ₃	mg/l	5.04	APHA 23rd edition Method 4500 NO ₃ B: 2017	NA



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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kunamangalam Lake

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-I):2021

ULR : TC1231025000017034F

Report No. : HECSL/WT/029/260325

Sample ID No : 260325165

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
14	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
15	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
16	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	APHA 23rd edition Method 4500-P B.D: 2017	NA
17	pH at 25°C	-	7.96	IS 3025 Part 11: 2022 (Electrometric Method)	5.5 - 9.0
18	Total dissolved solids	mg/l	132.0	IS 3025 Part 16: 1984	NA
19	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
20	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.2
21	Magnesium as Mg	mg/l	9.72	IS 3025 Part 46: 1994 (Volumetric Method using EDTA)	NA
22	Potassium as K	mg/l	2.0	IS 3025 Part 45: 1993	NA
23	Sodium as Na	mg/l	16.0	IS 3025 Part 45: 1983	NA
24	Sulphate as SO4	mg/l	3.12	IS 3025 Part 24 Sec 1: 2022	NA
25	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43:Sec 1: 2022	1.0
26	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B, C: 2017	NA



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Kunnamangalam Lake

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017034F

Report No. : HECSL/WT/029/260325

Sample ID No : 260325165

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
27	Percent Sodium	%	29.50	HECSG/WT/SOP/002 Issue No:01, Issue date 18.12: 2021	NA
28	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	NA
29	Residual Sodium Carbonate	mg/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA
30	Ammonia as NH3	mg/l	0.48	IS 3025 Part 34 Sec 2: 2021	5.0
31	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit r	0.77	IS 11624: 2019	NA
32	Total Hardness as CaCO3	mg/l	80.0	IS 3025 Part 21: 2009	NA
33	Total Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA
34	Total Suspended Solids	mg/l	31.0	IS 3025 Part 17: 1984	100
35	Turbidity	NTU	13.4	IS 3025 Part 10: 1984	NA
36	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.2
37	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	2.0
38	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
39	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SHPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kunamangalam Lake

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

U/LR : TC1231025000017034F

Report No. : HECSL/WT/029/260325

Sample ID No : 260325165

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
40	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.1
41	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.01
42	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0
43	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l - Milligramm per liter.

End of Report



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TEST REPORT

Page : 1 of 1

Report No : HECSL/WT/029/260325N

Sample ID No : 260325165

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Kunamangalam Lake

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule - VI)
Discipline : Chemical					
1	Hexavalent Chromium as Cr6+	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 52 Clause 6: 2003	0.1

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/l: milligram per Litre. % - Percentage.

End of Report

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TEST REPORT

Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Ajees Nagar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017035F

Report No. : HECS1/WT/030/260325

Sample ID No : 260325166

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discipline : Chemical					
1	Total alkalinity as CaCO ₃	mg/l	113.0	IS 3025 Part 23: 1986	NA
2	Bi carbonate	mg/l	140.3	IS 3025 Part 51: 2001	NA
3	Biological Oxygen Demand (BOD) ₅ at 27°C For 3 days	mg/l	2.0	IS 3025 Part 44: 1993	30
4	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 (Curcumin Method)	NA
5	Calcium as Ca	mg/l	28.06	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA
6	Chemical Oxygen Demand (COD)	mg/l	16.0	IS 3025 Part 58: 2006	250
7	Chloride as Cl	mg/l	22.21	IS 3025 Part 32: 1988 (Argentometric Method)	NA
8	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	NA
9	Dissolved oxygen	mg/l	6.0	IS 3025 Part 38: 1989	NA
10	Electrical Conductivity at 25°C	µS/cm	340.0	IS:3025 Part 14: 2013	NA
11	Fluoride as F	mg/l	0.25	APHA 23rd edition Method 4500 F -B,D: 2017	2.0
12	Iron as Fe	mg/l	0.112	IS 3025 Part 53: 2003	3.0
13	Nitrate as NO ₃	mg/l	3.38	APHA 23rd edition Method 4500 NO ₃ B: 2017	NA



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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Ajees Nagar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017035F

