

HALF YEARLY ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

For the Period of April 2024- September 2024

For

“Development of Industrial Park with Industrial Housing
Facility at Soorapoondi and Vaniyamallee villages,
Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu”
over an extent of 215.834 Ha (533.11 Acres)

EC obtained vide Letter No. SEIAA-TN/F.No. 9263/2024 dated: 22/04/2024

Submitted by



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

Prepared by



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

November 2024

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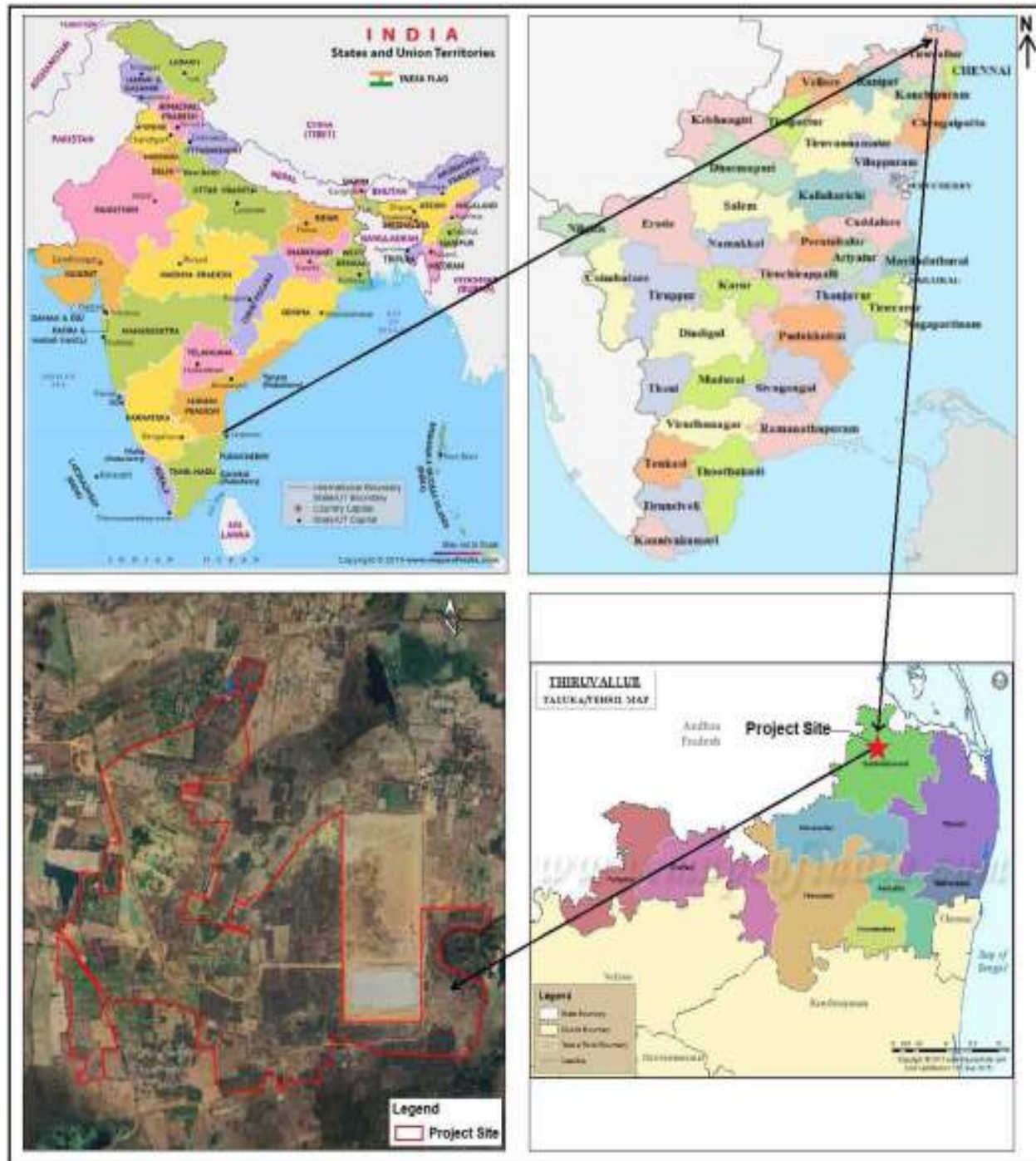
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1.0 PROJECT DETAILS

Name of the Project	Development of Industrial Park with Industrial Housing Facility at Soorapoondi and Vaniamallee villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu” over an extent of 215.834 Ha (533.11 Acres) by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).																						
Name of the Proponent	M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT)																						
Location	Soorapoondi and Vaniamallee villages Gummidipoondi Taluk, Thiruvallur District and Tamil Nadu state.																						
EC No.	<table border="1"> <tr> <td>(i)</td><td>EC Identification No.</td><td>:</td><td>EC24B3813TN5100474N</td></tr> <tr> <td>(ii)</td><td>File No.</td><td>:</td><td>9263</td></tr> <tr> <td>(iii)</td><td>Clearance Type</td><td>:</td><td>Fresh EC</td></tr> <tr> <td>(iv)</td><td>Category</td><td>:</td><td>B1</td></tr> <tr> <td>(v)</td><td>Project/Activity Included Schedule No.</td><td>:</td><td>8(b) Townships/ Area Development Projects / Rehabilitation Centres</td></tr> </table> <p style="text-align: center;">Enclosed as Annexure 1</p>			(i)	EC Identification No.	:	EC24B3813TN5100474N	(ii)	File No.	:	9263	(iii)	Clearance Type	:	Fresh EC	(iv)	Category	:	B1	(v)	Project/Activity Included Schedule No.	:	8(b) Townships/ Area Development Projects / Rehabilitation Centres
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Area Details	215.834 Ha																						

Water Requirement	<p>4789 KLD</p> <p>Fresh water: 874 KLD,</p> <p>TTRO water: 2133 KLD and</p> <p>Recycled water: 1782 KLD.</p> <p><u>Source:</u></p> <p>a) Fresh water - Letter from TWAD for the supply of 10 MLD raw water supply from SIPCOT Industrial Park at Thervoykandigai vide Letter no. CMWSSB/WT&T/ROII/SIPCOT-Manallur dated: 03.02.2023</p> <p>b) TTRO water - Letter from TWAD for the supply of 22.70 MLD TTRO water vide Letter no. CMWSSB/CE(O&M)II/STP(N)/45TTRO – KOD/039/SIPCOT – Manallur dated 25.03.2023</p>
Project Cost	INR. 495.52 crores

2.0 LOCATION MAP



3.0 SITE PHOTOGRAPHS





4.0 SIX MONTHLY ENVIRONMENTAL CLEARANCE COMPLIANCE STATEMENT

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

1. SEAC Conditions - Site Specific

S.NO	CONDITIONS	STATUS OF COMPLIANCE
1.1		
1.	The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.	Condition noted.
3.	PP shall submit the commitment letter from the local body for supply of fresh water.	Water Supply letter from CMWSSB is enclosed as Annexure-5 .
4	The project proponent shall continuously operate and maintain the Sewage treatment plant & Grey Water Treatment Plant to achieve the standards prescribed by the TNPCB/CPCB.	Condition noted. SIPCOT will provide STP only for treating sewage from Industrial Housing Facility. All the member industries will be mandated to provide STP to achieve the standards prescribed by the TNPCB/CPCB.
5	The proponent must protect 5 numbers of Ficus trees existing in the site by constructing stone wall fencing around each tree.	Condition noted.
6	STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.	Condition noted. SIPCOT will provide STP only for treating sewage from Industrial Housing Facility and operated on BOOT basis.
7	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	Condition noted.

	<p>parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely</p> <p>(1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area,</p> <p>(2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and</p> <p>(3) as a device which was crucial to the overall eco-system.</p>	
8.	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 and will be complied.
9.	Project proponent should ensure that there will be no use of “Single use of Plastic” (SUP).	Condition noted. All the member units will be instructed to follow all applicable rules and guidelines.
10.	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
11.	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.	<p>Condition will be complied.</p> <p>Greenbelt will be developed as per the layout approval and also follow the guidelines of CPCB/Development authority for green belt as per the norms.</p>
12.	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 will be complied.
13.	Proponent should submit the certified	Condition noted. EC has been obtained

	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.	only once for this project.
14	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.
15	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.	SIPCOT will measure / record the quantity of fresh water supply to the individual industries. All the individual industries will be instructed to record the treated wastewater and rainwater harvesting.
16	The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.	Condition noted. Tertiary Treated Reverse Osmosis (TTRO) water will be supplied by CMWSSB.

2. SEIAA Specific Conditions:

2.1		
1.	The PP shall ensure that the proposed activities in no way result any impact on the migratory birds.	Condition noted.
2.	The PP shall ensure that the proposed activity in no way result any impact on the surrounding Agriculture.	Condition noted.
3.	The proponent shall ensure that the buildings should not cause any damage to water Table & natural drainage	Condition noted.
4.	The proponent shall take necessary action to	Condition noted.

	reduce anthropogenic GHGs such as CO ₂ , CH ₄ , nitrous oxide, etc., and temperature rise resulting from human activities.	
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3. SEIAA Standard Conditions:

3.1		
Climate Change		
1.	The proponent shall adopt strategies to decarbonize the building.	Condition noted. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
2.	The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials).	Condition noted. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
3.	The proponent shall adopt strategies to reduce temperature including the Building Facade.	Condition noted. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
4.	The proponent shall adopt methodology to control thermal environment and other shocks in the building.	Condition noted. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
5.	The proponent shall adopt detailed plan to reduce carbon footprints and also develop strategies for climate proofing and climate mitigation.	Condition noted. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
6.	The proponent shall adopt strategies to	Condition noted. It is an infrastructure

	ensure the buildings in blocks are not trapping heat to become local urban heat islands.	development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
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. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
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.
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. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
Health		
10.	The proponent shall adopt strategies to maintain the health of the inhabitants.	Condition noted.
Energy		
11.	The proponent shall adopt strategies to reduce electricity demand and consumption.	Condition noted and will be complied.
12.	The proponent shall provide provisions for automated energy efficiency.	Condition noted and will be complied.
13.	The proponent shall provide provisions for controlled ventilation and lighting systems.	Condition noted and will be complied.
14.	The proponent shall provide solar panels	Condition noted.

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

	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	Not applicable. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
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 be instructed to follow applicable rules and guidelines.
21.	The proponent should maintain environmental audits to measure and mitigate environmental concerns.	Condition noted
Biodiversity		
22.	There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc.,	Condition noted. CER cost of 1.5 crores will be spent towards biodiversity conservation measures through Forest Department.
23.	The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.	Condition noted.
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.
25.	The proponent shall ensure almost safety	Condition noted.

	for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances.	
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
27.	The proponent shall adopt strategies to prevent bird hits.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
Safety measures		
28.	The proponent should develop an emergency response plan in addition to the disaster management plan.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
29.	The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan in emergencies.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
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 be instructed to follow applicable rules and guidelines.
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. 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
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 be mandated to have STP/ETP for treatment of sewage/effluent and to reuse the treated water within their premises
36.	The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB.	We SIPCOT will 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.	Condition noted. All the member units will be instructed to follow the condition
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 will be complied.
Parking		
40.	The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan	SIPCOT will provide Truck Parking within the Industrial Park. Further, Individual industries will provide parking facility within

	as committed.	their premises.
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.	Condition noted. All the member units will be instructed to follow 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 be instructed to follow applicable rules and guidelines.
EMP		
43.	The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.	Condition noted.
44.	The proponent shall ensure that all activities of EMP shall be completed before obtaining CTO from TNPCB.	Condition noted.
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.
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.

