



#### EC/Vaniamallee/HYC/June/2025

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

Sir/Madam,

Chennai - 600 035.

Sub: SIPCOT Industrial Park at Vaniamallee – Submission of Half Yearly Compliance Report for June 2025 (i.e., for the period of October 2024 to March 2025) - Reg.

Ref: EC vide Identification No. EC24B3813TN5100474N, File No. 9263 dated:22.04.2024

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We hereby submit the Half Yearly Compliance Report for the Development of Industrial Park at Vaniamallee and Soorapoondi Villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu for June 2025 (i.e., for the period of October 2024 to March 2025) along with the supporting documents for your perusal.

Thanking you

CONSULTANT

Yours faithfully,

(PROJECT MANAGEMENT)

3015m

Date: 30.05.2025

Encl: As above.

Copy to:

The Director,
 The Ministry of Environment and Forest & Climate Change,
 Integrated Regional Office,
 1st Floor, Additional Office Block for GPOA,
 Shastri Bhawan, Haddows Road,
 Nungambakkam, Chennai – 600 006.

 The Director, CPCB Zonal Office, 77-A, South Avenue Road, Ambattur Industrial Estate, Ambattur Taluk, Thiruvallur District, Chennai - 600 058.

P.T.O.

# State Industries Promotion Corporation of Tamil Nadu Limited

(A Government of Tamil Nadu Undertaking)
CIN I U74999TN1971SGC005967





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

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

CIN I U74999TN1971SGC005967

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

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

#### HALF YEARLY ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

#### For the Period of October 2024- March 2025

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)

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 Lakshmipathy Road, Egmore, Chennai-600008.

Prepared by



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

May 2025

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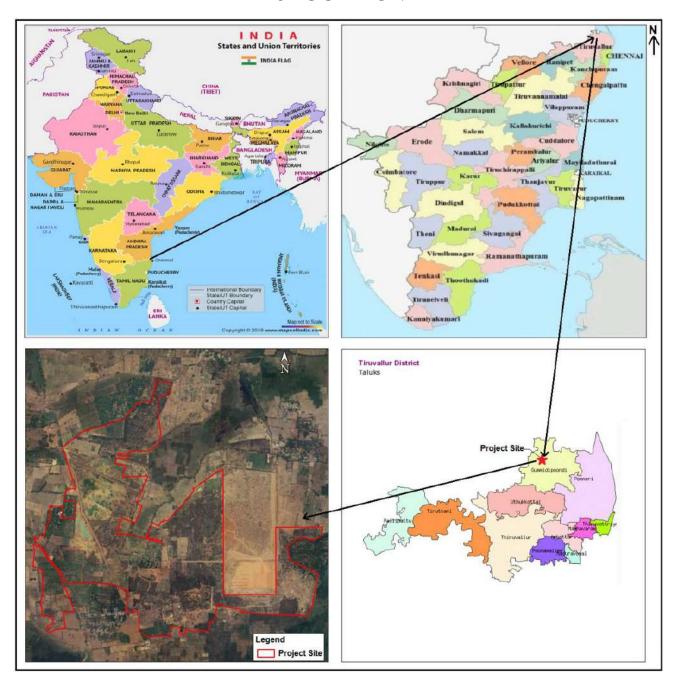
S.No	List of Contents
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Annexure 11	EEP & DMP Report

## **1.0 PROJECT DETAILS**

	Develo	pment of Industri	al Par	k with Industrial Housing
Name of the	Facility at Soorapoondi and Vaniamallee villages,			
Project	Gumm	idipoondi Taluk,	Γhiruva	ıllur District, Tamil Nadu"
	over an	extent of 215.834	Ha (533	3.11 Acres)
NI GAI				
Name of the		State Industries Pr		on Corporation of
Proponent	Tallill	Nadu Limited (SIPC	.01)	
Location	Soorap	oondi and Vania	ımallee	villages Gummidipoondi
Location	Taluk, Thiruvallur District and Tamil Nadu state.			
	(i)	EC Identification	:	EC24B3813TN5100474N
		No.		
	(ii)	File No.	:	9263
EC No.	(iii)	Clearance Type	:	Fresh EC
	(iv)	Category	:	B1
	(v)	Project/Activity	:	8(b) Townships/ Area
		Included		Development Projects /
		Schedule No.		Rehabilitation Centres
		Enclosed as <b>Ann</b>	exure 1	<u> </u> 
Area Details	215.834 Ha			
Alea Details	213.03+114			
	I			

Water Requirement	4789 KLD Fresh water: 874 KLD, TTRO water: 2133 KLD and Recycled water: 1782 KLD.
	Water: Fresh &TTRO water from CMWSSB. Letter enclosed as Annexure 5
<b>Project Cost</b>	INR. 495.52 crores

### 2.0 LOCATION MAP



#### **3.0 SITE PHOTOGRAPHS**





## 4.0 SIX MONTHLY ENVIRONMENTAL CLEARANCE COMPLIANCE STATEMENT (October 2024 – March 2025)

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

#### 1. SEAC Conditions - Site Specific

S.NO	CONDITIONS	STATUS OF COMPLIANCE
1.1	<u> </u>	<u> </u>
1.	The construction shall comply with Green Building norms and shall get minimum IGBC	Condition noted.
	Gold rating.	
3.	PP shall submit the commitment letter from the local body for supply of fresh water.	Condition will be complied. Water Supply letter from CMWSSB is enclosed as Annexure-5.
4	The project proponent shall continuously	Condition noted.
	operate and maintain the Sewage treatment plant & Grey Water Treatment Plant to	SIPCOT will provide STP only for treating sewage from Industrial Housing
	achieve the standards prescribed by the TNPCB/CPCB.	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 will be complied.
6	STP shall be installed on 10-year BOOT	Condition noted.
	basis, so that the construction and	SIPCOT will provide STP only for
	maintenance are combined in one single	treating sewage from Industrial Housing
	responsibility.	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	Condition will be complied.

	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	Condition will be complied
0.	possibility and getting the cement in a closed	Condition will be complied.
	container rather through the plastic bag to	
	prevent dust emissions at the time of	
0	loading/unloading.	
9.	Project proponent should ensure that there	Condition will be complied.
	will be no use of "Single use of Plastic"	
10	(SUP).	
10.	The proponent should provide the sufficient	Condition Noted.
	electric vehicle charging points as per the	
	requirements at ground level and allocate the	
	safe and suitable place in the premises for the	
1.1	same.	
11.	The project proponent should develop green	Condition will be complied.
	belt in the township as per the plan submitted	
	and also follow the guidelines of	
	CPCB/Development authority for green belt	
12	as per the norms.	
12.	Project proponent should invest the CSR	Condition Noted.
	amount as per the proposal and submit the	•

	compliance report regularly to the concerned	
	authority/Directorate of environment.	
13.	Proponent should submit the certified	Condition is being complied.
	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	Condition Noted.
	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	Condition noted.
	measuring device for monitoring the various	All the member units will comply with.
	sources of water supply namely fresh water,	
	treated waste water and harvested rain water.	
16	The proponent should provide the MoU with	Condition noted.
	STPs' owner/concerned department for	
	getting the STPs treated water for construction	
	use.	

#### 2. SEIAA Specific Conditions:

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

	& natural drainage	
4.	The proponent shall take necessary action to	Condition noted.
	reduce anthropogenic GHGs such as CO2,	
	CH4, nitrous oxide, etc., and temperature rise	
	resulting from human activities.	

#### 3. SEIAA Standard Conditions:

3.1		
Clima	nte Change	
1.	The proponent shall adopt strategies to	Condition noted. It is an infrastructure
	decarbonize the building.	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	Condition noted. It is an infrastructure
	reduce emissions during operation	development project that includes the
	(operational phase and building materials).	construction of roads, storm water drainage
		systems, street lighting, water supply
		systems, development of green spaces, etc.
3.	The proponent shall adopt strategies to	Condition noted. It is an infrastructure
	reduce temperature including the Building	development project that includes the
	Facade.	construction of roads, storm water drainage
		systems, street lighting, water supply
		systems, development of green spaces, etc.
4.	The proponent shall adopt methodology to	Condition noted. It is an infrastructure
	control thermal environment and other	development project that includes the
	shocks in the building.	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	Condition noted. It is an infrastructure
	reduce carbon footprints and also develop	development project that includes the
	strategies for climate proofing and climate	construction of roads, storm water drainage
	mitigation.	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	development project that includes the
	trapping heat to become local urban heat	construction of roads, storm water drainage
	islands.	systems, street lighting, water supply
		systems, development of green spaces, etc.
7.	The proponent shall ensure that the	Condition noted. It is an infrastructure
	building does not create artificial wind	development project that includes the
	tunnels creating cold water and	construction of roads, storm water drainage
	uncomfortable living conditions resulting	systems, street lighting, water supply
	in health issues.	systems, development of green spaces, etc.
8.	The activities should in no way cause	Condition noted.
	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	Condition noted. It is an infrastructure
	buildings should not cause any damage to	development project that includes the
	water environment, air quality and should	construction of roads, storm water drainage
	be carbon neutral building	systems, street lighting, water supply
		systems, development of green spaces, etc.
Healt	h	
10.	The proponent shall adopt strategies to	Condition noted.
	maintain the health of the inhabitants.	
Energ	У	
11.	The proponent shall adopt strategies to	Condition noted.
	reduce electricity demand and	All the member units will comply with
	consumption.	
12.	The proponent shall provide provisions for	Condition noted .
	automated energy efficiency.	
13.	The proponent shall provide provisions for	Condition noted.
	controlled ventilation and lighting	All member units will comply with

	systems.	
14.	The proponent shall provide solar panels	Condition noted.
	and contribute to the grid from the solar	All member units will comply with
	panel as proposed.	
15.	All the construction of Buildings shall be	Condition noted.
	energy efficient and conform to the green	All the member units will be instructed to
	building norms. The PP shall ensure that	follow all applicable rules and guidelines.
	carbon neutral building.	
16.	The proponent shall provide adequate	Condition noted.
	capacity of DG set (standby) for the	All the member units will be mandated to
	proposed STP so as to ensure continuous	comply with
	and efficient operation. Regulatory	
	Frameworks	
17.	The proponent shall adopt methodologies	<b>Condition noted</b> . All the member units will
	to effectively implement the Solid Waste	be instructed to follow all applicable rules
	Management Rules, 2016, E-Waste	and guidelines.
	(Management) Rules, 2016, Plastic Waste	
	Management Rules, 2016 as amended,	
	Bio-Medical Waste Management Rules,	
	2016 as amended, Hazardous and Other	
	Wastes (Management and Transboundary	
	Movement) Rules, 2016 as amended,	
	Construction and Demolition Waste	
	Management Rules, 2016, & Batteries	
	(Management and Handling) Rules, 2001.	
18.	The project proponent shall ensure to	Condition noted. All the member units will
	provide adequate elevated closed area	be instructed to follow all applicable rules
	earmarked for collection, segregation,	and guidelines.
	storage & disposal of wastes generated	
	within the premises as per provisions of	
	Solid Waste Management Rules, 2016, E-	
	Waste (Management) Rules, 2016, Plastic	
	ı	1

	Waste Management Rules, 2016 as	
	amended, Bio-Medical Waste	
	Management Rules, 2016 as amended,	
	Hazardous and Other Wastes	
	(Management and Transboundary	
	Movement) Rules, 2016 as amended,	
	Construction and Demolition Waste	
	Management Rules, 2016, & Batteries	
	(Management and Handling) Rules, 2001.	
19.	The proponent shall provide elevator as	Not applicable.
	per rules CMDA/DTCP. Database	It is an infrastructure development project that
	maintenance & audits	includes the construction of roads, storm water
		drainage systems, street lighting, water supply
		systems, development of green spaces, etc.
Datab	pase maintenance & audits	
20.	The database record of environmental	Condition noted.
	conditions of all the events from pre-	
	construction, construction and post-	
	construction should be maintained in	
	digitized format.	
21.	The proponent should maintain	Condition noted.
	environmental audits to measure and	
	mitigate environmental concerns.	
Biodiv	versity	
22.	There should not be any impact due to the	Condition noted.
	modification of the habitat on critically	
	endangered species, biodiversity, etc,	
23.	The proponent shall ensure that the	Condition noted.
	proposed activities in no way result in the	All the member units will comply with
	spread of invasive species.	
24.	The proponent shall adopt sustainability	Condition noted.
	criteria to protect the micro environment	All the member units will comply with

	from wind turbulences and change in	
	aerodynamics since high rise buildings	
	may stagnate air movements.	
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-	Condition Noted.
	friendly pest control strategies by using	All the member units will comply with
	non chemical measures so as to control the	
	pest population thereby not losing	
	beneficial organisms.	
27.	The proponent shall adopt strategies to	Condition noted.
27.	prevent bird hits.	Condition noted.
~ •		
Safety	measures	
28.	The proponent should develop an	Condition noted.
	emergency response plan in addition to the	Emergency Response Plan and Disaster
	disaster management plan.	Management Plan is enclosed as annexure-
		11.
29.	The proponent shall develop detailed	Condition will be complied.
	evacuation plan for disabled people and	All the member units will have own
	safety evacuation plan in emergencies.	Emergency evacuation plan
30.	All bio-safety standards, hygienic	Condition noted.
	standards and safety norms of working	All the member units will be Mandated to
	staff and patients to be strictly followed as	follow applicable rules and guidelines
	stipulated in EIA/EMP.	
31.	The disaster management and disaster	Condition noted. All the member units will
	mitigation standards to be seriously	be instructed to follow applicable rules and
	adhered to avoid any calamities.	guidelines.
32.	The proponent shall provide the	Condition noted.
54.	* *	All the member units will be mandated to
	emergency exit in the buildings.	
		follow applicable rules and guidelines
33.	The proponent shall adhere to the	Condition noted.