Report No. : HECSL/WT/030/260325

Sample ID No : 260325166

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
14	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
15	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
16	Phosphate as PO4	mg/l	0.065	APHA 23rd edition Method 4500-P G.D. 2017	NA
17	pH at 25°C	-	8.14	IS 3025 Part 11: 2022 (Electrometric Method)	5.5 - 9.0
18	Total dissolved solids	mg/l	181.0	IS 3025 Part 16: 1984	NA
19	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
20	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.2
21	Magnesium as Mg	mg/l	10.94	IS 3025 Part 46: 1994 (Volumetric Method using EDTA)	NA
22	Potassium as K	mg/l	3.0	IS 3025 Part 45: 1993	NA
23	Sodium as Na	mg/l	19.0	IS 3025 Part 45: 1983	NA
24	Sulphate as SO4	mg/l	11.75	IS 3025 Part 24 Sec 1: 2022	NA
25	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43-Sec 1: 2022	1.0
26	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B, C: 2017	NA



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Ajees Nagar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC1231025000017035F

Report No. : HECS1/WT/030/260325

Sample ID No : 260325166

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
27	Percent Sodium	%	26.68	HECSG /WT/SOP/002 Issue No:01, Issue date 18.12- 2021	NA
28	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	NA
29	Residual Sodium Carbonate	mg/l	BLQ (LOQ: 1.0)	IS 11624: 2019	NA
30	Ammonia as NH3	mg/l	0.45	IS 3025 Part 34 Sec 2: 2021	5.0
31	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit r	0.77	IS 11624: 2019	NA
32	Total Hardness as CaCO3	mg/l	115.0	IS 3025 Part 21: 2009	NA
33	Total Phosphorous as P	mg/l	0.020	IS 3025 Part 31 Sec 1: 2022	NA
34	Total Suspended Solids	mg/l	7.0	IS 3025 Part 17: 1984	100
35	Turbidity	NTU	2.9	IS 3025 Part 10: 1984	NA
36	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.2
37	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	2.0
38	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
39	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Ajees Nagar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

U/LR : TC1231025000017035F

Report No. : HECSL/WT/030/260325

Sample ID No : 260325166

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
40	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.1
41	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.01
42	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0
43	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5.0

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l - Milligram per liter.

End of Report

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TEST REPORT

Page : 1 of 1

Report No : HECSL/WT/030/260325N

Sample ID No : 260325166

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 2 Litres

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Water

Sample Name : Surface Water

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Near Ajees Nagar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule - VI)
Discipline : Chemical					
1	Hexavalent Chromium as Cr6+	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 52 Clause 6: 2003	0.1

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/l: milligram per Litre, % - Percentage.

End of Report

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TEST REPORT

Page : 1 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Project Area

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

U/LR : TC1231025000017017F

Report No. : HECS/PE/028/260325

Sample ID No : 260325167

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	11.41	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	22.31	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	20.77	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	37.2	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	45.8	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	17.0	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	8.24	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	150.6	IS 14767: 2000



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Laboratory Services Division

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TEST REPORT

Page : 2 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Project Area

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

U.L.R : TC1231025000017017F

Report No. : HECS/PE/028/260325

Sample ID No : 260325167

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	0.99	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.29	IS 2720 (Part 22) Section 1 1972
13	Organic Matter	%	0.50	IS 2720 (Part 22) Section 1 1972
14	Available Phosphorous as P	µg/g	6.05	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	23.59	FAO of United Nations, Rome Chapter - III 2008
16	Iron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02-07 2020
17	Total Nitrogen as N	%	0.0074	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	15.81	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.90	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	2.6	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	29.6	IS 14765: 2000
22	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT
Address of the Client : kallakurichi
Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Project Area
Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0
Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/028/260325/N
Sample ID No : 260325167
Sampling Date : 26/03/2025
Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	3.98	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Manganese	mg/kg	112.10	HECS-G/INS/SOP/ 042
3	Iron	mg/kg	2.17	Inhouse method
4	Infiltration Rate	-	0.8	Inhouse method

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage..