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

1. Statutory Compliance		
S. No	EC CONDITIONS	STATUS OF COMPLIANCE
1.1	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.	Condition noted. Construction shall be done in accordance with the layout approval obtained from the town planning authority.
1.2	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.	Condition noted. All the member units will be mandated to follow applicable rules and guidelines.
1.3	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.	Not applicable. The proposed project does not involve diversion of forest land.
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Condition Complied. NBWL recommended the project.
1.5	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	Condition will be complied. Consent to Establish application Copy is enclosed as Annexure 3.
1.6	A certificate of adequacy of available power from the agency supplying power	Condition noted.

	to the project along with the load allowed for the project should be obtained.	
1.7	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.	Condition noted
1.8	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 mandated to follow applicable rules and guidelines.
1.9	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 mandated to follow applicable rules and guidelines.
2. Air Quality Monitoring And Preservation		
2.1	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.	Condition noted. All the member units will be mandated to follow applicable rules and guidelines.
2.2	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.	Individual industries will be instructed to comply with their statutory approvals / clearances. Ambient Air Monitoring Reports are enclosed as Annexure - 4.
2.3	The project proponent shall install system to carryout Ambient Air Quality	Individual industries will be instructed to comply with their statutory approvals /

	monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.	clearances. Ambient Air Monitoring Reports are enclosed as Annexure - 4 .
2.4	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.	Condition noted. All the member units will be mandated to follow applicable rules and guidelines.
2.5	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.	Condition noted. All the member units will comply with
2.6	Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.	Condition noted.

2.7	Wet jet shall be provided for grinding and stone cutting.	Condition noted.
2.8	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	Condition noted
2.9	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.	Condition noted. All the member units will be mandated to follow applicable rules and guidelines.
2.10	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.	Condition noted.
2.11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.	Condition noted.
2.12	For indoor air quality the ventilation provisions as per National Building Code of India.	Condition noted. All the member units will be mandated to follow applicable rules and guidelines.
3. Water Quality Monitoring And Preservation		

3.1	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.	Condition will be complied.
3.2	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.	Condition noted
3.3	Total fresh water use shall not exceed the proposed requirement as provided in the project details.	Condition noted
3.4	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.	Condition noted The Industrial Park is in construction phase.
3.5	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available.	Water Supply letter from CMWSSB copy is enclosed as Annexure 5 .
3.6	At least 20% of the open spaces as required by the local building bye-laws	Condition noted.

	shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.	
3.7	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.	Condition noted. Individual industries will comply with.
3.8	Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.	Condition noted. Individual industries will comply with.
3.9	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.	Condition noted. Individual industries will comply with.
3.10	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Condition will be complied.
3.11	The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

	harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.	
3.12	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse.	Condition noted
3.13	All recharge should be limited to shallow aquifer.	Condition noted
3.14	No ground water shall be used during construction phase of the project.	Condition noted
3.15	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.	Condition noted. SIPCOT will provide STP only for treating sewage from Industrial Housing and all the member industries will be mandated to provide STP to reuse the treated sewage for green belt development.
3.16	No sewage or untreated effluent water would be discharged through storm water drains.	Condition noted. All the member industries will be mandated to adopt Zero Liquid Discharge system.
3.17	Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated	Condition noted. SIPCOT will provide STP only for treating sewage from Industrial Housing and all the member industries will be mandated to provide STP to reuse the treated sewage for green belt development.

	waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.	
3.18	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
3.19	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
4. Noise Monitoring And Prevention		
4.1	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.	Condition noted. Noise Level Monitoring Reports are enclosed as Annexure - 4.

4.2	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Condition will be complied. Noise Level Monitoring Reports are enclosed as Annexure - 4.
4.3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
5. Energy Conservation Measures		
5.1	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
5.2	Outdoor and common area lighting shall be LED.	Condition will be complied
5.3	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
5.4	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

	should be in place before project commissioning.	
6. Waste Management		
6.1	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.	Condition noted.
6.2	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
6.3	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.	Condition will be complied. All the member units will be instructed to follow applicable rules and guidelines.
6.4	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
6.5	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.	Condition will be complied. All member units will comply with.
6.6	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

	Pollution Control Board.	
6.7	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
6.8	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.
6.9	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 will be instructed to follow applicable rules and guidelines.
7. Green Cover		
7.1	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).	Condition noted
7.2	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should	Condition will be complied

	include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.	
7.3	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.	Condition noted
7.4	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.	Condition noted
8. Transport		
8.1	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and	Condition noted. All the member units will be instructed to follow applicable rules and guidelines.

	pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.	
8.2	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.	Condition noted. All the member units shall comply with.
9.		
9.1	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.	Condition noted. All the member units shall comply with.
10. Human Health Issues		

10.1	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.	Condition noted. All the member units shall comply with.
10.2	For indoor air quality the ventilation provisions as per National Building Code of India.	Condition noted. All the member units shall comply with.
10.3	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.
10.4	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Condition noted. All the member units shall comply with.
10.5	Occupational health surveillance of the workers shall be done on a regular basis.	Condition noted. All the member units shall comply with.
10.6	A First Aid Room shall be provided in the project both during construction and operations of the project.	Condition will be complied. All the member units shall comply with.
11. Miscellaneous		
11.1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating	Condition Complied. Newspaper Advertisement Copy is enclosed as Annexure – 2.

	that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.	
11.2	ii. Environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Condition complied. Acknowledgement copy from local bodies and government office for submission of clearance letter is enclosed as Annexure – 7.
11.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Condition noted
11.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Condition noted.
11.5	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife	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

	<p>norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.</p>	– 8.
11.6	<p>A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.</p>	<p>Condition complied.</p> <p>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 - 8.</p>
11.7	<p>Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report</p>	Condition noted
11.8	<p>The project proponent shall submit the environmental statement for each</p>	Condition will be Complied.

	financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	
11.9	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Condition noted
11.10	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Condition noted
11.11	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the State Expert Appraisal Committee.	Condition noted.
11.12	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC)/SEIAA-TN.	Condition noted.
11.13	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Condition noted

11.14	The Ministry/SEIAA-TN may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Condition noted
11.15	The Ministry/SEIAA-TN reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Condition noted
11.16	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Condition noted
11.17	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Condition noted. All the member units will be instructed to follow all necessary rules and guidelines.
11.18	Any appeal against this EC shall lie with the National Green Tribunal, if preferred,	Condition noted.

	within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	
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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 **April 2024- September 2024**.

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 **April 2024- September 2024** is enclosed as **Annexure - 4**.

5.2 Ambient Noise level monitoring

Ambient noise levels were monitored and the test report of ambient noise recorded during the period of **April 2024- September 2024** is enclosed as **Annexure - 4**.

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 **April 2024- September 2024** is enclosed as **Annexure - 4**.

5.4 Ground water quality monitoring

Ground water was tested for various water quality parameters during the period of **April 2024- September 2024**. The test report of bore well water collected and analyzed is enclosed as **Annexure- 4**.

5.5 Surface water quality monitoring

The surface water was collected and tested for various water quality parameters during the period of **April 2024- September 2024**. The test report of surface water collected and analyzed is enclosed as **Annexure 4**.

6.0 CONCLUSION

1. The environmental monitoring was carried out at site during the period of **April 2024- September 2024.**
2. All the conditions stipulated in Environmental Clearance are being complied/ will be complied.



Dr. RAJKUMAR SAMUEL
Director Technical

Name: Dr. Rajkumar Samuel
Designation: Director Technical
Company Name: Hubert Enviro Care
Systems Private Limited

ANNEXURE



File No: 9263
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), TAMIL NADU)



Date 22/04/2024



To,

Managing Director
 STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED
 19-A, Rukmani Lakshmipathy Road, Egmore, Chennai , Egmore, CHENNAI, TAMIL NADU, Egmore,
 600008
 md@sipcot.in

Subject: Grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 -regarding.

Sir/Madam,

This is in reference to your application for Proposed Development of Industrial Park with Industrial Housing Facility over an extent of 215.834 Ha (533.11 Acres) at Soorapoondi Village S.F.Nos. 65/1, 181, 182, 183, 184, 185, 186, 187, 188, 189/1, 190, 192, 213pt, 214pt, 215, 216, 217, 218pt, 219pt, 220pt, 221pt, 227/1pt, 227/2pt, 227/3pt, 228/1pt, 228/2pt, 228/3pt, 235pt & Vaniyamallee Village S.Nos. 31/1, 31/2, 31/3, 31/4, 31/5, 31/6, 36, 38/1, 41/3, 41/4, 41/12, 41/20, 142/1, 175/2, 175/3, 175/4, 176/1, 176/2, 176/3, 177, 178/1, 179, 180/1, 180/2, 180/3, 180/4, 180/5, 180/6, 181/1, 181/2, 181/3, 181/4, 182, 183, 184, 185, 188/2, 188/3, 188/4, 188/5, 189/1, 189/2, 189/3, 189/4, 197/2, 198/1, 199, 200, 201, 202, 203/1, 204/10, 205/2, 206, 207/1, 207/2, 207/3, 207/4, 207/5, 207/6, 207/7, 207/8, 207/9, 208/1, 208/2, 208/3, 208/4, 208/5, 208/6, 209, 210, 211, 212, 213pt, 214pt, 215, 216, 217/1, 218pt, 219pt, 221pt, 222pt, 223pt, 225pt, 226pt, 228/1 of Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) submitted to SEIAA-TN vide proposal number SIA/TN/INFRA2/463400/2024 dated 23/02/2024 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

Ref:

1. ToR issued by SEIAA-TN vide Lr.No.SEIAA-TN/F.No.9263/SEAC/ToR-1213/2022 dated:14.07.2022
2. ToR amendment issued by SEIAA-TN vide Lr.No.SEIAA-TN/F.No.9263/SEAC/ToR-1213/2022/Amendment/2023 dated:06.11.2023
3. Online Proposal No. SIA/TN/INFRA2/463400/2024, dated 20.02.2024 for EC
4. EIA report submitted dated: 21.02.2024

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24B3813TN5100474N
(ii) File No.	9263
(iii) Clearance Type	Fresh EC
(iv) Category	B1
(v) Project/Activity Included Schedule No.	8(b) Townships/ Area Development Projects / Rehabilitation Centres
(vii) Name of Project	Development of Industrial Park with Industrial Housing Facility at Soorapoondi and Vaniamallee villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu
(viii) Name of Company/Organization	STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED
(ix) Location of Project (District, State)	THIRUVALLUR, TAMIL NADU
(x) Issuing Authority	SEIAA
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the State Environment Impact Assessment Authority(SEIAA) under the provision of EIA notification 2006 and its subsequent amendments.
4. The above-mentioned proposal has been considered by SEIAA in the meeting held on 01/04/2024. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.
5. The SEAC, based on information submitted viz: Form 1 (Part A, B and C), EIA/EMP report etc., & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and public hearing issues and compliance thereto furnished by the Project Proponent, recommended the proposal for grant 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.
6. The SEIAA has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the SEAC hereby accords Environment Clearance for the instant proposal to Mr. Raam Mohan K under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of the Specific and Standard EC conditions as given in Annexure (2)
7. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.
8. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
9. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.
10. Validity of EC is for a period of 7 years from the date of issue of EC. In case the project proponent fails to complete the construction/proposed activities within the EC validity date, application for EC validity extension shall be submitted to the regulatory authority as per the provision contained in the Para 9.0 of EIA notification, 2006 and its amendment
11. **Salient features of the proposal are as follows:**

S. No	Description	Details
1.	Name of the Project	“Development of Industrial Park with Industrial Housing Facility at Soorapoondi and Vaniamallee villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu” over an extent of 215.834 Ha (533.11 Acres) by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).