	provision and norms regard to fire safety	
	prescribed by competent authority	
Water	r/Sewage	
34.	The proponent shall ensure that no treated	Condition will be complied.
	or untreated sewage shall be let outside the	All the member units will be mandated to
	project site & shall find access to nearby	have STP/ETP for treatment of
	water-bodies under any circumstances	sewage/effluent and to reuse the treated water
	other than the permitted mode of disposal.	within their premises
35.	The proponent shall provide STP of	Condition will be complied.
	adequate capacity as committed and shall	All the member industries will be mandated
	continuously & efficiently operate STP so	to have their own STP for treatment of
	as to satisfy the treated sewage discharge	wastewater and to reuse the treated water as
	standards prescribed by the TNPCB time	per the norms.
	to time.	
36.	The proponent shall periodically test the	Condition noted.
	treated sewage the through TNPCB lab	All the member units will be mandated to
	/NABL accredited laboratory and submit	have STP/ETP for treatment of
	report to the TNPCB.	sewage/effluent and to reuse the treated water
		within their premises
37.	The proponent shall periodically test the	Condition noted.
	water sample for the general water quality	Water quality monitoring report is enclosed
	core parameters including fecal coliform	as <b>annexure 4.</b>
	within the proposed project site through	
	TNPCB lab /NABL accredited laboratory	
	and submit report to the concerned	
	authorities.	
38.	The proponent shall ensure that provision	Condition noted.
	should be given for proper utilization of	All the member units will be mandated to
	recycled water.	have STP/ETP for treatment of
		sewage/effluent and to reuse the treated water
		within their premises
39.	The project proponent shall adhere to	Condition will be complied.
	storm water management plan as	

	committed.	
Parki	ng	
40.	The project proponent shall adhere to	Condition will be complied.
	provide adequate parking space for visitors	
	of all inmates including clean traffic plan	
	as committed.	
Solid	waste Management	
41.	The proponent shall ensure that no form of	Condition noted.
	municipal solid waste shall be disposed	All the member units will be mandated to
	outside the proposed project site at any	comply Solid waste management Rules 2016
	time.	
42.	The proponent should strictly comply	Condition noted.
	with, Tamil Nadu Government order	We SIPCOT mandated the member
	regarding ban on one time use and	industries that the single use plastics is
	throwaway plastics irrespective of	banned within the project premises.
	thickness with effect from 01.01.2019	
	under Environment (Protection) Act, 1986.	
EMP		
43.	The proponent shall ensure that the	Condition noted.
	EIA/EMP and disaster management plan	
	should be adhered strictly.	
44.	The proponent shall ensure that all	Condition noted.
	activities of EMP shall be completed	
	before obtaining CTO from TNPCB.	
45.	The proponent shall provide and ensure	Condition Noted.
	the green belt plan is implemented as	
	indicated in EMP. Also, the proponent	
	shall explore possibilities to provide	
	sufficient grass lawns.	
Other	's	
46.	As per the 'Polluter Pay Principle', the	Condition noted.
	proponent will be held responsible for any	
	environmental damage caused due to the	

	proposed activity including withdrawal of	
	EC and stoppage of work.	
47.	The project proponent shall adhere to	Condition noted.
	height of the buildings as committed.	

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

1. Statut	1. Statutory Compliance		
S. No	EC CONDITIONS	STATUS OF COMPLIANCE	
1.1	The project proponent shall obtain all	Condition noted.	
	necessary clearance/ permission from all	Construction shall be done in accordance with	
	relevant agencies including town	the layout approval obtained	
	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	Condition noted. All the member units will be	
	shall be obtained for structural safety of	mandated to follow applicable rules and	
	buildings due to earthquakes, adequacy	guidelines	
	of firefighting equipment etc. as per		
	National Building Code including		
	protection measures from lightening etc.		
1.3	The project proponent shall obtain forest	Not applicable.	
	clearance under the provisions of Forest	The proposed project does not involve diversion	
	(Conservation) Act, 1980, in case of the	of forest land.	
	diversion of forest land for non-forest		
	purpose involved in the project.		
1.4	The project proponent shall obtain	Condition Complied.	
	clearance from the National Board for	NBWL recommended for the project.	
	Wildlife, if applicable.		
1.5	The project proponent shall obtain	Condition will be complied.	
	Consent to Establish / Operate under the	All the member units will be instructed to	
	provisions of Air (Prevention & Control	obtain all necessary statutory clearances and	

	of Pollution) Act, 1981 and the Water	approvals Consent to Establish application
	(Prevention & Control of Pollution) Act,	Copy is enclosed as <b>Annexure 3.</b>
	1974 from the concerned State Pollution	
	Control Board/ Committee.	
1.6	A certificate of adequacy of available	Condition will be complied.
	power from the agency supplying power	
	to the project along with the load allowed	
	for the project should be obtained.	
1.7	All other statutory clearances such as the	Condition noted.
	approvals for storage of diesel from	All the member units will be mandated to
	Chief Controller of Explosives, Fire	follow applicable rules and guidelines.
	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	Condition noted.
	Management Rules, 2016, e-Waste	All the member units will be mandated to
	(Management) Rules, 2016, and the	follow applicable rules and guidelines.
	Plastics Waste Management Rules, 2016,	
	shall be followed.	
1.9	The project proponent shall follow the	Condition noted.
	ECBC/ECBC-R prescribed by Bureau of	All the member units will be mandated to follow
	Energy Efficiency, Ministry of Power	applicable rules and guidelines.
	strictly.	
2. Air Q	uality Monitoring And Preservation	
2.1	Notification GSR 94(E) dated 25.01.2018	Condition noted.
	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	Individual industries will be instructed to

	and implemented to contain the current	comply with their statutory approvals /
	exceedance in ambient air quality at the	clearances. Ambient Air Monitoring Reports
	site.	are enclosed as <b>Annexure - 4</b>
2.3	The project proponent shall install	Individual industries will be instructed to
	system to carryout Ambient Air Quality	comply with their statutory approvals /
	monitoring for common/criterion	clearances. Ambient Air Monitoring Reports
	parameters relevant to the main	are enclosed as Annexure - 4.
	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	Condition noted.
	source of backup power should be of	All the member units will be mandated to
	enclosed type and conform to rules made	follow applicable rules and guidelines.
	under the Environment (Protection) Act,	Total approach tures and guidenness
	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	Condition noted.
	barricaded before the construction	All the member units will comply with
	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	
	materials profit to eausing dust pollution	

	at the site as well as taking out debris	
	from the site.	
2.6	Sand, murram, loose soil, cement, stored	Condition noted.
	on site shall be covered adequately so as	All the member units will comply with
	to prevent dust pollution.	
2.7	Wet jet shall be provided for grinding	Condition noted.
	and stone cutting.	All the member units will comply with
2.8	Unpaved surfaces and loose soil shall be	Condition noted
	adequately sprinkled with water to	
	suppress dust.	
2.9	All construction and demolition debris	Condition noted.
	shall be stored at the site (and not	All the member units will be mandated to
	dumped on the roads or open spaces	follow applicable rules and guidelines.
	outside) before they are properly	
	disposed. All demolition and	
	construction waste shall be managed as	
	per the provisions of the Construction	
	and Demolition Waste Management	
	Rules 2016.	
2.10	The diesel generator sets to be used	Condition will be complied.
	during construction phase shall be low	All the member industries will have their own
	sulphur diesel type and shall conform to	power backup.
	Environmental (Protection) prescribed	
	for air and noise emission standards.	
2.11	The gaseous emissions from DG set shall	Condition noted.
	be dispersed through adequate stack	All the member units will provide adequate
	height as per CPCB standards. Acoustic	stack height and acoustic enclosures for DG set.
	enclosure shall be provided to the DG	Noise Monitoring Reports are enclosed as
	sets to mitigate the noise pollution. Low	Annexure -4.
	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	Condition noted.
	provisions as per National Building Code	All the member units will comply with
	of India.	
3. Wate	er Quality Monitoring And Preservation	
3.1	The natural drain system should be	Condition noted.
	maintained for ensuring unrestricted flow	All the member units will comply with
	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	Condition noted
	natural topography as much as possible.	All the member units will comply with
	Minimum cutting and filling should be	
	done.	
3.3	Total fresh water use shall not exceed the	Condition will be complied.
	proposed requirement as provided in the	All the member units will comply with
	project details.	
3.4	The quantity of fresh water usage, water	Condition noted
	recycling and rainwater harvesting shall	At present, no construction activity has
	be measured and recorded to monitor the	been initiated at the project site.
	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	Condition noted.
	local body supplying water, specifying	
	the total annual water availability with	
	the local authority, the quantity of water	
	1	I .

	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	Condition noted.
	required by the local building bye-laws	All the member units will be instructed to
	shall be pervious. Use of Grass pavers,	follow applicable rules and guidelines.
	paver blocks with at least 50% opening,	
	landscape etc. would be considered as	
	pervious surface.	
3.7	Installation of dual pipe plumbing for	Condition noted.
	supplying fresh water for drinking,	All the member industries will comply with
	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.	Condition noted.
	low flow flushing systems; use of low	All the member industries will comply with
	flow faucets tap aerators etc) for water	
	conservation shall be incorporated in the	
	building plan.	
3.9	Separation of grey and black water	Condition noted.
	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	Condition noted.
	should be reduced by use of pre-mixed	All the member industries will comply with
	concrete, curing agents and other best	
	practices referred.	
3.11	The local bye-law provisions on rain	Condition noted.
	water harvesting should be followed. If	All the member units will be instructed to

	local bye-law provision is not available,	follow applicable rules and guidelines.
	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	Condition noted.
	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	Condition noted
	aquifer.	
3.14	No ground water shall be used during	Condition noted.
	construction phase of the project.	
3.15	Sewage shall be treated in the STP with	Condition will be complied.
	tertiary treatment. The treated effluent	SIPCOT will provide STP only for treating
	from STP shall be recycled/re-used for	sewage from Industrial Housing and all the
	flushing, AC make up water and	member industries will be mandated to provide
	gardening. As proposed, no treated water	STP to reuse the treated sewage for green belt
	shall be disposed in to municipal drain.	development.
3.16	No sewage or untreated effluent water	Condition noted.
	would be discharged through storm water	All member units will comply with
	drains.	
3.17	Onsite sewage treatment of capacity of	Condition will be complied.
	treating 100% waste water to be	SIPCOT will provide STP only for treating
	installed. The installation of the Sewage	sewage from Industrial Housing and all the

	Treatment Plant (STP) shall be certified	member industries will be mandated to provide
	by an independent expert and a report in	STP to reuse the treated sewage for green belt
	this regard shall be submitted to the	development.
	Ministry before the project is	development.
	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	Condition noted.
	treated sewage shall be conducted.	All member units will comply with.
	Necessary measures should be made to	
	mitigate the odour problem from STP.	
3.19	Sludge from the onsite sewage treatment,	Condition noted.
	including septic tanks, shall be collected,	All the member units will be instructed to
	conveyed and disposed as per the	follow applicable rules and guidelines.
	Ministry of Urban Development, Central	
	Public Health and Environmental	
	Engineering Organization (CPHEEO)	
	Manual on Sewerage and Sewage	
	Treatment Systems, 2013.	
4. Noise	<b>Monitoring And Prevention</b>	
4.1	Ambient noise levels shall conform to	Condition Noted.
	residential area/commercial	Ambient Noise quality monitoring report is
	area/industrial area/silence zone both	enclosed as annexure 4
	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	
<u> </u>	l .	