End of Report



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**TEST REPORT**

Page : 1 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanaiyar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231025000017018F

Report No. : HECS/PE/029/260325

Sample ID No : 260325168

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	13.35	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	24.64	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	25.31	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i) Sand	%	44.0	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii) Silt	%	38.6	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii) Clay	%	17.4	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	6.45	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	85.4	IS 14767: 2000



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TEST REPORT

Page : 2 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Kanaiyar

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

U.L.R : TC1231025000017018F

Report No. : HECS/PE/029/260325

Sample ID No : 260325168

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	1.00	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.28	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.48	IS 2720 (Part 22) Section I 1972
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	21.53	FAO of United Nations, Rome Chapter - III 2008
16	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No.:01 Issue Date:02-07-2020
17	Total Nitrogen as N	%	0.0096	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	3.83	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.67	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	1.4	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	30.8	IS 14765: 2000
22	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage.
End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT
Address of the Client : kallakurichi
Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : Kanalyar
Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0
Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/029/260325/N
Sample ID No : 260325168
Sampling Date : 26/03/2025
Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	2.79	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Manganese	mg/kg	117.12	HECS-G/NS/SOP/ 042
3	Iron	mg/kg	BL001.00 0.021	Inhouse method
4	Infiltration Rate	-	0.9	Inhouse method

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage.

End of Report



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TEST REPORT

Page : 2 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Ulundurpettai

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

U.L.R : TC1231025000017019F

Report No. : HECS/PE/030/260325

Sample ID No : 260325169

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	0.97	FAO of United Nations Rome 2007
12	Organic Carbon	%	1.75	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	3.02	IS 2720 (Part 22) Section I 1972
14	Available Phosphorous as P	µg/g	13.18	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	22.29	FAO of United Nations, Rome Chapter - III 2008
16	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02.07. 2020
17	Total Nitrogen as N	%	0.0168	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	11.54	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.69	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	2.1	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	18.8	IS 14765: 2000
22	Colour	-	Black	HECS-G/ENV/SSW/SOP/011 Issue

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage.

End of Report

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**TEST REPORT**

Page : 1 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

U.L.R : TC1231025000017019F

Report No. : HECS/PE/030/260325

Sample ID No : 260325169

Sampling Date : 26/03/2025

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Ulundurpettai

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	17.55	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	6.38	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	6.44	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Clay loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	26.8	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	42.4	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	30.8	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	6.77	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	206.0	IS 14767: 2000



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT
Address of the Client : kallakurichi
Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Ulundurpettai
Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0
Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/030/260325/N
Sample ID No : 260325169
Sampling Date : 26/03/2025
Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	4.78	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02.07. 2020
2	Manganese	mg/kg	150.74	HECS-G/INS/SOP/ 042
3	Iron	mg/kg	9.42	Inhouse method
4	Infiltration Rate	-	0.7	Inhouse method

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage.

End of Report



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**TEST REPORT**

Page : 1 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Pallidangal

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231025000017020F

Report No. : HECS/PE/031/260325

Sample ID No : 260325170

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	15.42	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	7.80	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	5.85	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Clay loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i) Sand	%	31.6	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii) Silt	%	40.8	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii) Clay	%	27.6	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	8.75	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	290.0	IS 14767: 2000

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TEST REPORT

Page : 2 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.

Sample Location : Pallidangal

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

U/LR : TC1231025000017020F

Report No. : HECS/PE/031/260325

Sample ID No : 260325170

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	0.99	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.26	IS 2720 (Part 22) Section 1 1972
13	Organic Matter	%	0.45	IS 2720 (Part 22) Section 1 1972
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mfEq/100g	38.44	FAO of United Nations, Rome Chapter - III 2008
16	Brown as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/011 Issue No:01 Issue Date:02/07 2020
17	Total Nitrogen as N	%	0.0104	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	11.38	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	11.38	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	2.7	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	19.2	IS 14765: 2000
22	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage..

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT
Address of the Client : kallakurichi
Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : Pallidangal
Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0
Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/031/260325/N
Sample ID No : 260325170
Sampling Date : 26/03/2025
Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	6.90	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02-07-2020
2	Manganese	mg/kg	141.83	HECS-G/INS/SOP/ 042
3	Iron	mg/kg	3.88	Inhouse method
4	Infiltration Rate	-	0.6	Inhouse method

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage.