2.	Location	Soorapoondi and Vaniamallee villages Gummidipoondi Taluk, Thiruvallur District and Tamil Nadu state.
3.	Type of Project	Category – 8(b)
4.	Latitude & Longitude	13°25'24.17"N, 80° 2'12.45"E
5.	Total Plot Area (in sq. m)	215.834 Ha (533.11 Acres)
6.	Brief description of the project	The Environmental Clearance is sought for “Development of Industrial Park with Industrial Housing Facility at Soorapoondi and Vaniamallee villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu” over an extent of 215.834 Ha (533.11 Acres) by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT)
7.	Built up area details	Not applicable – It is infrastructure development project
8.	Maximum height of the project	18.2
9.	Maximum number of floors	Industrial park - based on industrial units Industrial Housing – G+4
10.	No. of blocks	Industrial park - based on industrial units Industrial Housing – 4 towers
11.	Permissible FSI area	-
12.	Proposed FSI area	-
13.	Cost of Project	INR. 495.52 crores
14.	No. of Saleable Units	Not applicable. Total developable area is 533.11 Acres (215.834 Ha) which includes Industrial plot area, Industrial Housing, Other Common facilities, Greenbelt, SWM, Road, Storm Water Drain, OSR and such other infrastructure facilities.
15.	Expected Population	Construction phase - 100 Nos. Operation phase – 10,800 Nos (including 1,920 Nos for industrial housing during operation phase)
16.	a) Water requirement (in KLD)	4789 KLD (Fresh water: 874 KLD, TTRO water: 2133 KLD and Recycled water: 1782 KLD)
17.	b) Source	Source: a. Fresh water - Letter from TWAD for the supply of 10 MLD raw water supply from SIPCOT Industrial Park at Thervoykandigai vide Letter no. CMWSSB/WT&T/RO-II/SIPCOT-Manallur dated: 03.02.2023 b. TTRO water - Letter from TWAD for the supply of 22.70 MLD TTRO water vide Letter no. CMWSSB/CE(O&M)II/STP(N)/45TTRO – KOD/039/SIPCOT – Manallur dated 25.03.2023
18.	Details of Sewage generation and Treatment	Total Sewage generation: 593 KLD Treatment Method: • Sewage from Industries - Will be treated by individual industries and used for green belt development within the IP. • Sewage from Industrial Housing - SIPCOT will provide STP of capacity 250 KLD for Industrial Housing.
19.	Details of greywater / Effluent generation and Treatment	Total Effluent Generation: 1193 KLD Treatment Method: • Effluent from Industries - Will be treated by individual industries and reused for process and utilities. ZLD will be maintained by individual industries, if necessary. • Effluent from Industries - SIPCOT will provide ETP of capacity 1300 KLD.
20.	Mode of Disposal of treated sewage / effluent	• Treated effluent will be used by individual units for their Process & Utilities • Treated sewage will be used for greenbelt & Flushing.

		Description	Details	Unit	
		Total Solid Waste Generation	4.860	TPD	
		Organic waste	2.916	TPD	
21.	Quantity of Solid Waste generation, Mode of treatment and Disposal	For Industrial Park: Individual industries will segregate the waste and organic waste will be composted and used as manure for green belt development. Inorganic waste will be sold to TNPCB authorized recyclers/local vendors by individual industries. For Industrial Housing: Organic wastes will be composted in Organic Waste Converter and the compost will be used as manure for green belt development. Inorganic waste will be collected and sold to TNPCB authorized recyclers / local vendors.			
22.	Quantity of E-Waste generation, Mode of treatment and Disposal	E-waste such used PC, equipment, sensor, controller, etc) will be generated from the proposed units in IP and Industrial Housing. The same will be disposed through TNPCB Authorized E-waste Vendor by Individual units as per E-waste Management Rules 2022.			
23.	Quantity of Biomedical Waste generation, Mode of treatment and Disposal	Biomedical waste generation and management (Medical centre proposed within Industrial housing)			
		Waste Schedule	Waste Type	Quantity	Method of Disposal
		Yellow	Soiled wastes	6.5 kg/month	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for Incineration
		Red	Contaminated wastes	4.7 kg/month	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for sterilization
		White	Waste sharps including metals	0.3 kg/month	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for shredding & disposal
		Blue	Glassware	1.8 kg/month	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for disinfection & recycling
24.	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		0.5KL/A	Will be sent to TNPCB authorized recyclers/vendors
		33.3-Empty barrels/ containers/ liners contaminated with hazardous chemicals/wastes		5 nos/Annum	Will be sent to TNPCB authorized recyclers
25.	Power requirement	22 MVA (Source: TANGEDCO)			
26.	Details of solar energy	50% of total roof coverage 1) Solar panels will be proposed in the roof top of Project office. Solar power will be utilized for the IP internal road lighting. 2) Apart from this, individual industries will be advised to provide roof top solar panels & solar lighting to reduce power consumption.			
27.	Details of D.G. set with Capacity	Individual industries will have their own power back up:			

28.	Details of Green Belt Area i) Total area of green belt ii) No. of trees existing within the project site iii) No. of trees proposed to be planted iv) No. of trees to be transplanted / cut	I. Greenbelt Area – 77.883 Ha (192.37 Acres) II. Existing Tree – 6,117 Nos. III. Tree cut - 0 Nos. IV. Tree going to be planted – 1,46,027 Nos.
29.	Details of OSR Area	27.737 Ha (68.51 acres) (12.85%)
30.	Details of Parking Area	Truck parking is provided in Common amenities area by SIPCOT and Individual units will also have their own parking space within their Site.
31.	Provision for rain water harvesting	<ul style="list-style-type: none"> • Rain water Harvesting pit proposed = 3522 nos • The capacity of the Rain water harvesting pit has been calculated as 1.18 m3 (Assuming 50% percolation rate). • Storm water will be collected in RWH pits through storm water drains and only excess storm water will be let into nearby water bodies after filtration.
32.	EMP Cost (Rs.)	Capital cost-34.59 Crores Recurring cost/annum-67 lakhs
33.	CER Cost	Rs. 1.5 Crores. As accepted by the project proponent, amount shall be spent for the conservation measures towards Pulicat Bird Sanctuary in consultation with the State Wildlife Warden, Chennai.

12. General Instructions:

- The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing 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.
- Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
- 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.
- The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

Copy To

1.The Additional Chief Secretary to Government, Environment, Climate Change and Forests Department, 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 Chairperson, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032.

4.Monitoring Cell, I A Division, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110003.

5.Stock File.

Annexure 1

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

1. Seac Conditions - Site Specific

S. No	EC Conditions
1.1	<ol style="list-style-type: none">1. The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.3. PP shall submit the commitment letter from the local body for supply of fresh water.4. The project proponent shall continuously operate and maintain the Sewage treatment plant & Grey Water Treatment Plant to achieve the standards prescribed by the TNPCB/CPCB.5. The proponent must protect 5 numbers of Ficus trees existing in the site by constructing stone wall fencing around each tree.6. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.7. 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.8. 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.9. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).10. 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.11. 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.12. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.13. 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.14. 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.15. 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.16. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

2. Seiaa Specific Conditions:

S. No	EC Conditions
2.1	<ol style="list-style-type: none"> 1. The PP shall ensure that the proposed activities in no way result any impact on the migratory birds. 2. The PP shall ensure that the proposed activity in no way result any impact on the surrounding Agriculture. 3. The proponent shall ensure that the buildings should not cause any damage to water Table & natural drainage. 4. The proponent shall take necessary action to reduce anthropogenic GHGs such as CO₂, CH₄, nitrous oxide, etc., and temperature rise resulting from human activities.

3. Seiaa Standard Conditions:

S. No	EC Conditions
3.1	<p>Climate Change</p> <ol style="list-style-type: none"> 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. <p>Health</p> <ol style="list-style-type: none"> 10. The proponent shall adopt strategies to maintain the health of the inhabitants. <p>Energy</p> <ol style="list-style-type: none"> 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. <p>Regulatory Frameworks</p> <ol style="list-style-type: none"> 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

S. No	EC Conditions
	<p>Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.</p> <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> <p>19. The proponent shall provide elevator as per rules CMDA/DTCP.</p> <p>Database maintenance & audits</p> <p>20. The database record of environmental conditions of all the events from pre-construction, construction and post-construction should be maintained in digitized format.</p> <p>21. The proponent should maintain environmental audits to measure and mitigate environmental concerns.</p> <p>Biodiversity</p> <p>22. There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc.,.</p> <p>23. The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.</p> <p>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.</p> <p>25. The proponent shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances.</p> <p>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.</p> <p>27. The proponent shall adopt strategies to prevent bird hits.</p> <p>Safety measures</p> <p>28. The proponent should develop an emergency response plan in addition to the disaster management plan.</p> <p>29. The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan in emergencies.</p> <p>30. All bio-safety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as stipulated in EIA/EMP.</p> <p>31. The disaster management and disaster mitigation standards to be seriously adhered to avoid any calamities.</p> <p>32. The proponent shall provide the emergency exit in the buildings.</p> <p>33. The proponent shall adhere to the provision and norms regard to fire safety prescribed by competent authority.</p> <p>Water/Sewage</p> <p>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.</p> <p>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.</p> <p>36. The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB.</p> <p>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.</p> <p>38. The proponent shall ensure that provision should be given for proper utilization of recycled</p>

S. No	EC Conditions
	<p>water.</p> <p>39. The project proponent shall adhere to storm water management plan as committed.</p> <p>Parking</p> <p>40. The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan as committed.</p> <p>Solid waste Management</p> <p>41. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.</p> <p>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.</p> <p>EMP</p> <p>43. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.</p> <p>44. The proponent shall ensure that all activities of EMP shall be completed before obtaining CTO from TNPCB.</p> <p>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.</p> <p>Others</p> <p>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.</p> <p>47. The project proponent shall adhere to height of the buildings as committed.</p>

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

1. Statutory Compliance

S. No	EC Conditions
1.1	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
1.2	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
1.3	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.5	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
1.6	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.

S. No	EC Conditions
1.7	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
1.8	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
1.9	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

2. Air Quality Monitoring And Preservation

S. No	EC Conditions
2.1	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
2.2	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
2.3	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
2.4	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
2.5	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
2.6	Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
2.7	Wet jet shall be provided for grinding and stone cutting.
2.8	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
2.9	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.

S. No	EC Conditions
2.10	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
2.11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
2.12	For indoor air quality the ventilation provisions as per National Building Code of India.

3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
3.2	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3.3	Total fresh water use shall not exceed the proposed requirement as provided in the project details.
3.4	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
3.5	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available.
3.6	At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
3.7	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
3.8	Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
3.9	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
3.10	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

S. No	EC Conditions
3.11	The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
3.12	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse.
3.13	All recharge should be limited to shallow aquifer.
3.14	No ground water shall be used during construction phase of the project.
3.15	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
3.16	No sewage or untreated effluent water would be discharged through storm water drains.
3.17	Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
3.18	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
3.19	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
4.2	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
4.3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

5. Energy Conservation Measures

S. No	EC Conditions
5.1	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
5.2	Outdoor and common area lighting shall be LED.
5.3	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
5.4	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

6. Waste Management

S. No	EC Conditions
6.1	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
6.2	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
6.3	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
6.4	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
6.5	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6.6	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
6.7	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
6.8	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

S. No	EC Conditions
6.9	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

7. Green Cover

S. No	EC Conditions
7.1	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
7.2	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
7.3	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
7.4	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

8. Transport

S. No	EC Conditions
8.1	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.
8.2	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

9.