to	hase. Adequate measures shall be made or reduce ambient air and noise level turing construction phase, so as to	
	onform to the stipulated standards by CPCB / SPCB.	
4.2 N	Noise level survey shall be carried as per	Condition is being complied.
th	ne prescribed guidelines and report in	Noise level survey is carried as per the
th	his regard shall be submitted to Regional	prescribed guidelines and report in this
0	Officer of the Ministry as a part of six-	regard are submitted to Regional Officer of
m	nonthly compliance report.	the Ministry as a part of six-monthly
		compliance report.
		Noise quality monitoring report is enclosed
		as Annexure 4
	Acoustic enclosures for DG sets, noise arriers for ground-run bays, ear plugs	Condition noted. All the member units will be instructed to
	or operating personnel shall be	follow applicable rules and guidelines.
ir	mplemented as mitigation measures for	
ne	oise impact due to ground sources.	
5. Energy C	Conservation Measures	
C B en	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be insured. Buildings in the States which ave notified their own ECBC, shall comply with the State ECBC.	Condition noted.
	Outdoor and common area lighting shall e LED.	Condition will be complied.
5.3 C	Concept of passive solar design that	Condition will be complied.
m	ninimize energy consumption in	All the member units will be instructed to
b	uildings by using design elements, such	follow applicable rules and guidelines.
as	, , ,	
	fficient building envelope, appropriate enestration, 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	Condition noted.
	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	
6.1	A certificate from the competent	Condition noted.
	authority handling municipal solid	All the member units will be instructed to
	wastes, indicating the existing civic	follow applicable rules and guidelines.
	capacities of handling and their adequacy	Tono w appreadore rares and gardennes.
	to cater to the M.S.W. generated from	
	project shall be obtained.	
6.2	Disposal of muck during construction	Condition noted.
	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	Condition noted.
	provided in each unit and at the ground	All the member units will be instructed to
	level for facilitating segregation of waste.	follow applicable rules and guidelines.
	Solid waste shall be segregated into wet	
	garbage and inert materials.	
6.4	Organic waste compost/Vermiculture	Condition noted.
	pit/Organic Waste Converter within the	All the member units will be instructed to
	premises with a minimum capacity of 0.3	follow applicable rules and guidelines.
	kg /person/day must be installed.	

6.5	All non-biodegradable waste shall be	Condition noted.
	handed over to authorized recyclers for	All the member units will be instructed to
	which a written tie up must be done with	follow applicable rules and guidelines.
	the authorized.	
6.6	Any hazardous waste generated during	Condition noted.
	construction phase, shall be disposed off	All the member units will be instructed to
	as per applicable rules and norms with	follow applicable rules and guidelines.
	necessary approvals of the State	
	Pollution Control Board.	
6.7	Fly ash should be used as building	Condition noted.
	material in the construction as per the	All the member units will be instructed to
	provision of Fly Ash Notification of	follow applicable rules and guidelines.
	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	Condition noted.
	demolition activities related thereto shall	All the member units will be instructed to
	be managed so as to strictly conform to	follow applicable rules and guidelines.
	the Construction and Demolition Waste	
	Management Rules, 2016.	
6.9	Used CFLs and TFLs should be properly	Condition noted.
	collected and disposed off/sent for	All the member units will be instructed to
	recycling as per the prevailing	follow applicable rules and guidelines.
	guidelines/ rules of the regulatory	
	authority to avoid mercury	
	contamination.	
7. Green	1 Cover	
7.1	No tree can be felled/transplant unless	Condition will be complied
	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	Condition noted.
	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	Condition noted.
	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	Condition noted.
	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. Trans	sport	
8.1	A comprehensive mobility plan, as per	Condition noted.
	MoUD best practices guidelines	
8.1	*	Condition noted.

	(VDDDEN 1111	
	(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	Condition will be complied.
	material to the site should be in good	Air and noise quality monitoring report is
	condition and should have a pollution	enclosed as <b>Annexure- 4</b>
	check certificate and should conform to	Chelosed as Afficaute- 4
	applicable air and noise emission	
	standards be operated only during non-	
	peak hours.	
9.	Print notion	
9.1	A detailed traffic management and traffic	Condition noted.
7.1		
	decongestion plan shall be drawn up to ensure that the current level of service of	All the member units shall comply with.
	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	
	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. Hum	an Health Issues	
10.1	All workers working at the construction	Condition will be complied.
	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	Condition noted.
	provisions as per National Building Code	All the member units shall comply with.
	of India.	
10.3	Emergency preparedness plan based on	Condition noted.
	the Hazard identification and Risk	All the member units shall comply with.
	Assessment (HIRA) and Disaster	
	Management Plan shall be implemented.	
10.4	Provision shall be made for the housing	Condition noted.
	of construction labour within the site	All the member units shall comply with.
	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	Condition noted. All the member units shall
	workers shall be done on a regular basis.	comply with.
10.6	A First Aid Room shall be provided in	Condition noted.
	the project both during construction and	All the member units shall comply with.

	operations of the project.	
11. Miso	cellaneous	
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.	Condition complied.  Newspaper advertisement copy is enclosed as  Annexure- 2  Screenshot of uploaded EC details copy our website is enclosed as Annexure- 9
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 regarding 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 is being complied.  We SIPCOT uploaded the status of compliance of the stipulated environment clearance conditions along with monitoring data in our website  The screenshot of uploaded Half Yearly compliance report in our website is enclosed as Annexure-10.
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 is being complied.  We SIPCOT submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the MoEF&CC at environmental clearance portal and the same is enclosed as annexure- 10.

11.5	The company shall have a well laid down	Condition complied.
	environmental policy duly approved by	Separate environmental management cell has
	the Board of Directors. The	been assigned and will report to the General
	environmental policy should prescribe	Manager, SIPCOT who will report directly to
	for standard operating procedures to have	the Head of the Organization for
	proper checks and balances and to bring	implementation monitoring and compliance of
	into focus any	the environmental safeguards. Details of
	infringements/deviation/violation of the	Environmental Management Cell with Roles
	environmental/forest/wildlife	and Responsibilities are enclosed as Annexure
	norms/conditions. The company shall	<b>-8.</b>
	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	Condition complied.
	the project and company head quarter	Separate environmental management cell has
	level, with qualified personnel shall be	been assigned and will report to the General
	set up under the control of senior	Manager, SIPCOT who will report directly to
	Executive, who will directly report to the	the Head of the Organization for
	head of the organization.	implementation monitoring and compliance of
		the environmental safeguards. Details of
		Environmental Management Cell with Roles
		and Responsibilities are enclosed as Annexure
		- 8.
11.7	Action plan for implementing EMP and	Condition noted.
	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	Condition will be complied.
	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	Condition Noted.
	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	Condition noted
	adhere to the stipulations made by the	
	State Pollution Control Board and the	
	State Government.	
11.11	The project proponent shall abide by all	Condition noted.
	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	Condition noted.
	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	Condition noted
	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	Condition noted
	suspend the clearance, if implementation	
	of any of the above conditions is not	
	satisfactory.	
11.15	The Ministry/SEIAA-TN reserves the	Condition noted
	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	Condition will be complied.
	shall monitor compliance of the	
	stipulated conditions. The project	
	authorities should extend full cooperation	
	to the officer (s) of the Regional Office	
	by furnishing the requisite data /	
	information/monitoring reports.	
11.17	The above conditions shall be enforced,	Condition will be complied.
	inter-alia under the provisions of the	At present, no construction activity has been
	Water (Prevention & Control of	initiated at the project site.
	Pollution) Act, 1974, the Air (Prevention	CTE application copy is enclosed as <b>annexure</b>
	& Control of Pollution) Act, 1981, the	-3
	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	Condition noted.
	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 Condition	
12.1	The project proponent shall develop R&	Condition noted.
	D facilities to develop their own	
	technologies for propylene and	
	polypropylene processing.	

#### 5.0 ENVIRONMENTAL MONITORING DETAILS

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

#### **5.1** Ambient Air Quality monitoring

The ambient air quality parameters such as suspended Particulate matter (PM10), Respirable Particulate matter (PM 2.5), Sulphur dioxide, Oxides of Nitrogen (NOx), Ammonia, Ozone and Carbon monoxide were monitored. The test report of ambient air quality for the period of **October 2024- March 2025** is enclosed as **Annexure - 4.** 

#### **5.2** Ambient Noise level monitoring

Ambient noise levels were monitored and the test report of ambient noise recorded during the period of October 2024- March 2025 is enclosed as Annexure - 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 October 2024- March 2025 is enclosed as Annexure - 4.

#### **5.4** Ground water quality monitoring

Ground water was tested for various water quality parameters during the period of **October 2024- March 2025.** The test report of bore well water collected and analyzed is enclosed as **Annexure- 4.** 

#### **5.5** Surface water quality monitoring

The surface water was collected and tested for various water quality parameters during the period of October 2024- March 2025. The test report of surface water collected and analyzed is enclosed as Annexure 4.

Environmental Monitoring Photographs are enclosed as **Annexure-6** 

## 6.0 CONCLUSION

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

Dr. RAJKUMAR SAMUEL
Director Technical

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



#### **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 & Vaniamallee 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 AssessmentAuthority(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).