End of Report



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**TEST REPORT**

Page : 1 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

ULR : TC1231025000017021F

Report No. : HECS/PE/032/260325

Sample ID No : 260325171

Sampling Date : 26/03/2025

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Sathanur

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	15.04	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	6.67	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	4.87	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Silty clay	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i) Sand	%	14.8	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii) Silt	%	45.0	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii) Clay	%	40.2	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	7.94	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	172.0	IS 14767: 2000



D. Anusuya

Lab Manager

Authorized Signatory

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Laboratory Services Division

(Chemical & Biological Testing)
Recognized by CPCB (MoEF & CC)
BIS FSSAI Notified Laboratory
ISO 9001, 14001 & 45001 Certified.



TEST REPORT

Page : 2 of 2

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : NA

Sample Reference : NA

Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.

Sample Location : Sathanur

Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231025000017021F

Report No. : HECS/PE/032/260325

Sample ID No : 260325171

Sampling Date : 26/03/2025

Received Date : 26/03/2025

Commenced Date : 26/03/2025

Completed On : 07/04/2025

Report Date : 07/04/2025

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	0.96	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.96	IS 2720 (Part 22) Section 1 1972
13	Organic Matter	%	1.66	IS 2720 (Part 22) Section 1 1972
14	Available Phosphorous as P	µg/g	16.94	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	21.70	FAO of United Nations, Rome Chapter - III 2008
16	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/016 Issue No. 01 Issue Date: 02-07-2020
17	Total Nitrogen as N	%	0.0149	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	7.80	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	11.71	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	2.2	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	22.4	IS 14765: 2000
22	Colour	-	Black	HECS-G/ENV/SSW/SOP/011 Issue

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage..

End of Report



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TEST REPORT

Page: 1 of 1

Name of the Client : M/s. SIPCOT
Address of the Client : kallakurichi
Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : Sathanur
Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0
Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/032/260325/N
Sample ID No : 260325171
Sampling Date : 26/03/2025
Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	6.34	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02-07-2020
2	Manganese	mg/kg	129.85	HECS-G/NS/SOP/ 042
3	Iron	mg/kg	5.85	Inhouse method
4	Infiltration Rate	-	0.7	Inhouse method

Note:- BLQ : Below the Limit of Quantification, LOQ: Limit of Quantification, mg/kg: milligram per kilogram, % - Percentage.

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : kallakurichi

Group : Atmospheric Pollution
Sample Name : Ambient Noise Levels (Excluding vibration)
Sample Mark : Noise
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : NA
Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 56.0
Sampling Method & Plan : HECS-G/Micro/Sop/04

U/LR : TC1231025000016338F
Report No. : HECS/AP/106/260325
Sample ID No : 260325172
Sampling Date : 26/03/2025

Received Date : 26/03/2025
Commenced Date : 26/03/2025
Completed On : 04/04/2025
Report Date : 04/04/2025
Sample quantity : NA

S.No	Sampling Location	Day Noise level in dB (A)	Night Noise level in dB (A)
1	Near Project area	52.3	41.3
2	Kanaiyar	51.2	43.8
3	Ulundurpettai	54.6	45.9
4	Pallidangal	53.8	40.8
5	Sathanur	55.7	41.1

Noise Standards - CPCB:

i.	Industrial Area	: Day Time-75 dB (A);	Night Time-70 dB (A);
ii.	Commercial Area	: Day Time-65 dB (A);	Night Time-55 dB (A);
iii.	Residential Area	: Day Time-55 dB (A);	Night Time-45 dB (A);
iv.	Silence Zone	: Day Time-50 dB (A);	Night Time-40 dB (A);

Note: 1. Day Time shall mean from 6.00 am to 10.00 pm.
2. Night Time shall mean from 10.00 pm to 6.00 am.

Remarks:- The noise level meets the requirement of CPCB Limit

End of Report



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STORM WATER DRAIN PHOTOGRAPH