S. No	EC Conditions
9.1	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative

S. No	EC Conditions
	impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

10. Human Health Issues

S. No	EC Conditions
10.1	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
10.2	For indoor air quality the ventilation provisions as per National Building Code of India.
10.3	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
10.4	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
10.5	Occupational health surveillance of the workers shall be done on a regular basis.
10.6	A First Aid Room shall be provided in the project both during construction and operations of the project.

11. Miscellaneous

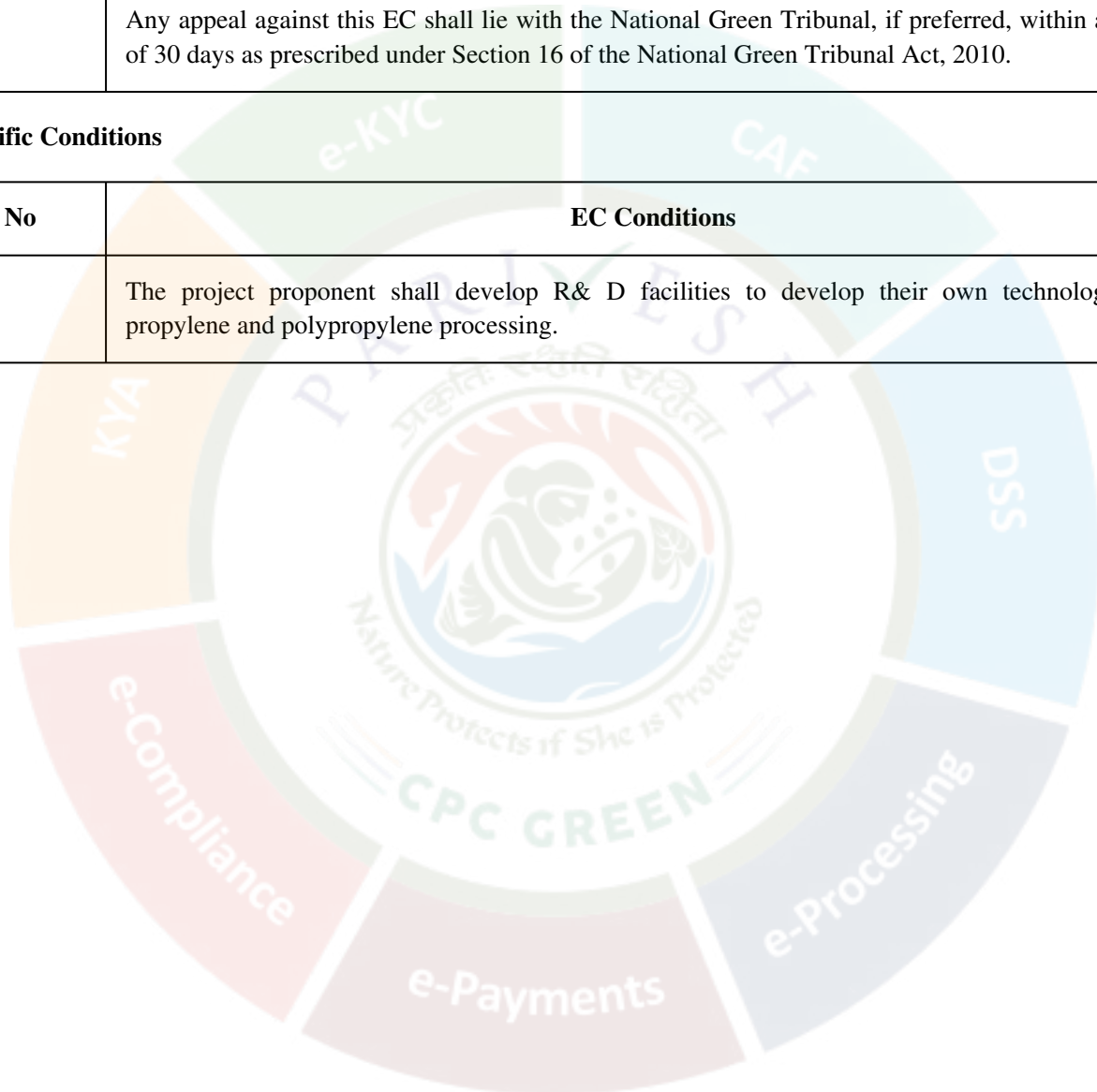
S. No	EC Conditions
11.1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
11.2	ii. environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
11.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
11.4	The project proponent shall submit six-monthly reports on the status of the compliance of the

S. No	EC Conditions
	stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
11.5	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
11.6	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
11.7	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report
11.8	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
11.9	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
11.10	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11.11	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the State Expert Appraisal Committee.
11.12	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC)/SEIAA-TN.
11.13	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11.14	The Ministry/SEIAA-TN may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11.15	The Ministry/SEIAA-TN reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
11.16	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by

S. No	EC Conditions
	furnishing the requisite data / information/monitoring reports.
11.17	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
11.18	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

12. Specific Conditions

S. No	EC Conditions
12.1	The project proponent shall develop R& D facilities to develop their own technologies for propylene and polypropylene processing.





The PM 2.5 level recorded at Alandur on Friday. Nitrogen dioxide level was at 41 µg/m3 against the prescribed standard of 80 µg/m3

NEWS UPDATE FROM TN

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Bad roads, garbage mounds welcome visitors at industrial estate in Guindy

C SHIVAKUMAR @ Chennai

POTHOLE-ridden roads and damaged stormwater drains with garbage dumped into them greet visitors to the country's first model industrial estate in Guindy. The southern phase of the estate, which directly employs more than 5,000 people and indirectly 10,000, paints a picture of neglect. The employees are blaming the lackadaisical attitude of SIDCO towards their repeated complaints on bad roads leading to mishaps, some minor and some major.

Twenty-seven year-old Shanti, who works as an accountant, recalls the day when she fell off her two-wheeler trying to avoid a pothole a few months ago. "I suffered a ligament injury and was bed-ridden for months. I was advised not to ride a two-wheeler, but I am forced to do so because I have a family to support," she says. A pregnant



Bad roads have been affecting users for years, say firms | D SAMPATH KUMAR

woman also met with an accident owing to the unmotorable road and suffered a miscarriage. She was psychologically affected and quit, alleges Shanti.

Aadarsh, a senior official of a company, says he once fell off his two-wheeler into a pit and suffered an elbow fracture.

Employees and firms in the southern phase recently submitted a petition, once again, to SIDCO citing poor condition of a basic requirement — motorable roads. "Given the impor-

tant of SIDCO, south phase, Guindy is a premier industrial park. This issue has been affecting the estate for years and we have taken up the matter repeatedly. Though SIDCO said roads would be re-laid by January 2024, there has been no progress," the plea says. The employees also sent a copy of the petition to Industries Minister TRB Rajaa and top officials.

A Guindy Industrial Estate Association member alleges that officials are carelessly sit-

ting on such an important issue. The association has taken upon itself SIDCO's task of clearing garbage in the estate. However, borders of the estate are porous and hotels and other outsiders keep dumping garbage into the drain. A petition was recently sent to MSME minister seeking new stormwater drain in vain, he claims.

It may be noted that TNIE carried a report in November last highlighting the plight of the estate and officials had assured to take prompt action.

Talking to TNIE, an official in Tamil Nadu Small Industries Development Corporation Limited says maintenance work of the estate has been transferred to Greater Chennai Corporation and the roads in Ambattur and Guindy Industrial Estates would be re-laid at a cost of ₹12.07 crore by the civic body. Work is currently under way in Ambattur estate, he adds.

50% redevelopment work at Park station complete, project expedited

EXPRESS NEWS SERVICE @ Chennai

REDEVELOPMENT works at Chennai Park station have gained momentum, with 50% completion of the proposed works aimed at facilitating seamless passenger transition between the station and Chennai Central, MRTS, and Central metro station.

According to official sources, the station serves as a vital point connecting Chennai Central in the Chennai Beach - Chengalpattu section. "During rush hours, the entry and exit points of the station witness huge congestion. As part of the redevelopment project, station approaches are being developed not only to provide seamless movement of passengers but also to improve access for persons with disabilities," an official said.

Last year, the station was taken up for redevelopment at a cost of ₹10.68 crore under the



The works are likely to be completed in a few months. Construction of platform shelters and landmark towers are nearing completion | P JAWAHAR

Amrit Bharat Station Scheme. An official note said that over 50% of the redevelopment works has been completed, including the resurfacing of flooring on platforms 1A, 1 and 2. "The works to instal lifts, new canopy and other enhancements are under way," the note added.

The redevelopment plan involves the construction of a new booking office with an executive lounge, a new canopy at the entry with waiting space, resurfac-

ing of flooring on platforms, development of a pedestrian walkway towards MRTS stations and Poonamallee High Road entry and new platform shelters.

Additionally, the proposal includes the provision of lifts (three lifts) for the foot over-bridge and handrails, a passenger information display system, an enhanced public announcement system, modern signage, the statement added.

AR constable, 2 friends booked for 'cheating' cop

EXPRESS NEWS SERVICE @ Chennai

THE Triplicane police have booked an Armed Reserve police constable and her two friends for allegedly cheating a traffic police constable to the tune of ₹7.95 lakh under the pretext of online business. The victim tried to die by suicide in February and is now out of danger.

According to sources, P Muniswaran (30) was employed as a constable at Flower Bazaar Traffic Police Station. In November last, he got acquainted with Priya (33), an AR constable, and her two friends Ajin and Anand, through a mutual friend. Prom-

ising to invest in their online business and getting a huge return, they made him transfer ₹7.95 lakh.

However, in December, when Muniswaran did not get any return, he lodged a police complaint. The police tried to inquire, but the trio did not cooperate. In February, Muniswaran tried to die by suicide and was admitted to hospital. After conducting inquiry, police booked a case against the three persons on Thursday. They are yet to be arrested.

(Those with suicidal thoughts contact helpline 104 and Sneha's 044-24640050)

Traffic diversion at Madley Jn from today

EXPRESS NEWS SERVICE @ Chennai

DUE to the construction of a flyover at Madley Junction, the following traffic diversions will be implemented from Saturday to April 26, 2025.

Vehicles coming from North Usman Road towards T Nagar bus stand are prohibited from using the Usman Road flyover near Panagal Park. Instead, vehicles can take the service road of the flyover and reach T Nagar bus stand via Prakasam Road, Bhashyam Road, Thyagaraya Road and Burkit Road.

Only buses will be allowed to ply from Burkit Road Mooparappan Street Junction towards Madley.

Other vehicles can reach T Na-



Due to the construction of a flyover at the junction, traffic diversion will be in place till April 26, 2025 | ASHWIN PRASATH

gar bus stand via Usman Road, Mooparappan Street, Musa Street, South Dhandapani Street and Mannar Street.

From T Nagar bus stand, vehicles have to take South Usman Road to reach Saidapet Anna Road and reach Kannammappet junction, and then take South West Boag Road, CIT Nagar Fourth Main Road, CIT Nagar Third Main Road and reach Anna Road.

Vehicles going from CIT Nagar 1st Main Road to North Usman Road should take South West Boag Road at Kannammappet junction and take Venkatanarayana Road to reach North Usman Road via Nageswaran Rao Road.

Vehicles from T Nagar bus stand which have to reach North Usman Road from Madley Roundabout have to take Burkit Road to Venkatanarayana Road and turn left at Nageswara Rao Road.