Sociation			
4. Latitude 4. Longitude 5. Total Plot Area (in) 5. Rq. m) 6. Brief description of Housing Facility at Soorapoondi and Vaniamallee villages, Gummidipoondi Tuluk, Drinvallur District, Tamil Nadu" over an extent of 215.834 Ha (\$33.11 Acres) by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) 7. Built up area details 8. Maximum height of the project 8. Maximum numberifindustrial park - based on industrial units of fillors 9. Maximum numberifindustrial park - based on industrial units 10. No. of blocks 11. Permissible FSI area 12. Proposed FSI area 13. Cost of Project 14. Units 14. Units 15. Expected Population 16. Saleable 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 Operation phase - 100 Nos. 15. Expected Population Operation phase - 10.800 Nos (including 1,920 Nos for industrial housing during operation phase) 16. Construction phase - 10.800 Nos (including 1,920 Nos for industrial housing during operation phase) 17. b) Source 18. Proposed FSI area 19. Expected Population Operation phase - 10.800 Nos (including 1,920 Nos for industrial housing during operation phase) 19. Effluent Generation Treatment 10. Common Maximum Project 11. Project National Park At Thervoykandigai vide Letter no. CMWSSB/WT&ET/RO_US/SB/CE/GMMJI/STP(N)/45TTRO - KOD/039/SIPCOT - Manallur dated: 03.02.203 10. TIRO water - Letter from TWAD for the supply of 22.70 MI,D TTRO water vide Letter no. CMWSSB/CE/GMMJI/STP(N)/45TTRO - KOD/039/SIPCOT - Manallur dated: 03.02.203 10. Total Sewage generation: 593 KLD 10. Details of greywater of Testiment Method: 10. Fifthent generation of Testiment Method: 10. Fifthent generation of Testiment Method: 10. Fifthent from Industries - Will be treated by individual industries and reused for process and unditities. ZLD will be manifacine by individual industries, if necessary. 17. Extracted S	2.	Location	
Longitude   13°25'24-11'N, 80°21'24-3' E	3.	Type of Project	Category – 8(b)
Brief description of Housing Facility at Soorapoondi and Vaniamallee villages, Gummidipoondi Taluk, the project Thirvallur District, Tamil Nadu' over an extent of 215.834 Ha (S33.11 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  9. Maximum number Industrial park - based on industrial units of floors industrial Housing — 6+4  10. No. of blocks  11. Permissible FSI area  12. Proposed FSI area  13. Cost of Project  14. Units  15. Expected Population OSR and such other facilities.  16. Construction phase — 100 Nos.  17. Do Source  18. Expected Population Operation phase — 100. Nos (including 1,920 Nos for industrial housing during operation phase)  18. Details of Sewage 18. Fresh water: 874 KLD, TTRO water: 2133 KLD and Recycled water: 1782 KLD) KLD)  18. Details of Sewage 18. generation Treatment  18. Details of greywater Treatment Method:  18. Proposed FSI area 19. Source 19. Fresh water: 874 KLD, TTRO water: 2130 KLD TTRO water vide Letter no. CMWSSB/CE(Q&MJI/STP(N)/45TTRO — KOD/039/SIPCOT — Manallur dated 25.03.2023  18. Treatment Method:  18. Source 19. Sewage from Industrial Housing - SIPCOT will provide STP of capacity 250 KLD for Industrial Housing - Treatment Method:  18. Source 20. Source 20. Source 20. Source 20. Source 3. Treatment Method:  18. Source 3. Treatment Method:  18. Details of greywater Treatment Method:  18. Source 3. Treatment Method:  18. Details of greywater Treatment Method:  18. Source 3. Treated effluent will be used by individual industries and reused for process and utilities. SLD will be maintained by individual industries and reused for process and utilities. SLD will be maintained by individual industries if necessary.  18. Expected Population of Housing - SIPCOT will provide STP of capacity 250 KLD for Industrial Housing.  18. Treated effluent will be used by individual units for their Process & Utilities  18. Treated effluen	4.	Longitude	13°25'24.17"N, 80° 2'12.45"E
brief description of 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)  Built up area details  Maximum height of the project  Maximum number Industrial park - based on industrial units Industrial park - based on industrial units Industrial park - based on industrial units Industrial Housing — G+4  No. of blocks  Il Permissible FSI area  I2 Proposed FSI area  I3 Cost of Project  No. of Saleable 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.  Construction phase — 10.800 Nos (including 1,920 Nos for industrial housing during operation phase)  a) Water forequirement (inf789 KLD (Fresh water: 874 KLD, TTRO water: 2133 KLD and Recycled water: 1782 KLD)  Details of Sewage (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/SIP(N)/45TTRO — KOD/039/SIPCOT — Manallur dated 25.03.2023  Total Sewage generation: 593 KLD  Treatment Method:  Sewage from Industrial Housing - SIPCOT will provide STP of capacity 250 KLD for Industrial Housing.  Details of greywater/Treatment Method:  Sewage from Industries - Will be treated by individual industries and used for process and utilities. ZLD will be maintained by individual industries and reused for process and utilities. ZLD will be maintained by individual industries and reused for process and utilities. SLD will be maintained by individual industries and reused for process and utilities. Surfaced generable & Ellushing.  Treatd eswage of the process of the process & Utilities.  Treated es	5.	Total Plot Area (in sq. m)	215.834 Ha (533.11 Acres)
7. Built up area details Not applicable —It is infrastructure development project  8. Maximum height of 18.2  9. Maximum height of 18.2  10. No. of blocks Industrial park - based on industrial units Industrial Housing — Great Industrial Housing — House of Industrial units Industrial Housing — 4 towers  11. Permissible FSI area 12. Proposed FSI area 13. Cost of Project INR. 495.52 crores  Not applicable.  14. Units INR. 495.52 crores  Not applicable.  15. Expected Population OSR and such other infrastructure facilities.  16. Construction phase — 100 Nos.  17. Expected Population Dhase  18. Ostere 19. Ostere 19. Ostere 19. Ostered 19. O	h	Brief description of the project	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
Maximum height of the project  Maximum number Industrial park - based on industrial units of floors Industrial Housing – G+4  Industrial Housing – G+4  Industrial Housing – 4 towers  II. Permissible FSI area  I2. Proposed FSI area  I3. Cost of Project  No. of Saleable 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.  Construction phase - 100 Nos.  I5. Expected Population Operation phase - 10,800 Nos (including 1,920 Nos for industrial housing during operation phase)  a) Water  I6 requirement (in 4789 KLD (Fresh water: 874 KLD, TTRO water: 2133 KLD and Recycled water: 1782 KLD)  KLD)  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  Details of Sewage  B. generation and Treatment Treatment Method:  Total Sewage generation: 593 KLD  Treatment Method:  Total Effluent Generation: 1193 KLD  Details of greywated  Treatment  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.  Mode of Disposal of treated effluent will be used by individual units for their Process & Utilities  Treated sewage of the process of the pro	7.	Built up area details	Not applicable – It is infrastructure development project
Industrial Housing – G+4   Industrial Jark - based on industrial units Industrial Housing – 4 towers	8	Maximum height of	18.2
II. Permissible FSI area   -	y l		
12. Proposed FSI area   13. Cost of Project   INR. 495.52 crores   Not applicable.   No. of Saleable   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.   Construction phase - 10.800 Nos.	10.	No of blocks	
13. Cost of Project   INR, 495.52 crores   Not applicable.     14.   No. of Saleable   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   Operation phase - 10.800 Nos (including 1,920 Nos for industrial housing during operation phase)     16. Frequirement   (in KLD)   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     17.   Details of Sewage   Total Sewage generation: 593 KLD   Treatment   Sewage from Industries - Will be treated by individual industries and used for green belt development within the IP.   Sewage from Industrial Housing.     19. / Effluent generation and Treatment   Effluent Generation: 1193 KLD   Mode of Disposal of 20. treated sewage   Treated effluent will be used by individual industries, if necessary.   Effluent from Industries - SIPCOT will provide ETP of capacity 1300 KLD.   Treated effluent will be used by individual industries for their Process & Utilities   Treated effluent will be used by individual information of the process and utilities.   Treated effluent will be used by individual information of the process and utilities.   Treated effluent will be used by individual information of the process & Utilities   Treated effluent will be used by individual and the process & Utilities   Treated effluent will be used by individual and the process & Utilities   Treated effluent will be used by individual and the process & Utilities   Treated effluent will be used by individual individual individual and the process & Utilities   Treated effluent will be used by individual and the process of the process of the process and utilities.   Treated effluent will be used by individual individual and the process & Utilities   Treated effluent will b	11.	Permissible FSI area	
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15. Expected Population phase – 10,800 Nos (including 1,920 Nos for industrial housing during operation phase)  a) Water 16. requirement (in 4789 KLD (Fresh water: 874 KLD, TTRO water: 2133 KLD and Recycled water: 1782 KLD) KLD)  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  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.  Total Effluent Generation: 1193 KLD  Details of greywater Treatment Method:  Effluent generation and Treatment  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.  Mode of Disposal of 20. treated sewage will be used by individual units for their Process & Utilities Treated sewage will be used by individual units for their Process & Utilities	114.	No. of Saleable Units	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.
16. requirement (in 4789 KLD (Fresh water: 874 KLD, TTRO water: 2133 KLD and Recycled water: 1782 KLD)  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(0&M)II/STP(N)/45TTRO - KOD/039/SIPCOT - Manallur dated 25.03.2023  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.  Total Effluent Generation: 1193 KLD  Details of greywater  Treatment Method:  19. / Effluent generation and Treatment  **Treatment Method:**  Treated sewage  Treatment Method:  Treated sewage  Treated sewage will be used by individual units for their Process & Utilities  Treated sewage will be used for greenbelt & Flushing.	15.	Expected Population	Operation phase – 10,800 Nos (including 1,920 Nos for industrial housing during operation
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Total Effluent Generation: 1193 KLD  Details of greywater  19./ Effluent generation and Treatment  • 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.  Mode of Disposal of 20. treated sewage  • Treated effluent will be used by individual units for their Process & Utilities  • Treated sewage will be used for greenbelt & Flushing	18.	Details of Sewage generation and	<ul> <li>Treatment Method:</li> <li>Sewage from Industries - Will be treated by individual industries and used for green belt development within the IP.</li> <li>Sewage from Industrial Housing - SIPCOT will provide STP of capacity 250 KLD for</li> </ul>
20. treated sewage   • Treated sewage will be used for greenbelt & Flushing	19.	Details of greywater / Effluent generation	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.
	20.	treated sewage /	·

	Description		Det	tails		Unit	
	Total Solid	Waste	4.8	360		TPD	
	Generation		2.0	116		TDD	
Quantity of Solid Waste generation Mode of treatmen and Disposal	manure for green belt development.						
Quantity of E-Waste generation, Mode of treatment and Disposal	waste Vendor	by Individual units as peral waste generation an	er E-waste M  d managem	fanage lanage	<b>Iedical centre propose</b>	Autnorized I	
	Waste	Waste Type	ndustrial ho Quantity	using	Method of Dispos	al	
Overtity	Schedule Yellow	Soiled wastes	6.5 kg/month		Will be sent to TNPCB Authorized common Biomedical waste Management Facility for Incineration		
Quantity of Biomedical Waste 3. generation, Mode of treatment and	Red	Contaminated wastes	4.7 kg/month		fill be sent to TNPCB A mon Biomedical waste M Faci <mark>lity</mark> for sterilizat	Managemen	
Disposal	White	Waste sharps including metals	0.3 kg/month	com	fill be se <mark>nt</mark> to TNPCB Amon Biomedical waste Macility for shredding &	Managemen	
	Blue	Glassware	1.8 kg/month	Will be sent to TNPCB Authorized common Biomedical waste Management Facility for disinfection & recycling			
	Š.	CGK		7			
	To /	Hazardous waste ger	eration fro	m SEZ	Z & its management		
Quantity of	Hazardous	waste schedule & type	Quant	ity	Method of Disp	•	
Hazardous Waste 4. generation, Mode of	5.1 -	Used /Spent Oil	0.5KL	/A	Will be sent to TNPCE recyclers/vend		
treatment and Disposal	22.2 Empty homels/containous/liners		5 nos/Annum		Will be sent to TNPCF recyclers	3 authorized	
5.Power requirement	22 MVA (Sour	rce: TANGEDCO)					
Details of sola energy	50% of total roof coverage  1) Solar panels will be proposed in the roof top of Project office. Solar power will be utilized						
	solar lighting t	o reduce power consum	ption.				

	Details of Green	
	Belt Area	
	i) Total area of	
	green belt	
	1 1	I. Greenbelt Area – 77.883 Ha (192.37 Acres)
28	existing within the	II. Existing Tree – 6,117 Nos.
20	project site	III. Tree cut - 0 Nos.
	iii) No. of trees	IV. Tree going to be planted – 1,46,027 Nos.
	proposed to be	
	planted	
	iv) No. of trees to be	
	transplanted / cut	
29	Details of OSR Area	27.737 Ha (68.51 acres) (12.85%)
	Details of Parking	Truck parking is provided in Common amenities area by SIPCOT and Individual units will
30	- 1	also have their own parking space within their Site.
		• Rain water Harvesting pit proposed = 3522 nos
		• The capacity of the Rain water harvesting pit has been calculated as 1.18 m3 (Assuming
31	Provision for rain	50% percolation rate).
	water harvesting	• 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.
		Capital cost-34.59 Crores
32. EMP Cost (Rs.) Recurring cost/annum-67 lakhs		
-		Rs. 1.5 Crores.
22	CER Cost	
33		As accepted by the project proponent, amount shall be spent for the conservation measures
L		towards Pulicat Bird Sanctuary in consultation with the State Wildlife Warden, Chennai.

#### 12. General Instructions:

- (a) 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.
- (b) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (c) 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.
- (d) 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 perational 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.
- (e) 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.
- (f) 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.
- (g) 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	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 invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.  12. Proponent should submit the certified compli		

## 2. Seiaa Specific Conditions:

S. No	EC Conditions		
2.1	<ol> <li>1. 1. The PP shall ensure that the proposed activities in no way result any impact on the migratory birds.</li> <li>2. The PP shall ensure that the proposed activity in no way result any impact on the surrounding Agriculture.</li> <li>3. The proponent shall ensure that the buildings should not cause any damage to water Table &amp; natural drainage.</li> <li>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.</li> </ol>		

#### 3. Seiaa Standard Conditions:

S. No	EC Conditions			
	Climate Change			
	1. The proponent shall adopt strategies to decarbonize the building.			
	2. The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials).			
	3. The proponent shall adopt strategies to reduce temperature including the Building Façade.  4. The proponent shall adopt methodology to control thermal environment and other shocks in the building.			
	5. The proponent shall adopt detailed plan to reduce carbon footprints and also develop strategie 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 color 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.			
3.1	9. The proponent shall ensure that the buildings should not cause any damage to water environment air quality and should be carbon neutral building.  Health			
	10. The proponent shall adopt strategies to maintain the health of the inhabitants.			
	Energy			
	<ul><li>11. The proponent shall adopt strategies to reduce electricity demand and consumption.</li><li>12. The proponent shall provide provisions for automated energy efficiency.</li></ul>			
	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 a 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 a to ensure continuous and efficient operation.			
	Regulatory Frameworks			
	17. The proponent shall adopt methodologies to effectively implement the Solid Wast			
	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** Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001. 18. The project proponent shall ensure to provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001. 19. The proponent shall provide elevator as per rules CMDA/DTCP. Database maintenance & audits 20. The database record of environmental conditions of all the events from pre-construction, construction and post-construction should be maintained in digitized format. 21. The proponent should maintain environmental audits to measure and mitigate environmental concerns. **Biodiversity** 22. There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc,.. 23. The proponent shall ensure that the proposed activities in no way result in the spread of invasive species. 24. The proponent shall adopt sustainability criteria to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements. 25. The proponent shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances. 26. The proponent shall develop building-friendly pest control strategies by using non chemical measures so as to control the pest population thereby not losing beneficial organisms. 27. The proponent shall adopt strategies to prevent bird hits. Safety measures 28. The proponent should develop an emergency response plan in addition to the disaster management plan. 29. The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan in emergencies. 30. All bio-safety standards, hygienic standards and safety norms of working staff and patients to be

- strictly followed as stipulated in EIA/EMP.
- 31. The disaster management and disaster mitigation standards to be seriously adhered to avoid any
- 32. The proponent shall provide the emergency exit in the buildings.
- 33. The proponent shall adhere to the provision and norms regard to fire safety prescribed by competent authority.

#### Water/Sewage

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

S. No	EC Conditions
	water.
	39. The project proponent shall adhere to storm water management plan as committed.
	Parking
	40. The project proponent shall adhere to provide adequate parking space for visitors of all inmates
	including clean traffic plan as committed.
	Solid waste Management
	41. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.
	42. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one
	time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under
	Environment (Protection) Act, 1986.
	EMP
	43. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
	44. The proponent shall ensure that all activities of EMP shall be completed before obtaining CTO from TNPCB.
	45. The proponent shall provide and ensure the green belt plan is implemented as indicated in EMP.
	Also, the proponent shall explore possibilities to provide sufficient grass lawns.
	Others
	46. As per the 'Polluter Pay Principle', the proponent will be held responsible for any
	environmental damage caused due to the proposed activity including withdrawal of EC and
	stoppage of work.
	47. The project proponent shall adhere to height of the buildings as committed.

#### 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
2.6	Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
2.7	Wet jet shall be provided for grinding and stone cutting.
2.8	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
2.9	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.

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

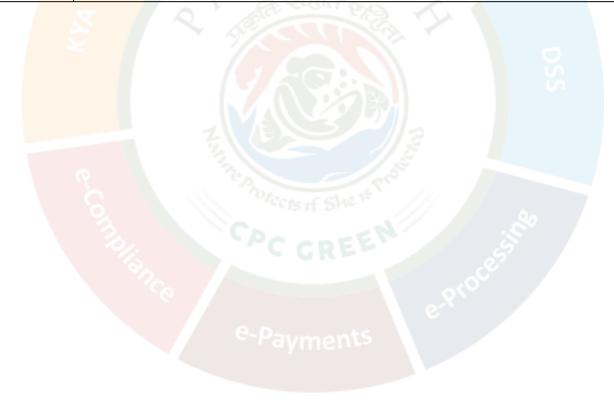
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S. No	EC Conditions
11.1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded 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.



#### **NEWSPAPER ADVERTISEMENT**



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## 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 Vaniamallee 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





















## Online Consent Management & Monitoring System

Ministry of Environment, Forest and Climate Change Government of India





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Annexure 3

Home	Consent Management	Laboratory Management	Waste Management	CESS Management	Knowledge Base	Logout
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▶ Apply	For Consent					
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Conser	nt Fee Calculator	Welcome DEVELOPMENT OF INDUST	RIAL PARK WITH INDUTRIAL	HOUSING FACILITY AT VANI	AMALLEE D	)ate : 25-6-2024

#### Consent Application Details

Application No: 59704657

## Send us your feedback

View Notices 0

Online Payment Verification



click here for any kind complaints or query



#### 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.

A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



#### **Laboratory Services Division**

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



Name of the Client

#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016170F

Report No.

: HECS/AP/068/050325

Sample ID No

: 050325104

Sampling Date

: 02/03/2025

Address of the Client

: M/s. SIPCOT : Vaniamallee

Group

: Atmospheric Pollution

Received Date

: 05/03/2025

Sample Name

: Ambient Air

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On : 03/04/2025

Sample Pafaranaa

. 13/3

impleted Oil .

02/04/2025

Sample Reference

: NA

Report Date

: 03/04/2025

Sample Drawn By

: M/s.Hubert Enviro care Systems (P) Ltd. : Near Project Site(Vaniyamalli)

.

Sample quantity : NA

Sample Location Environmental Condition

: Temperature (°C): 29.8

| Humidity (%): 53.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stand	dards : 2009
Discip	line : 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	7.61	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	26.05	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	μg/m³	11.30	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 μm)	μg/m³	71.27	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 μm)	μg/m³	38.05	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	9.66	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	BLQ (LOQ: 0.01)	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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HECS-G/O/FMT/049

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/068/050325/N

Sample ID No

: 050325104

Sampling Date

Received Date

Completed On

Sample quantity: NA

Report Date

Commenced Date: 05/03/2025

: 02/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

: Atmospheric Pollution

Sample Name

: Ambient Air

: NA

Sample Mark Sample Reference

: NA

Sample Drawn By

: M/s. Hubert Enviro care Systems (P) Ltd. : Near Project Site(Vaniyamalli)

Sample Location

Environmental Condition

: Temperature (°C) :	29.8	Humidity (%): 53.0
: IS 5182 Part 5 & Part	14	

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

Note:- ppmv- Parts per million by Volume.

\*\*\*End of Report\*\*\*



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### **TEST REPORT**

Page: 1 of 1

ULR

: TC1231025000016171F

Report No.

: HECS/AP/069/050325

Sample ID No

: 050325105

Sampling Date

Received Date

Completed On

Sample quantity : NA

Report Date

: 02/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

Commenced Date: 05/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

Sample Reference

Sample Drawn By

: NA

Sample Location

: M/s.Hubert Enviro care Systems (P) Ltd. : Iguvarpalaiyam

**Environmental Condition** 

: Temperature (°C): 29.8 | Humidity (%): 53.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stand	lards : 2009		
Discip	Discipline : Chemical							
1	Arsenic	ng/m³	2.27	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)	l (Annual)		
5	Ammonia as NH3	μg/m³	6.83	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	8.47	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)		
8	Ozone as O3	μg/m³	BLQ(LOQ 10)	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)		
9	Particulate matter (Size less than 10 μm)	μg/m³	92.64	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)		
10	Particulate matter (Size less than 2.5 µm)	μg/m³	45.18	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)		
11	Sulphur dioxide as SO2	μg/m³	8.50	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)		
12	Lead	μg/m³	0.08	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 NAAO Standards 2009.

\*\*\*End of Report\*\*\*



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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/069/050325/N

Sample ID No

: 050325105

Sampling Date

: 02/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Atmospheric Pollution

Received Date

: 05/03/2025

Sample Name

: Ambient Air

Commenced Date: 05/03/2025

Sample Mark

S.No.

: NA

Completed On

: 03/04/2025

Sample Reference

: NA

: 03/04/2025

Sample Drawn By

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

Report Date

Sample quantity: NA

Sample Location **Environmental Condition**  : Iguvarpalaiyam

: Temperature (°C): 29.8 | Humidity (%): 53.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

**Test Parameters** Units Results **Test Method** 

Discipline: Chemical TVOC BLQ(LOQ 0.1) ppmv HECS-G/ENV/AAQ/SOP/005 Issue No.:01 Issue Date:02:07 2020

Note:- ppmv- Parts per million by Volume.

\*\*\*End of Report\*\*\*



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

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Report No.

ULR

: TC1231025000016172F

: HECS/AP/070/050325

Sample ID No

: 050325106

Sampling Date

Received Date

Completed On

Sample quantity : NA

Report Date

: 02/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

Commenced Date: 05/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

Sample Reference Sample Drawn By

Sample Location

: NA

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

: Gummidipundi

: Temperature (°C): 29.8 | Humidity (%): 53.0

**Environmental Condition** Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stand	dards : 2009
Discip	oline : 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	I (Annual)	1 (Annual)
5	Ammonia as NH3	μg/m³	9.07	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	5.86	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
3	Ozone as O3	μg/m³	17.92	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours
9	Particulate matter (Size less than 10 μm)	μg/m³	89.70	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 μm)	μg/m³	37.07	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	BLQ(LOQ 5)	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.03	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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HECS-C/O/FMT/049 HECS-G/Q/FMT/049

A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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TEST REPORT

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Report No.

: HECS/AP/070/050325/N

Sample ID No

: 050325106

Sampling Date

Received Date

Completed On

Sample quantity: NA

Report Date

: 02/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

: NA

Sample Reference

Sample Drawn By Sample Location

Environmental Condition

: Gummidipundi

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

: Temperature (°C): 29.8 | Humidity (%): 53.0

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

S.No.	Test Parameters	Units	Results	Test Method
Discipline :	Chemical			T WEST STEAM A O'S OR 1005 Legue
1 TVC	OC .	ppmv	BLQ(LOQ 0.1)	HECS-G/ENV/AAQ/SOP/005 Issue No.:01 Issue Date:02:07 2020

Note:- ppmv- Parts per million by Volume.

\*\*\*End of Report\*\*\*



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HECS\_C/O/FMT/A0

A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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#### TEST REPORT

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ULR

: TC1231025000016173F

Report No.

: HECS/AP/071/050325

Sample ID No

: 050325107

Sampling Date

: 01/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

: 05/03/2025

Sample Name

: Atmospheric Pollution

Received Date

Group

: Ambient Air

Commenced Date: 05/03/2025

: 03/04/2025

Sample Mark

: NA

Completed On

Sample Reference

: NA

Report Date

: 03/04/2025

Sample Drawn By

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

Sample quantity : NA

Sample Location **Environmental Condition** 

: Guruvarajakandigai

: Temperature (°C): 29.8 | Humidity (%): 53.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No	. Test Parameters	Units	Results	Test Method	NAAO Stan	dards : 2009
Disci	pline : Chemical					
1	Arsenic	ng/m³	2.81	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	l (Annual)	1 (Annual)
5	Ammonia as NH3	μg/m³	11.70	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	9.54	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
3	Ozone as O3	μg/m³	12.41	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
)	Particulate matter (Size less than 10 μm)	μg/m³	86.88	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 μm)	μg/m³	24.99	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	27.44	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.08	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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HECS-G/O/FMT/049 HECS-G/Q/FMT/049

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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TEST REPORT

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Report No.

: HECS/AP/071/050325/N

Sample ID No

: 050325107

Sampling Date

: 01/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Atmospheric Pollution

Received Date

: 05/03/2025

Sample Name

: Ambient Air

Commenced Date: 05/03/2025

: 03/04/2025

Sample Mark Sample Reference : NA : NA

Completed On

: 03/04/2025

Sample Drawn By

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

Report Date

Sample Location

: Guruvarajakandigai

Sample quantity: NA

Environmental Condition

: Temperature (°C): 29.8

Humidity (%): 53.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method
Discipline				
1 TV	OC	ppmv	BLQ(LOQ 0.1)	HECS-G/ENV/AAQ/SOP/005 Issue

Note:- ppmv- Parts per million by Volume.

\*\*\*End of Report\*\*\*



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 1 of 1

Commenced Date: 05/03/2025

ULR

: TC1231025000016174F

Report No.

: HECS/AP/072/050325

Sample ID No

: 050325108

Received Date

Address of the Client

: M/s. SIPCOT

Sampling Date

: 01/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

: Vaniamallee

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

Sample Reference

: NA

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

Completed On Report Date

Sample quantity : NA-

Sample Drawn By Sample Location

: Teruvai

**Environmental Condition** 

: Temperature (°C): 29.8

Humidity (%): 53.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stan	dards : 2009
Discip	line : Chemical	1				
1	Arsenic	ng/m³	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m³	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	μg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene-AAQ	ng/m <sup>3</sup>	BLQ (LOQ: 0.1)	IS: 5182 Part 12: 2004	1 (Annual)	I (Annual)
5	Ammonia as NH3	μg/m³	BLQ(LOQ 5)	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual
6	Carbon Monoxide (CO)	mg/ m³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	μg/m³	BLQ(LOQ 5)	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	μg/m³	BLQ(LOQ 10)	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours
9	Particulate matter (Size less than 10 $\mu$ m)	μg/m³	84.67	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu$ m)	μg/m³	27.45	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	29.38	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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HECS-C/O/FMT/049 HECS-G/Q/FMT/049

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

**Laboratory Services Division** 

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

TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/072/050325/N

Sample ID No

: 050325108

Sampling Date

: 01/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Atmospheric Pollution

Received Date

: 05/03/2025

Sample Name

: Ambient Air

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 03/04/2025

Sample Reference

: NA

Report Date

: 03/04/2025

Sample Drawn By

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

Sample quantity: NA

Sample Location Environmental Condition : Teruvai

: Temperature (°C): 29.8

| Humidity (%): 53.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

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

Note:- ppmv- Parts per million by Volume.