STATE INDUSTRIES PROMOTION CORPORATION OF TAMIL NADU LIMITED
19-A, RUKMANI LAKSHMIPATHY ROAD,
EGMORE, CHENNAI - 600 008.
CIN U74999TN1971SGC005967

SIPCOT INDUSTRIAL PARK WITH INDUSTRIAL HOUSING FACILITY

ENVIRONMENTAL CLEARANCE

Environmental Clearance has been obtained for the proposed Development of SIPCOT Industrial Park with Industrial Housing Facility at Soorapoondi and Vaniyamallee Villages, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu from the State Environment Impact Assessment Authority (SEIAA), Tamil Nadu vide **EC Identification No. EC24B3813TN5100474N, File No. 9263 dated 22.04.2024.**

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.

DIPR / 452 / Display / 2024 **MANAGING DIRECTOR**

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5
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AIR

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17

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34

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39

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Welcome DEVELOPMENT OF INDUSTRIAL PARK WITH INDUSTRIAL HOUSING FACILITY AT VANIAMALLEEDate : 25-6-2024

Consent Application Details

Application No : 59704657

Congratulations! Application submitted successfully.
Please submit the signed hard copy of application with required signed enclosures to concerned District office on request of DEE/AEE concerned.
Your Consent Application application has been received under the Application Number **59704657**. (Note this number for future communication and know the online status of the application submitted)
Submitted application is under processing. Please send the following documents by post/by hand. You may ignore sending the documents which have been uploaded online.

1) A covering requisition letter stating the status of the industry and activities clearly.

2) Copy of attested sale Deed /Lease Deed or any other relevant documents as proof to ensure possession of the site/factory for which application is made by the applicant.

3) Copy of attested Memorandum of Articles in case of Public/Private sectors or registered partnership deed in case of partnership company.

4) Layout plan showing the location of various process equipments, utilities like boiler, generator etc, effluent treatment plant, outlet location, non-hazardous and hazardous waste storage yard.

5) Topo sketch showing the distance of water bodies, roads, existing/proposed residential areas, agricultural lands, important religious locations, educational institutions, ancient monuments, archeological places and other sensitive areas for 1 KM. radius from the units.

6) Detailed manufacturing process for each product along with detailed process flow chart.

7) Details of Water Balance and wastewater balance for process.

8) Details of Material balance for each products and process.

Hubert Enviro Care Systems (P) Ltd.A-21, III Phase, Thiru Vi Ka Industrial Estate,
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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 : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : Near Project Site(Vaniyamalli)

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 32.0 Humidity (%) : 56.0

Sampling Method & Plan : IS 182 Part-5 & Part 14

ULR : TC1231024000047292F

Report No. : HECS/AP/179/300924

Sample ID No : 300924354

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 05/10/2024

Report Date : 05/10/2024

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	6.28	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	26.79	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m3	10.28	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m3	56.32	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m3	20.19	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m3	14.66	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

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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : Near Project Site(Vaniyamalli)

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 32.0 | Humidity (%) : 56.0

Sampling Method & Plan : IS 182 Part-5 & Part 14

Report No. : HECS/AP/179/300924/N

Sample ID No : 300924354

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 05/10/2024


Report Date : 05/10/2024

Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	TVOC	ppmv	BLQ(LOQ 0.05)	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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Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : Iguvarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 32.0 | Humidity (%) : 56.0

Sampling Method & Plan : IS 182 Part-5 & Part 14

ULR : TC1231024000047291F

Report No. : HECS/AP/180/300924

Sample ID No : 300924355

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 05/10/2024

Report Date : 05/10/2024

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	5.28	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	23.82	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m³	13.25	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m³	49.79	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	20.16	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	11.28	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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Authorized Signatory

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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT
Address of the Client : Vaniyamallee
Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : Iguvarpalaiyam
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : NA
Environmental Condition : Temperature (°C) : 32.0 | Humidity (%) : 56.0
Sampling Method & Plan : IS 182 Part-5 & Part 14

Report No. : HECS/AP/180/300924/N
Sample ID No : 300924355
Sampling Date : 30/09/2024
Received Date : 30/09/2024
Commenced Date : 30/09/2024
Completed On : 05/10/2024
Report Date : 05/10/2024
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	TVOC	ppmv	BLQ(LOQ 0.05)	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 : Vaniyamallee

ULR : TC1231024000047319F

Report No. : HECS/AP/181/300924

Sample ID No : 300924356

Sampling Date : 30/09/2024

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : Gummidipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 32.0 Humidity (%) : 56.0

Sampling Method & Plan : IS 182 Part-5 & Part 14

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 05/10/2024

Report Date : 05/10/2024

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	6.12	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	25.19	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m³	10.65	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m³	46.29	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	20.18	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	11.54	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
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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : Gummidipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 32.0 | Humidity (%) : 56.0

Sampling Method & Plan : IS 182 Part-5 & Part 14

Report No. : HECS/AP/181/300924/N

Sample ID No : 300924356

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 05/10/2024

Report Date : 05/10/2024

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 : Vaniyamallee

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : Teruvai

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 32.0 | Humidity (%) : 56.0

Sampling Method & Plan : IS 182 Part-5 & Part 14

U.L.R. : TC1231024000047318F

Report No. : HECS/ATP/183/300924

Sample ID No : 300924358

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 05/10/2024

Report Date : 05/10/2024

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	7.41	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	20.75	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m³	12.54	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m³	43.80	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	27.25	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	14.93	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, mg/m³-Milligrams 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 : Vaniyamallee

ULR : TC1231024000047335F
Report No. : HECS/AP/182/300924
Sample ID No : 300924357
Sampling Date : 30/09/2024

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : Gurusvarajakandigai
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : NA
Environmental Condition : Temperature (°C) : 32.0 | Humidity (%) : 56.0
Sampling Method & Plan : IS 182 Part-5 & Part 14

Received Date : 30/09/2024
Commenced Date : 30/09/2024
Completed On : 05/10/2024
Report Date : 05/10/2024
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	8.30	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	20.11	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m³	11.97	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m³	50.15	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	22.78	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	14.91	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 : Vaniyamallee

Group : Atmospheric Pollution

Sample Name : Ambient Air

Sample Mark : Gurusvarajakandigai

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 32.0 | Humidity (%) : 56.0

Sampling Method & Plan : IS 182 Part-5 & Part 14

Report No. : HECS/AP/182/300924/N

Sample ID No : 300924357

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 05/10/2024

Report Date : 05/10/2024


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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Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Near Project Area

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047811F

Report No. : HECSL/WT/099/300924

Sample ID No : 300924360

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Ammonia as NH3	mg/l	BLQ(LOQ:0.07)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
2	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
3	Bi carbonate	mg/l	220.0	IS 3025 Part 51: 2001	NA	NA
4	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
5	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
6	Calcium as Ca	mg/l	52.10	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
7	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
8	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
9	Chloride as Cl	mg/l	220.46	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
10	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
11	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
12	Dissolved oxygen	mg/l	6.7	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA

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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Near Project Area

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047811F

Report No. : HECSL/WT/099/300924

Sample ID No : 300924360

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
13	Electrical Conductivity at 25°C	µS/cm	1226.0	IS 3025 Part-14: 2013	NA	NA
14	Fluoride as F	mg/l	0.47	APHA 23rd edition (Method 4500F-B, D): 2017	1.0	1.5
15	Iron as Fe	mg/l	BLQ(LOQ:0.01)	IS 3025 (Part 53): 2003	1.0	No relaxation
16	Magnesium as Mg	mg/l	29.16	IS 3025 Part 46: 1994 (Volumetric Method using EDTA)	30	100
17	Nitrate as NO3	mg/l	11.74	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
18	Percent Sodium	%	47.47	HECS /WT/SOP/002: 2019	NA	NA
19	pH at 25°C	-	7.91	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation
20	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
21	Potassium as K	mg/l	9.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
22	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA	NA
23	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit)	3.01	IS 11624 : 2019	NA	NA
24	Sodium as Na	mg/l	110.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Near Project Area

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047811F

Report No. : HECSL/WT/099/300924

Sample ID No : 300924360

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
25	Sulphate as SO ₄	mg/l	67.37	IS 3025 Part 24 Sec 1: 2022 (Turbidity Method)	200	400
26	Total alkalinity as CaCO ₃	mg/l	220.0	IS 3025 (Part 23): 1986	200	600
27	Total dissolved solids	mg/l	687.0	IS 3025 (Part 16): 1984	500	2000
28	Total Suspended Solids	mg/l	BLQ (LOQ: 2.0)	IS 3025 (Part 17): 1984	NA	NA
29	Phosphate as PO ₄	mg/l	0.096	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
30	Phosphorous as P	mg/l	0.027	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
31	Total hardness as CaCO ₃	mg/l	250.0	IS 3025 (Part 21): 2009	200	600
32	Turbidity, NTU	NTU	0.8	IS 3025 (Part 10): 1984	1	5
33	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
35	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
36	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
37	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Near Project Area

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047811F

Report No. : HECSL/WT/099/300924

Sample ID No : 300924360

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
38	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
39	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
40	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
41	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
42	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
43	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15

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 : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Near Project Area

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

Report No. : HECSL/WT/099/300924/N

Sample ID No : 300924360

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 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: 2003 (Diphenyl Carbazide method)

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

End of Report



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Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Iguvarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047821F

Report No. : HECSI/WT/100/300924

Sample ID No : 300924361

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
2	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
3	Bi carbonate	mg/l	210.0	IS 3025 Part 51: 2001	NA	NA
4	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
5	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Circumion Method: 2021	0.5	2.4
6	Calcium as Ca	mg/l	48.09	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
7	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
8	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
9	Chloride as Cl	mg/l	195.96	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
10	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
11	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
12	Dissolved oxygen	mg/l	6.6	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA

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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Iguvarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047821F

Report No. : HECS1/WT/100/300924

Sample ID No : 300924361

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
13	Electrical Conductivity at 25°C	µS/cm	1055.0	IS 3025 Part-14: 2013	NA	NA
14	Fluoride as F	mg/l	0.43	APHA 23rd edition (Method 4500F-B : D): 2017	1.0	1.5
15	Iron as Fe	mg/l	0.061	IS 3025 (Part 53): 2003	1.0	No relaxation
16	Magnesium as Mg	mg/l	24.3	IS 3025 Part 46: 1994 (Volumetric Method using EDTA)	30	100
17	Nitrate as NO3	mg/l	6.78	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
18	Percent Sodium	%	48.65	HECS /WT/SOP/002:: 2019	NA	NA
19	pH at 25°C	-	7.88	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation
20	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
21	Potassium as K	mg/l	8.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
22	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA	NA
23	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit)	2.95	IS 11624 : 2019	NA	NA
24	Sodium as Na	mg/l	102.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Iguvarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047821F

Report No. : HECSL/WT/100/300924

Sample ID No : 300924361

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
25	Sulphate as SO ₄	mg/l	57.61	IS 3025 Part 24 Sec 1: 2022 (Turbidity Method)	200	400
26	Total alkalinity as CaCO ₃	mg/l	210.0	IS 3025 (Part 23): 1986	200	600
27	Total dissolved solids	mg/l	591.0	IS 3025 (Part 16): 1984	500	2000
28	Total Suspended Solids	mg/l	BLQ (LOQ: 2.0)	IS 3025 (Part 17): 1984	NA	NA
29	Phosphate as PO ₄	mg/l	0.12	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
30	Phosphorous as P	mg/l	0.036	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
31	Total hardness as CaCO ₃	mg/l	220.0	IS 3025 (Part 21): 2009	200	600
32	Turbidity, NTU	NTU	0.7	IS 3025 (Part 10): 1984	1	5
33	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
35	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
36	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
37	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5



D. Anusuya
Lab Manager
Authorized Signatory

**TEST REPORT**

Page : 4 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Iguvarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 Humidity (%) : 51.0