\*\*\*End of Report\*\*\*



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E-mail: labsales@hecs.in



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TEST REPORT

Page: 1 of 4

ULR

: TC1231025000013311F

Report No.

: HECSL/WT/015/050325

Sample ID No

: 050325110

Sampling Date

: 01/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Received Date : 05/03/2025

Sample Name

Name of the Client

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

Group

: NA

: Water

Completed On

: 19/03/2025

Sample Reference

: NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample quantity: 1 Litres

Sample Location

: Near Project Site(Vaniyamalli)

**Environmental Condition** Sampling Method & Plan

: Temperature (°C): 26.8 | Humidity (%): 55.0

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Acceptable Limit
Disci	pline: Chemical					
1	Bi carbonate	mg/l	115.9	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/l	28.06	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	71.75	IS 3025 Part 32: 1988 ( Argentometric Method)	250	1000
6	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
7	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
8	Electrical Conductivity at 25°C	μS/cm	513.0	IS 3025 Part-14; 2013	NA	NA
9	Fluoride as F	mg/l	0.29	APHA 23rd edition (Method 4500F-B, D): 2017	1.0	1.5
10	Iron as Fe	mg/l	0.13	IS 3025 (Part 53): 2003	1.0	No relaxation
11	Magnesium as Mg	mg/l	14.58	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
12	Nitrate as NO3	mg/l	3.91	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 2 of 4

ULR

: TC1231025000013311F

Report No.

: HECSL/WT/015/050325

Sample ID No

: 050325110

Sampling Date

: 01/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

: NA

Sample Reference Sample Drawn By

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

Sample Location

: Near Project Site(Vaniyamalli)

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

Received Date : 05/03/2025

Commenced Date: 05/03/2025

Completed On : 19/03/2025

: 19/03/2025 Report Date Sample quantity: 1 Litres

: Temperature (°C): 26.8 | Humidity (%): 55.0

S.No.	Test Parameters	Units Results	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits (Max)
13	pH at 25°C	<u>a</u>	7.32	IS 3025(Part 11): 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K	mg/l	4.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	42.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	27.75	IS 3025 Part 24 Sec 1: 2022( Turbidity Method)( Turbidity Method)	200	400
17	Total dissolved solids	mg/l	267.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	5.0	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	130.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	2.1	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation



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#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000013311F

Report No.

: HECSL/WT/015/050325

Sample ID No

: 050325110

Name of the Client

: M/s. SIPCOT

Sampling Date

: 01/03/2025

Address of the Client

: Vaniamallee

: Water

Received Date

: 05/03/2025

Sample Name

Group

: Ground Water

Commenced Date: 05/03/2025

Completed On

: 19/03/2025

Sample Mark

: NA

Sample Reference

: NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample quantity: 1 Litres

Sample Location

: Near Project Site(Vaniyamalli)

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Acceptable Limits
23	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
24	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
25	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	0.05	1.5
26	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8: 1994	0.01	No relaxation
27	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
28	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
29	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
30	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.00 1)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
31	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
32	Percent Sodium	%	40.17	HECS /WT/SOP/002::2019	NA	NA
33	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	NA	NA



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Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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# TEST REPORT

Page: 4 of 4

ULR

: TC1231025000013311F

Report No.

: HECSL/WT/015/050325

Sample ID No

: 050325110

Sampling Date

: 01/03/2025

Address of the Client

: M/s. SIPCOT

Name of the Client

: Vaniamallee

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 19/03/2025

Sample Reference

: NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample quantity: 1 Litres

Sample Location

: Near Project Site(Vaniyamalli)

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits (Max)
35	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 ( Nesslerization Method)	0.5	No relaxation
36	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit	1.6	IS 11624 : 2019	NA	NA
37	Dissolved oxygen	mg/l	6.4	IS 3025 (Part 38): 1989 ( Titrimetric Method)	NA	NA
38	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
39	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
40	Selenium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.01	No relaxation
41	Manganese	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.1	0.3
42	Total alkalinity as CaCO3	mg/l	95.0	IS 3025 (Part 23): 1986	200	600
43	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA	NA

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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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/015/050325N

Sample ID No

: 050325110

Sampling Date

Received Date

Completed On

Report Date

: 01/03/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Commenced Date: 05/03/2025

Sample quantity: 1 Litres

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group Sample Name : Water

: Ground Water

Sample Mark

: NA

: NA

: M/s. Hubert Enviro care Systems (P) Ltd. : Near Project Site(Vaniyamalli)

Sample Location **Environmental Condition** Sampling Method & Plan

Sample Reference

Sample Drawn By

: Temperature (°C): 26.8 | Humidity (%): 55.0

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method
Disciplin	e : Chemical			

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



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000013312F

Report No.

: HECSL/WT/016/050325

Sample ID No

: 050325111

Sampling Date

Address of the Client

: M/s. SIPCOT : Vaniamallee

: 01/03/2025

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Completed On

: 19/03/2025

Sample Mark

: NA : NA

Sample Reference Sample Drawn By

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

Report Date

: 19/03/2025

Sample Location

: Iguvarpalaiyam

Sample quantity: 1 Litres

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits (Max)
Disci	pline : Chemical					
1	Bi carbonate	mg/l	73.2	IS 3025 Part 51: 2001	NÄ	NA .
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/l	18.04	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	27.21	IS 3025 Part 32: 1988 ( Argentometric Method)	250	1000
6	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
7	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
8	Electrical Conductivity at 25°C	μS/cm	297.0	IS 3025 Part-14: 2013	NA	NA
9	Fluoride as F	mg/l	0.22	APHA 23rd edition (Method 4500F-B, D): 2017	1.0	1.5
10	Iron as Fe	mg/l	0.038	IS 3025 (Part 53): 2003	1.0	No relaxation
11	Magnesium as Mg	mg/l	10.94	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
12	Nitrate as NO3	mg/l	2.48	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation



D.Anusuya Lab Manager

**Authorized Signatory** 

A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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#### **TEST REPORT**

Page: 2 of 4

ULR

: TC1231025000013312F

Report No.

: HECSL/WT/016/050325

Sample ID No

: 050325111

Sampling Date

: 01/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 19/03/2025

Sample Reference

: NA

: 19/03/2025

Sample Drawn By

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

Report Date

Sample quantity: 1 Litres

Sample Location

: Iguvarpalaiyam

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limit
13	pH at 25°C	+	7.21	IS 3025(Part 11): 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K	mg/l	2.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	15.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)		NA
16	Sulphate as SO4	mg/l	26.04	IS 3025 Part 24 Sec 1: 2022( Turbidity Method)( Turbidity Method)	200	400
17	Total dissolved solids	mg/l	156.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	90.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation



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Name of the Client

#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000013312F

Report No.

: HECSL/WT/016/050325

Sample ID No

: 050325111

Address of the Client

: M/s. SIPCOT

Sampling Date

: 01/03/2025

: Vaniamallee

: Water

Received Date

: 05/03/2025

Sample Name

Group

31

32

33

34

agents as MBAS

Percent Sodium

Residual Sodium

Barium

Carbonate

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 19/03/2025

Sample Reference

· NA

: NA

Report Date

: 19/03/2025

Sample Drawn By

: M/s.Hubert Enviro care Systems (P) Ltd. : Iguvarpalaiyam

Sample quantity: 1 Litres

Sample Location

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

%

mg/l

meq/l

25.92

BLQ (LOQ:

0.01)

BLQ(LOQ:1.0)

Test Parameters Units S.No. Results Test Method IS 10500: 2012 Acceptable Limits Acceptable Limits (Max) (Max) Cadmium BLQ (LOQ: mg/l USEPA 200.8: 1994 0.003 No relaxation 23 0.001)Chromium mg/l BLQ (LOQ: USEPA 200.8: 1994 0.05 No relaxation 24 0.01)Copper BLO (LOO: mg/l USEPA 200.8:1994 0.05 1.5 25 0.01)Lead BLQ (LOQ: mg/l USEPA 200.8: 1994 0.01 No relaxation 26 0.005)Mercury BLQ (LOQ: mg/l USEPA 200.8: 1994 0.001 No relaxation 27 0.0005)Nickel BLQ (LOQ: mg/l USEPA 200.8: 1994 0.02 No relaxation 28 0.01)Zinc mg/l BLQ (LOQ: USEPA 200.8: 1994 5 29 15 0.01)Phenolic compounds as BLQ(LOQ:0.00 mg/l IS 3025 Part 43 Sec 1: 2022 0.001 0.002 30 C6H5OH Anionic Surface Active mg/l BLQ(LOQ:0.05) APHA 23rd edition (Method 5540 B 0.2 1

> D.Anusuya Lab Manager

, C): 2017

HECS /WT/SOP/002:: 2019

USEPA 200.8: 1994

IS 11624: 2019

Chennal

600 032

Authorized Signatory

NA

0.7

NA

NA

No relaxation

NA

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A-21, III Phase, Thiru Vi Ka Industrial Estate.

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 4 of 4

ULR

: TC1231025000013312F

Report No.

: HECSL/WT/016/050325

Sample ID No

: 050325111

Sampling Date

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity: 1 Litres

: 01/03/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Address of the Client

: M/s. SIPCOT : Vaniamallee

Group Sample Name Sample Mark

: Water

: Ground Water

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Iguvarpalaiyam

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits
35	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 ( Nesslerization Method)	0.5	No relaxation
36	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit	0.7	IS 11624 : 2019	. NA	NA
37	Dissolved oxygen	mg/l	6.7	IS 3025 (Part 38): 1989 ( Titrimetric Method)	NA	NA
38	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
39	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
40	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
41	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
42	Total alkalinity as CaCO3	mg/l	60.0	IS 3025 (Part 23): 1986	200	600
43	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA	NA

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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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/016/050325N

Sample ID No

: 050325111

Sampling Date

: 01/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Received Date : 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On : 19/03/2025

Sample Reference

: NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample quantity: 1 Litres

Sample Location **Environmental Condition**  : Iguvarpalaiyam

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

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

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



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000013313F

Report No.

: HECSL/WT/017/050325

Sample ID No

Received Date

Completed On

Report Date

: 050325112

Sampling Date

: 02/03/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Commenced Date: 05/03/2025

Sample quantity: 1 Litres

: Vaniamallee

: M/s. SIPCOT

Address of the Client

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

Sample Drawn By

: NA

Sample Location

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

: Gummidipundi

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limit
Discip	pline: Chemical				Miles and the second se	
1	Bi carbonate	mg/l	439.2	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/l	104.21	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	400.85	IS 3025 Part 32: 1988 ( Argentometric Method)	250	1000
6	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
7	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
8	Electrical Conductivity at 25°C	μS/cm	1850.0	IS 3025 Part-14: 2013	NA	NA
9	Fluoride as F	mg/l	0.43	APHA 23rd edition (Method 4500F-B, D): 2017	1.0	1.5
10	Iron as Fe	mg/l	0.045	IS 3025 (Part 53): 2003	1.0	No relaxation
11	Magnesium as Mg	mg/l	53.46	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
12	Nitrate as NO3	mg/l	18.74	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation



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A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 2 of 4

ULR

: TC1231025000013313F

Report No.

: HECSL/WT/017/050325

Sample ID No

: 050325112

Address of the Client

: M/s. SIPCOT : Vaniamallee

Sampling Date

: 02/03/2025

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

Completed On

: NA

: 19/03/2025

Sample Reference

: NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample Location

: Gummidipundi

Sample quantity: 1 Litres

**Environmental Condition** Sampling Method & Plan : Temperature (°C): 26.8 | Humidity (%): 55.0

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits (Max)
13	pH at 25°C	-	7.21	IS 3025(Part 11): 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K	mg/l	18.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	. NA	NA
15	Sodium as Na	mg/l	210.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/i	51.63	IS 3025 Part 24 Sec 1: 2022( Turbidity Method)( Turbidity Method)	200	400
17	Total dissolved solids	mg/l	1091.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	480.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8: 1994	0.01	No relaxation



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000013313F

Report No.