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

 ULR : TC1231024000047821F
 Report No. : HECSL/WT/100/300924
 Sample ID No : 300924361
 Sampling Date : 30/09/2024

 Received Date : 30/09/2024
 Commenced Date : 30/09/2024
 Completed On : 09/10/2024
 Report Date : 09/10/2024
 Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
38	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
39	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
40	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
41	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
42	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
43	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15

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 : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Iguvarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

Report No. : HECSL/WT/100/300924/N

Sample ID No : 300924361

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 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: 2003 (Diphenyl Carbazide method)

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l- Milligrams per litre.
End of Report

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Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Gunmidipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047812F

Report No. : HECSL/WT/101/300924

Sample ID No : 300924362

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
2	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
3	Bi carbonate	mg/l	240.0	IS 3025 Part 51: 2001	NA	NA
4	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
5	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
6	Calcium as Ca	mg/l	44.09	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
7	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
8	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
9	Chloride as Cl	mg/l	210.67	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
10	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
11	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
12	Dissolved oxygen	mg/l	6.5	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA

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Authorized Signatory

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HECS-G/Q/FMT/49

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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Gummidipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047812F

Report No. : HECSL/WT/101/300924

Sample ID No : 300924362

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
13	Electrical Conductivity at 25°C	µS/cm	1133.0	IS 3025 Part-14: 2013	NA	NA
14	Fluoride as F	mg/l	0.44	APHA 23rd edition (Method 4500F-B, D): 2017	1.0	1.5
15	Iron as Fe	mg/l	0.067	IS 3025 (Part 53): 2003	1.0	No relaxation
16	Magnesium as Mg	mg/l	29.16	IS 3025 Part 46: 1994 (Volumetric Method using EDTA)	30	100
17	Nitrate as NO3	mg/l	5.74	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
18	Percent Sodium	%	48.19	HECS /WT/SOP/002: 2019	NA	NA
19	pH at 25°C	-	7.94	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation
20	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
21	Potassium as K	mg/l	7.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA
22	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA	NA
23	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit)	2.94	IS 11624 : 2019	NA	NA
24	Sodium as Na	mg/l	103.0	IS 3025 Part 45: 1993 (Flame emission Photometric Method)	NA	NA



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Gummidiipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047812F

Report No. : HECSL/WT/101/300924

Sample ID No : 300924362

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
25	Sulphate as SO ₄	mg/l	67.46	IS 3025 Part 24 Sec 1: 2022 (Turbidity Method)	200	400
26	Total alkalinity as CaCO ₃	mg/l	240.0	IS 3025 (Part 23): 1986	200	600
27	Total dissolved solids	mg/l	637.0	IS 3025 (Part 16): 1984	500	2000
28	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
29	Phosphate as PO ₄	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
30	Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
31	Total hardness as CaCO ₃	mg/l	230.0	IS 3025 (Part 21): 2009	200	600
32	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
33	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
35	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
36	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
37	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Gummidipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047812F

Report No. : HECSLAWT/101/300924

Sample ID No : 300924362

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
38	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
39	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
40	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
41	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
42	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
43	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15

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 : Vaniyamallee

Group : Water

Sample Name : Ground Water

Sample Mark : Gummidiipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

Report No. : HECSL/WT/101/300924/N

Sample ID No : 300924362

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 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: 2003 (Diphenyl Carbazide method)

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l- Milligrams 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 : Vaniyamallee

Group : Water

Sample Name : Surface Water

Sample Mark : Pond near Vaniyamalli

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 Humidity (%) : 51.0

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

ULR : TC1231024000047813F

Report No. : HECSL/WT/102/300924

Sample ID No : 300924363

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296 Class-A)
Discipline : Chemical					
1	Ammonia as NH ₃	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34 Sec 2: 2021	NA
2	Bi carbonate	mg/l	180.0	IS 3025 Part 51: 2001	NA
3	Biological Oxygen Demand (BOD) _@ 27°C For 3 days	mg/l	3.0	IS 3025 Part 44: 1993	2
4	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 (Curcumin Method)	NA
5	Calcium as Ca	mg/l	36.07	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	80.10
6	Chemical Oxygen Demand (COD)	mg/l	24.0	IS 3025 Part 58: 2006	NA
7	Chloride as Cl	mg/l	176.37	IS 3025 Part 32: 1988 (Argentometric Method)	250
8	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	10
9	Dissolved oxygen	mg/l	6.1	IS 3025 Part 38: 1989	6
10	Electrical Conductivity at 25°C	µS/cm	914.0	IS:3025 Part 14: 2013	NA
11	Fluoride as F	mg/l	0.44	APHA 23rd edition Method 4500 F -B.D: 2017	1.5
12	Iron as Fe	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 53: 2003	0.3
13	Nitrate as NO ₃	mg/l	12.64	APHA 23rd edition Method 4500 NO3B: 2017	20

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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Surface Water

Sample Mark : Pond near Vaniyamalli

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047813F

Report No. : HECSLAWT/102/300924

Sample ID No : 300924363

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296 Class-A)
14	pH at 25°C	-	7.88	IS 3025 Part 11: 2022 (Electrometric Method)	8.5
15	Total dissolved solids	mg/l	512.0	IS 3025 Part 16: 1984	500
16	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B, C: 2017	0.2
17	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2011	NA
18	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.05
19	Magnesium as Mg	mg/l	17.01	IS 3025 Part 46: 1994 (Volumetric Method using EDTA)	24.28
20	Percent Sodium	%	52.27	HECSG /WT/SOP/002 Issue No:01, Issue date 18.12: 2021	NA
21	Phenolic compounds as C ₆ H ₅ OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43:Sec 1: 2022	0.002
22	Phosphate as PO ₄	mg/l	0.14	APHA 23rd edition Method 4500-P B,D: 2017	NA
23	Potassium as K	mg/l	6.0	IS 3025 Part 45: 1993	NA
24	Residual Sodium Carbonate	mg/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA
25	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit)	2.91	IS 11624: 2019	NA

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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Surface Water

Sample Mark : Pond near Vaniyamalli

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047813F

Report No. : HECSL/WT/102/300924

Sample ID No : 300924363

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296 Class-A)
26	Sodium as Na	mg/l	85.0	IS 3025 Part 45: 1983	NA
27	Sulphate as SO4	mg/l	47.36	IS 3025 Part 24 Sec 1: 2022	400
28	Total alkalinity as CaCO3	mg/l	180.0	IS 3025 Part 23: 1986	NA
29	Total Hardness as CaCO3	mg/l	160.0	IS 3025 Part 21: 2009	300
30	Total Phosphorous as P	mg/l	0.043	IS 3025 Part 31 Sec 1: 2022	NA
31	Total Suspended Solids	mg/l	4.0	IS 3025 Part 17: 1984	NA
32	Turbidity	NTU	1.9	IS 3025 Part 10: 1984	1
33	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	1
35	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.001
36	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05
37	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	1.5
38	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.1
39	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.5
40	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Surface Water

Sample Mark : Pond near Vaniyamalli

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047813F

Report No. : HECSL/WT/102/300924

Sample ID No : 300924363

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296 - Class-A)
41	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	NA
42	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01
43	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	15

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

End of Report



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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Surface Water

Sample Mark : Pond near Vaniyamalli

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

Report No. : HECSL/WT/102/300924/N

Sample ID No : 300924363

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

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

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

End of Report




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TEST REPORT

Page : 1 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Surface Water

Sample Mark : Lake Near Sitturattam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047820F

Report No. : HECSL/WT/103/300924

Sample ID No : 300924364

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296, Class-A)
Discipline : Chemical					
1	Ammonia as NH ₃	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34 Sec 2: 2021	NA
2	Bi carbonate	mg/l	170.0	IS 3025 Part 51: 2001	N/A
3	Biological Oxygen Demand (BOD) ₅ @ 27°C For 3 days	mg/l	4.0	IS 3025 Part 44: 1993	2.2
4	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 (Curcumin Method)	N/A
5	Calcium as Ca	mg/l	48.09	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	800/10
6	Chemical Oxygen Demand (COD)	mg/l	40.0	IS 3025 Part 58: 2006	N/A
7	Chloride as Cl	mg/l	181.77	IS 3025 Part 32: 1988 (Argentometric Method)	2580
8	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	100
9	Dissolved oxygen	mg/l	5.9	IS 3025 Part 38: 1989	6.6
10	Electrical Conductivity at 25°C	µS/cm	937.0	IS 3025 Part 14: 2013	N/A
11	Fluoride as F	mg/l	0.41	APHA 23rd edition Method 4500 F-B.D: 2017	1.5.5
12	Iron as Fe	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 53: 2003	0.0.3
13	Nitrate as NO ₃	mg/l	5.61	APHA 23rd edition Method 4500 NO ₃ B: 2017	200



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TEST REPORT

Page : 2 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Surface Water

Sample Mark : Lake Near Sitturattam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047820F

Report No. : HECSL/WT/103/300924

Sample ID No : 300924364

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296, Class-A)
14	pH at 25°C	-	7.91	IS 3025 Part 11: 2022 (Electrometric Method)	8.5
15	Total dissolved solids	mg/l	525.0	IS 3025 Part 16: 1984	500
16	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B, C; 2017	0.2
17	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
18	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.05
19	Magnesium as Mg	mg/l	17.01	IS 3025 Part 46: 1994 (Volumetric Method using EDTA)	24.28
20	Percent Sodium	%	48.75	HECSG /WT/SOP/002 Issue No:01, Issue date 18.12. 2021	NA
21	Phenolic compounds as C6HSOH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43:Sec 1: 2022	0.002
22	Phosphate as PO4	mg/l	0.15	APHA 23rd edition Method 4500-P B,D: 2017	NA
23	Potassium as K	mg/l	6.0	IS 3025 Part 45: 1993	NA
24	Residual Sodium Carbonate	mg/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA
25	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit)	2.74	IS 11624: 2019	NA



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TEST REPORT

Page : 3 of 4

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Water

Sample Name : Surface Water

Sample Mark : Lake Near Sitturattam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

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

ULR : TC1231024000047820F

Report No. : HECSL/WT/103/300924

Sample ID No : 300924364

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296 - Class-A)
26	Sodium as Na	mg/l	87.0	IS 3025 Part 45: 1983	NA
27	Sulphate as SO ₄	mg/l	41.66	IS 3025 Part 24 Sec 1: 2022	400
28	Total alkalinity as CaCO ₃	mg/l	170.0	IS 3025 Part 23: 1986	NA
29	Total Hardness as CaCO ₃	mg/l	190.0	IS 3025 Part 21: 2009	300
30	Total Phosphorous as P	mg/l	0.045	IS 3025 Part 31 Sec 1: 2022	NA
31	Total Suspended Solids	mg/l	5.0	IS 3025 Part 17: 1984	NA
32	Turbidity	NTU	2.2	IS 3025 Part 10: 1984	1
33	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	1
35	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.001
36	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05
37	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	1.5
38	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.1
39	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.5
40	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001



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TEST REPORT

Page : 4 of 4

Name of the Client : M/s. SIPCOT
Address of the Client : Vaniyamallee
Group : Water
Sample Name : Surface Water
Sample Mark : Lake Near Sitturattam
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : NA
Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0
Sampling Method & Plan : IS 17614(Part-1):2021

ULR : TC12310240000478207
Report No : HECSL/WT/103/300924
Sample ID No : 300924364
Sampling Date : 30/09/2024
Received Date : 30/09/2024
Commenced Date : 30/09/2024
Completed On : 09/10/2024
Report Date : 09/10/2024
Sample quantity : 1 Litres