: HECSL/WT/017/050325

Sample ID No

: 050325112

Sampling Date

: 02/03/2025

Address of the Client

: M/s. SIPCOT : Vaniamallee

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

: 19/03/2025

Sample Mark

: NA

Completed On

: 19/03/2025

Sample Reference

: NA

Report Date

Sample Drawn By

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

Sample quantity : 1 Litres

Sample Location **Environmental Condition**  : Gummidipundi

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits (Max)
23	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
24	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
25	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5
26	Lead	mg/i	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
27	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
28	Nickel	mg/l	0.014	USEPA 200.8 : 1994	0.02	No relaxation
29	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
30	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.00 1)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
31	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
32	Percent Sodium	%	47.41	HECS /WT/SOP/002:: 2019	NA	NA
33	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
34	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA	NA
35	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation

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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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#### **TEST REPORT**

Page: 4 of 4

ULR Report No.

: TC1231025000013313F

Sample ID No

: HECSL/WT/017/050325

: 050325112

Sampling Date

: 02/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Received Date

: 05/03/2025

Sample Name

Group

: Water : Ground Water

Commenced Date: 05/03/2025

: 19/03/2025

Sample Mark

: NA

Completed On

Sample Reference

: NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample Location

: Gummidipundi

Sample quantity: 1 Litres

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

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

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits (Max)
36	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit	4.2	IS 11624 : 2019	NA	NA
37	Dissolved oxygen	mg/l	6.6	IS 3025 (Part 38): 1989 ( Titrimetric Method)	NA	NA
38	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
39	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
40	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
41	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
42	Total alkalinity as CaCO3	mg/l	360.0	IS 3025 (Part 23): 1986	200	600
43	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA	NA

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/017/050325N

Sample ID No

: 050325112

Sampling Date

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

: 02/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Sample Name

: Ground Water

Sample Location

Sample Mark

: NA

Sample Reference Sample Drawn By : NA

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

: Gummidipundi

: 19/03/2025 : 19/03/2025 Sample quantity: 1 Litres

: 05/03/2025

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

: Temperature (°C): 26.8 | Humidity (%): 55.0

S.No.	Test Parameters	Units	Results	Test Method
Disciplin	e : Chemical			
piiii	e i chemicai			

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



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

Address of the Client

#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000016603F

Report No.

: HECSL/WT/018/050325

Sample ID No

: 050325113

: Vaniamallee

Sampling Date

: 01/03/2025

Group

: Water

: M/s. SIPCOT

Received Date

: 05/03/2025

Sample Name

: Surface Water

Commenced Date: 05/03/2025

Completed On

Sample Mark

: NA

: 05/04/2025

Sample Reference

: NA

Report Date

: 05/04/2025

Sample Drawn By

: M/s. Hubert Enviro care Systems (P) Ltd. : Pond near Vaniyamalli

Sample quantity : 2 Litres

Sample Location **Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discip	line : Chemical				<u> </u>
1	Bi carbonate	mg/l	41.48	IS 3025 Part 51: 2001	NA
2	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	2.0	IS 3025 Part 44: 1993	30
3	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 ( Curcumin Method)	NA
4	Calcium as Ca	mg/l	9.62	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA
5	Chemical Oxygen Demand (COD)	mg/l	20.0	IS 3025 Part 58: 2006	250
6	Chloride as Cl	mg/l	18.81	IS 3025 Part 32: 1988 ( Argentometric Method)	NA
7	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	NA
8	Dissolved oxygen	mg/l	6.2	IS 3025 Part 38: 1989	NA
9	Electrical Conductivity at 25°C	μS/cm	156.0	IS:3025 Part 14: 2013	NA
10	Fluoride as F	mg/l	BLQ(LOQ:0.2)	APHA 23rd edition Method 4500 F -B,D: 2017	2.0
11	Iron as Fe	mg/l	0.22	IS 3025 Part 53: 2003	3.0
12	Nitrate as NO3	mg/l	2.82	APHA 23rd edition Method 4500 NO3B: 2017	NA

D.Anusuya Lab Manager

**Authorized Signatory** 

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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 2 of 4

ULR

: TC1231025000016603F

Report No.

: HECSL/WT/018/050325

Sample ID No

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity : 2 Litres

: 050325113

Sampling Date

: 01/03/2025

: 05/03/2025

: 05/04/2025

: 05/04/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Sample Name

: Surface Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Pond near Vaniyamalli

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

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

S.No.	Test Parameters	Units	Results	Test Method	Surface water Standards (IS 2296Class-A)
13	pH at 25°C		8.09	IS 3025 Part 11: 2022 ( Electrometric Method)	5.5 – 9.0
14	Total dissolved solids	mg/l	88.0	IS 3025 Part 16: 1984	NA
15	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
16	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.2
17	Magnesium as Mg	mg/l	5.83	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	NA
18	Potassium as K	mg/l	1.0	IS 3025 Part 45: 1993	NA
19	Sodium as Na	mg/l	9.0	IS 3025 Part 45: 1983	NA
20	Sulphate as SO4	mg/l	6.48	IS 3025 Part 24 Sec 1: 2022	NA
21	Total Hardness as CaCO3	mg/l	48.0	IS 3025 Part 21: 2009	NA
22	Total Phosphorous as P	mg/l	0.03	IS 3025 Part 31 Sec 1: 2022	NA
23	Total Suspended Solids	mg/l	16.0	IS 3025 Part 17: 1984	100



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000016603F

Report No.

: HECSL/WT/018/050325

Sample ID No

: 050325113

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity : 2 Litres

Sampling Date

: 01/03/2025

: 05/03/2025

: 05/04/2025

: 05/04/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Sample Name

: Surface Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Pond near Vaniyamalli

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
24	Turbidity	NTU	3.0	IS 3025 Part 10: 1984	NA
25	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.2
26	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	2.0
27	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	2.0
28	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	3.0
29	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.1
30	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.01
31	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	3.0
32	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	5.0
33	Total alkalinity as CaCO3	mg/l	34.0	IS 3025 Part 23: 1986	NA
34	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	2.0
35	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
36	Phosphate as PO4	mg/l	0.093	APHA 23rd edition Method 4500-P B,D: 2017	NA



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Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 4 of 4

ULR

: TC1231025000016603F

Report No.

: HECSL/WT/018/050325

Sample ID No

: 050325113

Sampling Date

: 01/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Sample Name

: Surface Water

Sample Mark

: NA

Sample Reference

: NA

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

: Pond near Vaniyamalli

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

Received Date : 05/03/2025

Commenced Date: 05/03/2025

Completed On : 05/04/2025 Report Date

: 05/04/2025

Sample quantity: 2 Litres

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Test Parameters** S.No. Units Results Test Method **Inland Surface** water Standards (Schedule -VI) 37 Phenolic compounds as C6H5OH BLQ(LOQ:0.001) mg/l IS 3025 Part 43:Sec 1: 2022 1.0 Anionic Surface Active agents as MBAS mg/l BLQ(LOQ:0.05) APHA 23rd edition Method 5540 B, NA 38 C: 2017 Percent Sodium HECSG /WT/SOP/002 Issue 28.34 NA No:01,Issue date 18.12: 2021 Barium 40 mg/1BLQ (LOQ: 0.01) USEPA 200.8: 1994 NA Residual Sodium Carbonate 41 BLQ(LOQ:1.0) mg/lIS 11624: 2019 NA Ammonia as NH3 42 BLO(LOO:0.02) mg/l IS 3025 Part 34 Sec 2: 2021 5.0 Sodium Adsorption Ratio(SAR) Square root 0.56 IS 11624: 2019 NA of 43 (millimole/lit

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\*\*\*



D.Anusuya Lab Manager

Authorized Signatory

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

Name of the Client

Address of the Client

**Laboratory Services Division** 

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/018/050325N

Sample ID No

: 050325113

: Vaniamallee

: M/s. SIPCOT

Sampling Date

: 01/03/2025

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 05/04/2025

Sample Reference

: NA

Report Date

: 05/04/2025

Sample Drawn By

: M/s. Hubert Enviro care Systems (P) Ltd. : Pond near Vaniyamalli

Sample quantity : 2 Litres

Sample Location **Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: IS 17614(Part-1):2021

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

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



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A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000016604F

Report No.

: HECSL/WT/019/050325

Sample ID No

: 050325114

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity : 2 Litres

Sampling Date

: 01/03/2025

: 05/03/2025

: 05/04/2025

: 05/04/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

10

11

12

: Water

Sample Name

: Surface Water

Sample Mark

: NA

Sample Reference

: NA

Electrical Conductivity at 25°C

Fluoride as F

Iron as Fe

Nitrate as NO3

Sample Drawn By

: M/s. Hubert Enviro care Systems (P) Ltd. : Lake near Sitturnattam

Sample Location Environmental Condition

: Temperature (°C): 26.8 | Humidity (%): 55.0

μS/cm

mg/l

mg/l

mg/l

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discip	line : Chemical				
1	Bi carbonate	mg/l	79.3	IS 3025 Part 51: 2001	NA
2	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	30
3	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 ( Curcumin Method)	NA
4	Calcium as Ca	mg/l	26.05	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA
5	Chemical Oxygen Demand (COD)	mg/l	4.0	IS 3025 Part 58: 2006	250
6	Chloride as Cl	mg/l	34.64	IS 3025 Part 32: 1988 ( Argentometric Method)	NA
7	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	NA
8	Dissolved oxygen	mg/l	6.4	IS 3025 Part 38: 1989	NA

351.0

0.22

0.061

1.37



D.Anusuva Lab Manager Authorized Signatory

IS:3025 Part 14: 2013

APHA 23rd edition Method 4500 F

-B,D: 2017

IS 3025 Part 53: 2003

APHA 23rd edition Method 4500 NO3B: 2017

NA

2.0

3.0

NA

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A-21, III Phase, Thiru Vi Ka Industrial Estate.

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 2 of 4

ULR

: TC1231025000016604F

Report No

: HECSL/WT/019/050325

Sample ID No

: 050325114

: 05/03/2025

: 05/04/2025

: 05/04/2025

Sampling Date

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity : 2 Litres

: 01/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Sample Name

: Surface Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Lake near Sitturnattam

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** Sampling Method & Plan

· IS 17614(Part 1)-2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
13	pH at 25°C		6.59	IS 3025 Part 11: 2022 ( Electrometric Method)	5.5 – 9.0
14	Total dissolved solids	mg/l	187.0	IS 3025 Part 16: 1984	NA .
15	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
16	Cyanide as CN	mg/i	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.2
17	Magnesium as Mg	mg/l	13.37	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	NA
18	Potassium as K	mg/l	2.0	IS 3025 Part 45: 1993	NA
19	Sodium as Na	mg/l	16.0	IS 3025 Part 45: 1983	NA
20	Sulphate as SO4	mg/l	40.34	IS 3025 Part 24 Sec 1: 2022	NA
21	Total Hardness as CaCO3	mg/l	120.0	IS 3025 Part 21: 2009	NA
22	Total Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA
23	Total Suspended Solids	mg/l	2.0	IS 3025 Part 17: 1984	100



A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000016604F

Report No.

: HECSL/WT/019/050325

Sample ID No

: 050325114

Sampling Date

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity : 2 Litres

: 01/03/2025

: 05/03/2025

: 05/04/2025

: 05/04/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Water

Sample Name

: Surface Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Lake near Sitturnattam

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

: IS 17614(Part-1):2021

Sampling Method & Plan **Test Parameters** S.No. Units Results Test Method **Inland Surface** water Standards Schedule -VI) Turbidity NTU 0.7 IS 3025 Part 10: 1984 24 NA Arsenic BLQ (LOQ: USEPA 200.8: 1994 mg/l 0.2 25 0.005)Cadmium BLQ (LOO: USEPA 200.8 - 1994 mg/l 2.0 26 0.001)Chromium BLQ (LOQ: 0.01) USEPA 200.8: 1994 27 mg/l 2.0 Copper BLQ (LOQ: 0.01) USEPA 200.8: 1994 mg/l 28 3.0 Lead BLO (LOO: USEPA 200.8: 1994 mg/l 0.1 29 0.005)Mercury mg/l BLQ (LOQ: USEPA 200.8: 1994 0.01 30 0.0005)31 Nickel mg/l BLQ (LOQ: 0.01) USEPA 200.8: 1994 3.0 Zinc BLQ (LOQ: 0.01) USEPA 200.8: 1994 mg/l 32 5.0 Total alkalinity as CaCO3 65.0 IS 3025 Part 23: 1986 33 mg/l NA Manganese 0.017 USEPA 200.8: 1994 34 mg/l 2.0 Selenium BLQ (LOQ: USEPA 200.8: 1994 mg/l 0.05 35 0.005)0.071 Phosphate as PO4 APHA 23rd edition Method 4500-P mg/l NA 36 B,D: 2017



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A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 4 of 4

ULR

: TC1231025000016604F

Report No.