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296, Class-A)
41	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	NA
42	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01
43	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	15

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

End of Report




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TEST REPORT

Page : 1 of 1

Name of the Client	: M/s. SIPCOT	Report No.	: HECSL/WT/103/300924/N
Address of the Client	: Vaniyamallee	Sample ID No	: 300924364
Group	: Water	Sampling Date	: 30/09/2024
Sample Name	: Surface Water	Received Date	: 30/09/2024
Sample Mark	: Lake Near Sitturattam	Commenced Date	: 30/09/2024
Sample Reference	: NA	Completed On	: 09/10/2024
Sample Drawn By	: M/s.Hubert Enviro care Systems (P) Ltd.	Report Date	: 09/10/2024
Sample Location	: NA	Sample quantity	: 1 Litres
Environmental Condition	: Temperature (°C) : 28.0 Humidity (%) : 51.0		
Sampling Method & Plan	: IS 17614(Part-1):2021		

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

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

End of Report




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TEST REPORT

Page : 1 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Near Project Site(Vaniyamalli)

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047814F

Report No. : HECS/PE/059/300924

Sample ID No : 300924365

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

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	26.34	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	8.14	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	24.86	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture		Silt clay	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	19.4	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	40.0	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	40.6	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	7.28	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	700.0	IS 14767: 2000



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TEST REPORT

Page : 2 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Near Project Site(Vaniyamalli)

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

U.L.R : TC1231024000047814F

Report No. : HECS/PE/059/300924

Sample ID No : 300924365

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	1.12	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.90	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	1.58	IS 2720 (Part 22) Section I 1972
14	Available Potassium	mEq/100g	14.72	FAO of United Nations, Rome Chapter - III 2008
15	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No.01 Issue Date:02.07. 2020
16	Total Nitrogen as N	%	0.0695	IS 14684 Clause 4 1999
17	Exchangable Calcium as Ca	mEq/L	7.24	FAO of United Nations, Rome Chapter - III 2008
18	Exchangable Magnesium as Mg	mEq/L	6.32	FAO of United Nations, Rome Chapter - III 2008
19	Cation Exchange Capacity	mEq/100g	5.7	IS 2720 (Part 24) Clause 5 1976
20	Water Holding capacity	%	22.2	IS 14765: 2000
21	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue No.01 Issue Date:02.07. 2020
22	Phosphorous	µg/g	9.24	FAO of United Nations, Rome Chapter -

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/kg- Milligrams 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 : Vanlamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Near Project Site(Vaniyamalli)

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/059/300924/N

Sample ID No : 300924365

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024


Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Manganese	mg/kg	136.84	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	2.32	Inhouse method
3	Infiltration Rate	cm/hr	7.2	Inhouse method
4	Moisture	%	6.94	HECS-G/ENV/SSW/SOP/003 Issue No. 01 Issue Date:02.07. 2020

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

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TEST REPORT

Page : 1 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Iguvarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047815F

Report No. : HECS/PE/060/300924

Sample ID No : 300924366

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

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	24.94	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	8.12	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	28.47	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture		Clay	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	22.2	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	21.2	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	56.6	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	7.34	IS 2720 (Part -26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	165.0	IS 14767: 2000



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TEST REPORT

Page : 2 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Igavarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047815F

Report No. : HECS/PE/060/300924

Sample ID No : 300924366

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	1.22	FAO of United Nations Rome 2007
12	Organic Carbon	%	1.40	IS 2720 (Part 22) Section 1 1972
13	Organic Matter	%	2.42	IS 2720 (Part 22) Section 1 1972
14	Available Potassium	mEq/100g	9.54	FAO of United Nations, Rome Chapter - III 2008
15	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No.:01 Issue Date:02-07-2020
16	Total Nitrogen as N	%	0.0340	IS 14684 Clause 4 1999
17	Exchangable Calcium as Ca	mEq/L	10.54	FAO of United Nations, Rome Chapter - III 2008
18	Exchangable Magnesium as Mg	mEq/L	9.54	FAO of United Nations, Rome Chapter - III 2008
19	Cation Exchange Capacity	mEq/100g	5.8	IS 2720 (Part 24) Clause 5 1976
20	Water Holding capacity	%	20.2	IS 14765: 2000
21	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02-07-2020
22	Phosphorous	µg/g	12.24	FAO of United Nations, Rome Chapter -

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

% - Percentage.

End of Report



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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 : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Iguvarpalaiyam

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/060/300924/N

Sample ID No : 300924366

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024


Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Manganese	mg/kg	121.68	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	18.64	Inhouse method
3	Infiltration Rate	cm/hr	4.6	Inhouse method
4	Moisture	%	7.92	HECS-G/ENV/SSW/SOP/003 Issue No. 01 Issue Date: 02-07-2020

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

End of Report




D. Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.

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**TEST REPORT**

Page : 1 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Gummidipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047816F

Report No. : HECS/PE/061/300924

Sample ID No : 300924367

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

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	31.72	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	5.41	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	19.57	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture		Silty clay loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i) Sand	%	18.2	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii) Silt	%	52.6	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii) Clay	%	28.6	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	6.72	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	792.0	IS 14767: 2000



[Signature]
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TEST REPORT

Page : 2 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Gummidipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047816F

Report No. : HECS/PE/061/300924

Sample ID No : 300924367

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	1.24	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.96	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	1.66	IS 2720 (Part 22) Section I 1972
14	Available Potassium	mEq/100g	7.12	FAO of United Nations, Rome Chapter - III 2008
15	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No.:01 Issue Date:02-07-2020
16	Total Nitrogen as N	%	0.0462	IS 14684 Clause 4 1999
17	Exchangable Calcium as Ca	mEq/L	6.94	FAO of United Nations, Rome Chapter - III 2008
18	Exchangable Magnesium as Mg	mEq/L	6.56	FAO of United Nations, Rome Chapter - III 2008
19	Cation Exchange Capacity	mEq/100g	3.9	IS 2720 (Part 24) Clause 5 1976
20	Water Holding capacity	%	17.6	IS 14765: 2000
21	Colour	-	Black	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02-07-2020
22	Phosphorous	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter -

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

End of Report



[Signature]
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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Gummidiipundi

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/061/300924/N

Sample ID No : 300924367

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Manganese	mg/kg	130.58	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	2.92	Inhouse method
3	Infiltration Rate	cm/hr	7.4	Inhouse method
4	Moisture	%	4.12	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02-07-2020

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




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TEST REPORT

Page : 1 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Gurovarajakandigai

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047817F

Report No. : HECS/PE/062/300924

Sample ID No : 300924368

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024


Completed On : 09/10/2024

Report Date : 09/10/2024

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	34.82	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	7.15	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	31.41	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	%	25.2	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	32.4	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	42.4	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	7.38	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	169.8	IS 14767: 2000




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TEST REPORT

Page : 2 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : Guruvarakandigai
Sample Reference : NA
Sample Drawn By : M/s. Hubert Enviro care Systems (P) Ltd.
Sample Location : NA
Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0
Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047817F

Report No. : HECS/PE/062/300924

Sample ID No : 300924368

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gms/cm ³	1.24	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.55	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.94	IS 2720 (Part 22) Section I 1972
14	Available Potassium	mEq/100g	11.56	FAO of United Nations, Rome Chapter - III 2008
15	Boron as B	mg/kg	BLQ(LOQ 1.0)	HECS-G/ENV/SSW/SOP/018 Issue No.:01 Issue Date:02-07-2020
16	Total Nitrogen as N	%	0.0168	IS 14684 Clause 4 1999
17	Exchangable Calcium as Ca	mEq/L	10.54	FAO of United Nations, Rome Chapter - III 2008
18	Exchangable Magnesium as Mg	mEq/L	8.24	FAO of United Nations, Rome Chapter - III 2008
19	Cation Exchange Capacity	mEq/100g	6.7	IS 2720 (Part 24) Clause 5 1976
20	Water Holding capacity	%	18.8	IS 14765: 2000
21	Colour	-	Black	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02-07-2020
22	Phosphorous	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter -

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/kg- Milligrams 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 : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Guruvarajakandigai

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

Report No. : HECS/PE/062/300924/N

Sample ID No : 300924368

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Manganese	mg/kg	135.25	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	BLQ(LOQ 0.02)	Inhouse method
3	Infiltration Rate	cm/hr	7.8	Inhouse method
4	Moisture	%	8.02	HECS-G/ENV/SSW/SOP/003 Issue No.-01 Issue Date:03-07-2020

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

End of Report



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TEST REPORT

Page : 1 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Teruvai

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047818F

Report No. : HECS/PE/063/300924

Sample ID No : 300924369

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

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	34.18	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	8.74	HECS-G/INS/SOP/047 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	31.14	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	%	33.2	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	31.5	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	35.3	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	7.38	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	160.0	IS 14767: 2000



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TEST REPORT

Page : 2 of 3

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Teruvai

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

ULR : TC1231024000047818F

Report No. : HECS/PE/063/300924

Sample ID No : 300924369

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024

Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm ³	1.12	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.49	IS 2720 (Part 22) Section 1 1972
13	Organic Matter	%	0.86	IS 2720 (Part 22) Section 1 1972
14	Available Potassium	mEq/100g	11.24	FAO of United Nations, Rome Chapter - III 2008
15	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No. 01 Issue Date: 02-07-2020
16	Total Nitrogen as N	%	0.0095	IS 14684 Clause 4 1999
17	Exchangable Calcium as Ca	mEq/l.	13.54	FAO of United Nations, Rome Chapter - III 2008
18	Exchangable Magnesium as Mg	mEq/l.	12.54	FAO of United Nations, Rome Chapter - III 2008
19	Cation Exchange Capacity	mEq/100g	4.5	IS 2720 (Part 24) Clause 5 1976
20	Water Holding capacity	%	18.6	IS 14765: 2000
21	Colour	-	Black	HECS-G/ENV/SSW/SOP/011 Issue No. 01 Issue Date: 02-07-2020
22	Phosphorous	µg/g	5.62	FAO of United Nations, Rome Chapter -

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/kg- Milligrams 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 : Vaniyamallee

Group : Pollution & Environment

Sample Name : Soil

Sample Mark : Teruvai

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 28.0 | Humidity (%) : 51.0

Sampling Method & Plan : ICARDA:2013

Report No : HECS/PE/063/300924/N

Sample ID No : 300924369

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 09/10/2024

Report Date : 09/10/2024


Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Manganese	mg/kg	135.24	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	5.22	Inhouse method
3	Infiltration Rate	cm/hr	6.4	Inhouse method
4	Moisture	%	7.24	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02-07-2020

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

End of Report




D. Anisuya
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TEST REPORT

Page : 1 of 1

Name of the Client : M/s. SIPCOT

Address of the Client : Vaniyamallee

Group : Atmospheric Pollution

Sample Name : Ambient Noise Levels (Excluding vibration) (Env)

Sample Mark : Noise

Sample Reference : NA

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

Sample Location : NA

Environmental Condition : Temperature (°C) : 32.0 | Humidity (%) : 56.0

Sampling Method & Plan : IS 9989:1981

ULR : TC1231024000047317F

Report No. : HECS/AP/184/300924

Sample ID No : 300924359

Sampling Date : 30/09/2024

Received Date : 30/09/2024

Commenced Date : 30/09/2024

Completed On : 05/10/2024

Report Date : 05/10/2024

Sample quantity : NA

S.No	Sampling Location	Day Noise level in dB (A)	Night Noise level in dB (A)
1	Near Project Site(Vaniyamalli)	54.5	44.2
2	Gummidipundi	52.2	43.3
3	Igumvarpalaiyam	53.4	42.8
4	Guruvarajakandigai	52.8	40.9
5	Teruvai	53.6	43.6

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 Limits.

***End of
Report***

Dr. Rajkumar Samuel
Director Technical
Authorized Signatory





CHENNAI METROPOLITAN WATER SUPPLY AND SEWERAGE BOARD

SUPERINTENDING ENGINEER(WT&T)

2798/2023

Lr.No.CMWSSB/WT&T/RO-II/SIPCOT-MANALLUR

Date: 03.02.2023

To,
The Superintending Engineer,
SIPCOT,
No.19 - A, RukmaniLakshmipathy Road,
Post box no. 7223,
Egmore,
Chennai - 600008.

CT-1WC
BE/L



Sir,

Sub: CMWSS Board - C.E.(O&M) II - S.E.(WT&T) - Providing 10MLD of raw water supply from SIPCOT Industrial Park at Thervoykandigai to proposed Industrial park at Manallur - Status of work - Intimation - Reg

Ref: 1)Lr.No.CMWSSB/WT&T/RO-II/SIPCOT-MANALLUR dated 19.09.2022
2)Lr.No. CD/Water Supply/MNL/2022 dated 10.01.2023

6/2/23
SE

TA (M)
L
MNL

With reference to 1st cited above, CMWSSB has acknowledged the online transfer of the deposit amount of Rs.38.26 crores from SIPCOT for the work of "Providing 10MLD of raw water supply from SIPCOT Industrial Park at Thervoykandigai to proposed Industrial park at Manallur". The SIPCOT requested CMWSSB to intimate the work schedule and status for the above work vide reference 2nd cited.

In this connection, it is informed that the tenders were invited for the work of "Providing 10MLD of raw water supply from SIPCOT Industrial Park at Thervoykandigai to proposed Industrial park at Manallur" with tender due on 01.02.2023. The evaluation of tender are under progress and after finalization of tender the work order will be issued for execution of the above work. Later, on signing the agreement by the successful bidder, the work program can be formulated and subsequently SIPCOT would be intimated of the work program.

03.02.23

Superintending Engineer (WT&T)

4643



CHENNAI METROPOLITAN WATER SUPPLY AND SEWERAGE BOARD

MANAGING DIRECTOR

Lr.No.CMWSSB/CE(O&M)II/STP(N)/45TTRO - KOD/039/SIPCOT-MANALLUR, Date:25.03.2023

To,

The Managing Director,
SIPCOT,
No.19 - A, RukmaniLakshmiPathy Road,
Egmore,
Chennai - 600008.

11379/2023



Sir,

Sub: CMWSSB - C.E(O&M-II) - S.E(W.W.T&R) - E.E STP (North) - 45 MLD capacity Tertiary Treatment Reverse Osmosis (TTRO) plant at Kodungaiyur - Supply of TTRO water to proposed SIPCOT industrial park at Manallur, Gummudipoondi & Theruvoykandigai - Outline project cost for TTRO plant & pipeline arrived - Request made by Managing Director SIPCOT to consider conveyance system alone-Outline project cost arrived-Estimate amount to be deposited - Requested - Reg.

Ref: 1.Minutes of the meeting conducted by Managing Director, SIPCOT with CMWSSB officials on 10.10.2022
2.SIPCOT Lr.No.CD/Water Supply/MNL/2022, Dated 02.12.2022

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During the joint review meeting on reuse of recycled water for industrial purpose held by Additional Chief Secretary to Government for IIP&CD & Additional Chief Secretary to Government for MA&WS dept on 22.11.2022 CMWSSB was instructed to prepare and send the DPR for supplying 22.70 MLD TTRO water from the existing 45MLD TTRO plant to enable SIPCOT for making payment to takeover this work on a deposit work basis.

In this connection, CMWSSB has prepared the outline proposal cost taking into consideration the following excluding the O&M of the pipelines and pumping stations.

- Conducting Pre- design survey, Soil investigations, Detailed Design and estimate, etc,
- Supplying, Laying, Testing and conveying main of size 700mm dia. MS Transmission main for conveying TTRO water from Kodungaiyur TTRO plant upto proposed SIPCOT industrial park at Manallur for an approximate length of 62.5km and 300mm dia DI pipe from proposed SIPCOT industrial park at Manallur to TheruvoyKandigai industrial complex for a length of 17km.
- Construction of Storage Tank of 2 Nos. of 5 ML Capacity, and pump house of required size including electrical accessories and pumping machineries each at TTRO plant and Manallur Industrial Complexes including foundation, earthwork excavation, shuttering, reinforcement using Epoxy coated Steel / CRS, concrete of M30 and its allied works.

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- iv. Providing Suction and delivery arrangements including interconnecting with existing sumps with proposed sump at Kodungaiyur TTRO plant and also laying pipeline to the existing sump at Manallur.
- v. Construction of Pipe Carrying Bridge at 8 locations.
- vi. Railway crossing using Trenchless Method at 3 locations.
- vii. Laying transmission main using Trenchless Technology to cross main roads as instructed by the service department at 10 locations.
- viii. Supply, transporting, erection, testing and commissioning of pump sets and its allied civil, mechanical, Electrical and Instrumentation Works.
- ix. Cathodic Protection for 700mm dia MS Transmission main of 65.2 km length from treated water storage sump at TTRO plant to proposed sump of Manallur industrial complexes.
- x. Final Commissioning with detail report preparation, As-built Drawing and submission.

The estimate has been worked out for an amount of Rs.418 Crores for the work of "Supplying, Laying, Jointing and Testing of 700 mm dia MS pipes & 300 mm dia DI Pipes for Conveying TTRO Water from TTRO Plant at Kodungaiyur to Gummidipoondi, Manallur and Thervoykandigai SIPCOT Industrial Complex and other allied Civil, Mechanical, Electrical and Instrumentation works".

The estimate has been prepared based on the CMWSSB SoR 2022-2023, TWAD Board SoR 2022-2023, PWD SoR2022-2023 and approved settled rates for ongoing works in CMWSSB.

For any variations in cost during execution of the work due to change in length of transmission mains, roadcut restoration charges, EB deposit charges, differences over the department amount and contract amount, and escalation in rates over period of years also increase in the estimate cost due to revision based on the SOR of the execution year and any other items rate not contemplated in the estimate the same shall be borne by SIPCOT and CMWSSB reserves the right to claim the amount as and when it is required. The charges towards supply of TTRO water to the hubs will be decided on completion of the works based on the available tariff.

Further, SIPCOT shall be responsible for obtaining permissions from other statutory departments viz. Southern Railways, State and National Highways, District & Village roads, PWD, PCB, etc, and also shall be responsible for allotment of required lands at free of cost to CMWSSB for construction of sump, pump house etc. SIPCOT shall also be responsible for providing electric power supply at the proposed intermediate storage sump at Manallur.

The Detailed Project Report prepared is putup for reference. SIPCOT is requested to provide its concurrence for making deposit of Rs.418.00 Crore to enable CMWSSB to take necessary further action.

A. Palani
25/3/2023
MANAGING DIRECTOR

+

SIPCOT – Vaniyamalli
MONITORING PHOTOGRAPHS

AMBIENT AIR QUALITY MONITORING PHOTOS:

NEAR PROJECT SITE(VANIYAMALLI)



IGUVARPALAIYAM



GUMMIDIPUNDI



GURUVARAJAKANDIGAI



TERUVAI



GROUND WATER SAMPLING PHOTOS

NEAR PROJECT SITE	IGUVARPALAIYAM
 <p data-bbox="526 1843 678 1877">30-09-2024</p>	 <p data-bbox="1162 1843 1315 1877">30-09-2024</p>

GUMMIDIPUNDI	
	

NOISE SAMPLING PHOTOGRAPH

NEAR PROJECT SITE	IGUVARPALAIYAM
	
GUMMIDIPUNDI	GURUVARAJAKANDIGAI
	

TERUVAI


SOIL MONTORING PHOTOGRAPH

NEAR PROJECT SITE	IGUVARPALAIYAM
	
GUMMIDIPUNDI	GURUVARAJAKANDIGAI
	

TERUVAI



30-09-2024

SURFACE WATER SAMPLING PHOTOGRAPH

POND NEAR VANIYAMALLI



30-09-2024

LAKE NEAR SITTURNATTAM



30-09-2024

**MANELLORE**

Lr.no. PO/SIP/MNL/EC/2024

Date: 13.05.2024

To,
The Block Development Officer,
Block Development Office,
Gummidipoondi Taluk,

Sir,

Sub: SIPCOT – Proposed Development of SIPCOT Industrial Park with Industrial Housing Facility at Soorapoondi and Vaniamallee Villages, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu – Submission of Copy of Environmental Clearance (EC) issued by SEIAA – Reg.

Ref: SEIAA EC Identification No. EC24B3813TN5100474N dated: 22.04.2024

With reference to the above, it is to inform that, SIPCOT has obtained Environmental Clearance (EC) from the State Environment Impact Assessment Authority (SEIAA) for the Proposed Development of SIPCOT Industrial Park with Industrial Housing Facility over an extent of 215.834 Hectares (533.11 Acres) at Soorapoondi and Vaniamallee Villages, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu.

In accordance with the conditions specified in the EC, it is required that the project proponent must submit the copy of the environmental clearance to the Heads of local bodies, Panchayats, and Municipal Bodies. Subsequently, the above specified bodies are obligated to display the same for a period of 30 days from the date of receipt.

In this regard, we hereby enclose the copy of the environmental clearance for your kind perusal.

Yours faithfully,

PROJECT OFFICER,
SIPCOT / MANELLORE

Encl: As above.

State Industries Promotion Corporation of Tamil Nadu Limited

(A Government of Tamil Nadu Undertaking)

CIN : U74999TN1971SGC005967



This Office : MDR, Manellore Village, Madharpakkam Post,



MANELLORE

Lr.no. PO/SIP/MNL/EC/2024

Date:13.05.2024

To,
The President,
Vaniyamallee Village,
Gummidipoondi Taluk.

Sir,

Sub: SIPCOT – Proposed Development of SIPCOT Industrial Park with Industrial Housing Facility at Soorapoondi and Vaniyamallee Villages, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu – Submission of Copy of Environmental Clearance (EC) issued by SEIAA – Reg.

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Encl: As above.

[Signature]
சென்னை மாநகராட்சி
புதுச்சேரி மாநகராட்சி
கும்மிடிப்பாண்டி அலுவலகம்

Yours faithfully,
[Signature]
13/5/24
PROJECT OFFICER,
SIPCOT / MANELLORE

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

CIN : U74999TN1971SGC005967

Regd. Office : 19-A, Rukmani Lakshmiipathy Road,

This. Office : MDR, Manellore Village, Madharpakkam Post,



MANELLORE

Lr.no. PO/SIP/MNL/EC/2024

Date:13.05.2024

To,
The President,
Soorapoondi Village,
Gummidipoondi Taluk.

Sir,

Sub: SIPCOT - Proposed Development of SIPCOT Industrial Park with Industrial Housing Facility at Soorapoondi and Vaniamallee Villages, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu - Submission of Copy of Environmental Clearance (EC) issued by SEIAA - Reg.

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In this regard, we hereby enclose the copy of the environmental clearance for your kind perusal.

M. K. Vaniya
செல்வாணி
தொழில்நுட்ப மேலாண்மை
அதிகாரியின் செயலகம்

Yours faithfully,
S. J. 13/5/24.
PROJECT OFFICER,
SIPCOT / MANELLORE

Encl: As above.

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

CIN : U74999TN1971SGC005967

Regd. Office : 19-A, Rukmani Lakshminpathy Road,

This Office : MDR, Manellore Village, Madharpakkam Post,

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.