: HECSL/WT/019/050325

Sample ID No

: 050325114

Sampling Date

Address of the Client

: M/s. SIPCOT

: 01/03/2025

: Vaniamallee

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 05/04/2025

Sample Reference

: NA

Report Date

: 05/04/2025

Sample Drawn By

: M/s. Hubert Enviro care Systems (P) Ltd. : Lake near Sitturnattam

Sample quantity : 2 Litres

Sample Location

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** 

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
37	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43:Sec 1: 2022	1.0
38	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B , C: 2017	NA
39	Percent Sodium	9/0	21.99	HECSG /WT/SOP/002 Issue No:01,Issue date 18.12: 2021	NA
40	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	NA
41	Residual Sodium Carbonate	mg/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA
42	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34 Sec 2: 2021	5.0
43	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit r	0.63	IS 11624: 2019	NA

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\*\*\*

Chennal

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/019/050325N

Sample ID No

: 050325114

: Vaniamallee

Sampling Date

: 01/03/2025

Group

: M/s. SIPCOT

Received Date

: 05/03/2025

Sample Name

: Water : Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 05/04/2025 : 05/04/2025

Sample Reference Sample Drawn By : NA

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

Report Date Sample quantity : 2 Litres

Sample Location

Name of the Client

Address of the Client

: Lake near Sitturnattam

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

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

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



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A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 1 of 2 ULR : TC1231025000014800F

Report No.

101251025000014000

Sample ID No

: HECS/PE/015/050325 : 050325115

IS 14767: 2000

Sampling Date

: 01/03/2025

Address of the Client

: M/s. SIPCOT

: Vaniamallee

Group

: Pollution & Environment

Sample Name

: Soil

Sample Mark

: NA

Sample Reference

: NA

Electrical conductivity @ 25 ° C (1:2)

Sample Drawn By

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

Sample Location

: Near Project Site(Vaniyamalli)

Environmental Condition

Sampling Method & Plan

: Temperature (°C): 26.8 | Humidity (%): 55.0

: ICARDA :2013

Received Date : 05/03/2025

Commenced Date: 05/03/2025 Completed On : 28/03/2025

Report Date : 28/03/2025

Sample quantity: 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discip	oline : Chemical			
1	Cadmium	mg/Kg	0.20	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	47.07	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	30.38	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
1	Zinc	mg/kg	14.62	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	Ħ	Silt loam	FAO of United Nations, Rome Chapter III 2008
5	Soil Texture i)Sand	%	16.8	FAO of United Nations, Rome Chapter III 2008
7	Soil Texture ii)Silt	%	58.6	FAO of United Nations, Rome Chapter III 2008
3	Soil Texture iii)Clay	%	24.6	FAO of United Nations, Rome Chapter III 2008
)	pH Value @ 25 ° C (1 : 2.5)	Ye	5.64	IS 2720 (Part 26) 1987
	ALEXANDER SERVICE CONTROL OF THE SERVICE SERVI	100,000		



μS/cm

D.Anusuya
Lab Manager
Authorized Signatory

33.2

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A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014800F

Report No.

: HECS/PE/015/050325

Sample ID No

: 050325115

Sampling Date

: 01/03/2025

: Vaniamallee

Group Sample Name : Pollution & Environment

Received Date

: 05/03/2025

: Soil

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 28/03/2025

Sample Reference

: NA

Report Date

: 28/03/2025

Sample Drawn By

Name of the Client

Address of the Client

: NA

Sample Location

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

: Near Project Site(Vaniyamalli)

Sample quantity: 1 Kg

**Environmental Condition** 

: M/s. SIPCOT

: Temperature (°C): 26.8 | Humidity (%): 55.0

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.98	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.23	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.41	IS 2720 (Part 22) Section I 1972
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	16.26	FAO of United Nations, Rome Chapter - III 2008
16	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No.:01 Issue Date:02:07 2020
17	Total Nitrogen as N	%	0.0133	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	12.68	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	6.34	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	2.1	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	31.6	IS 14765: 2000
22	Colour	2	Red	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02:07: 2020

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

\*\*\*End of Report\*\*\*

Chennai

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/015/050325N

Sample ID No

: 050325115

Sampling Date

Received Date

: 01/03/2025

: 05/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Pollution & Environment

: Soil

Sample Name Sample Mark

: NA

Sample Reference Sample Drawn By

Sample Location **Environmental Condition**  : NA

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

: Temperature (°C): 26.8 | Humidity (%): 55.0

: Near Project Site(Vaniyamalli)

Completed On : 28/03/2025 : 28/03/2025

Report Date Sample quantity: 1 Kg

Commenced Date: 05/03/2025

Sampling Method & Plan : ICARDA :2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	oline : Chemical			
1	Manganese	mg/kg	132.89	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	16.17	Inhouse method
3	Infiltration Rate	-	0.7	Inhouse method
4	Moisture	%	9.93	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, % - Percentage. \*\*\*End of Report\*\*\*



A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Address of the Client

#### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014801F

Report No.

: HECS/PE/016/050325

Sample ID No

: 050325116

Sampling Date

: Vaniamallee

: 01/03/2025

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 28/03/2025

Sample Reference

: NA

Report Date

: 28/03/2025

Sample Drawn By

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

Sample Location

: Iguvarpalaiyam

: M/s. SIPCOT

Sample quantity: 1 Kg

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** Sampling Method & Plan

: ICARDA:2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	lline : Chemical			
1	Cadmium	mg/Kg	0.15	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	50.15	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Соррег	mg/Kg	14.67	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	10.98	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	: <u>*</u> :	Clay loam	FAO of United Nations, Rome Chapter III 2008
6	Soil Texture i)Sand	%	26.0	FAO of United Nations, Rome Chapter III 2008
7	Soil Texture ii)Silt	%	35.4	FAO of United Nations, Rome Chapter III 2008
8	Soil Texture iii)Clay	%	38.6	FAO of United Nations, Rome Chapter III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	5.52	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	μS/cm	15.7	IS 14767: 2000



D.Anusuya Lab Manager

**Authorized Signatory** 

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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014801F

Report No.

: HECS/PE/016/050325

Sample ID No

: 050325116

Sampling Date

: 01/03/2025

Address of the Client

: M/s. SIPCOT : Vaniamallee

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Group

Completed On

: 28/03/2025

Sample Mark

: NA

: 28/03/2025

Sample Reference

: NA

Report Date

Sample Drawn By

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

Sample quantity: 1 Kg

Sample Location

: Iguvarpalaiyam

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** mpling Method & Play

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.97	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.22	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.39	IS 2720 (Part 22) Section I 1972
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter III 2008
15	Available Potassium	mEq/100g	14.82	FAO of United Nations, Rome Chapter III 2008
16	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No.:01 Issue Date:02:07 2020
17	Total Nitrogen as N	%	0.0090	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	9.91	FAO of United Nations, Rome Chapter III 2008
19	Exchangable Magnesium as Mg	mEq/L	6.60	FAO of United Nations, Rome Chapter III 2008
20	Cation Exchange Capacity	mEq/100g	1.9	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	18.8	IS 14765: 2000
22	Colour	-	Red	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02:07: 2020

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

\*\*\*End of Report\*\*\*



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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/016/050325N

Sample ID No Sampling Date : 050325116

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

: 01/03/2025

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 28/03/2025

Sample Reference

: NA

Report Date

: 28/03/2025

Sample Drawn By

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

Sample quantity: 1 Kg

Sample Location

: Iguvarpalaiyam

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** Sampling Method & Plan

: ICARDA:2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	oline : Chemical			
1	Manganese	mg/kg	87.86	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	6.11	Inhouse method
3	Infiltration Rate	-	0.8	Inhouse method
4	Moisture	%	3.98	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, % - Percentage. \*\*\*End of Report\*\*\*



D.Anusuya Lab Manager Authorized Signatory

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HECS\_CIO/FMT.(40) HECS-G/Q/FMT/49

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Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014802F

Report No.

: HECS/PE/017/050325

Sample ID No

: 050325117

Sampling Date

: M/s. SIPCOT

: 02/03/2025

Address of the Client

: Vaniamallee

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

Group

: Soil

Commenced Date: 05/03/2025

Completed On

: 28/03/2025

Sample Mark

: NA

: 28/03/2025

Sample Reference

: NA

Report Date

Sample Drawn By

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

Sample quantity: 1 Kg

Sample Location

: Gummidipundi

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** Sampling Method & Plan

: ICARDA:2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	oline : Chemical			
1	Cadmium	mg/Kg	0.15	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2.	Chromium	mg/Kg	39.26	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Соррег	mg/Kg	17.31	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	18.67	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	3 <b>5</b>	Clay	FAO of United Nations, Rome Chapter III 2008
6	Soil Texture i)Sand	%	14.8	FAO of United Nations, Rome Chapter III 2008
7	Soil Texture ii)Silt	%	20.4	FAO of United Nations, Rome Chapter III 2008
8	Soil Texture iii)Clay	%	64.8	FAO of United Nations, Rome Chapter III 2008
9	pH Value @ 25 ° C (1 : 2.5)		8.78	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	μS/cm	76.8	IS 14767: 2000



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A-21, III Phase, Thiru Vi Ka Industrial Estate,

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Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014802F

Report No.

: HECS/PE/017/050325

Sample ID No

: 050325117

Sampling Date

: 02/03/2025

Address of the Client

: M/s. SIPCOT : Vaniamallee

Sample Name

: Pollution & Environment

Received Date

: 05/03/2025

Group

: Soil

Commenced Date: 05/03/2025

: 28/03/2025

Sample Mark

: NA

Completed On

Sample Reference

: NA

Report Date

: 28/03/2025

Sample Drawn By

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

Sample Location

Sample quantity: 1 Kg

**Environmental Condition** Camalina Mathad & Di

: Gummidipundi

: Temperature (°C): 26.8 | Humidity (%): 55.0

S.No.	Test Parameters	Units	Results	Test Method	
11	Bulk Density	gm/cm3	0.95	FAO of United Nations Rome 2007	
12	Organic Carbon	%	0.33	1S 2720 (Part 22) Section I 1972	
13	Organic Matter	%	0.58	IS 2720 (Part 22) Section I 1972	
14	Available Phosphorous as P	μg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter III 2008	
15	Available Potassium	mEq/100g	13.13	FAO of United Nations, Rome Chapter III 2008	
16	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No.:01 Issue Date:02:07 2020	
17	Total Nitrogen as N	%	0.0109	IS 14684 Clause 4 1999	
18	Exchangable Calcium as Ca	mEq/L	5.85	FAO of United Nations, Rome Chapt III 2008	
19	Exchangable Magnesium as Mg	mEq/L	11.71	FAO of United Nations, Rome Chapter III 2008	
20	Cation Exchange Capacity	mEq/100g	2.0	IS 2720 (Part 24) Clause 5 1976	
21	Water Holding capacity	%	21.5	IS 14765: 2000	
22	Colour	-	Black	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02:07: 2020	

% - Percentage.

\*\*\*End of Report\*\*\*



D.Anusuya Lab Manager

Authorized Signatory

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/017/050325N

Sample ID No

: 050325117

Sampling Date

: 02/03/2025

Address of the Client

Name of the Client

: M/s. SIPCOT : Vaniamallee

: Soil

Group Sample Name Sample Mark

: Pollution & Environment

Received Date : 05/03/2025

Commenced Date: 05/03/2025

: NA

Completed On

: 28/03/2025

Sample Reference

: NA

Report Date

: 28/03/2025

Sample Drawn By

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

Sample quantity: 1 Kg

Sample Location

: Gummidipundi

: Temperature (°C): 26.8 | Humidity (%): 55.0

**Environmental Condition** Sampling Method & Plan

: ICARDA:2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	oline : Chemical			
1	Manganese	mg/kg	150.65	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	10.02	Inhouse method
3	Infiltration Rate	-	0.4	Inhouse method
4	Moisture	%	7.89	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, % - Percentage. \*\*\*End of Report\*\*\*



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Name of the Client

#### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014803F

Report No.

: HECS/PE/018/050325

Sample ID No

: 050325118

Sampling Date

: 02/03/2025

Address of the Client

: M/s. SIPCOT : Vaniamallee

Sample Name

Group

: Pollution & Environment

Received Date

: 05/03/2025

: Soil

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 28/03/2025

Sample Reference

: NA

Report Date

: 28/03/2025

Sample Drawn By

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

Sample Location

: Guruvarajakandigai

Sample quantity: 1 Kg

**Environmental Condition** Sampling Method & Plan

: Temperature (°C): 26.8 | Humidity (%): 55.0

: ICARDA:2013

S.No.	Test Parameters	Units	Results	Test Method	
Discip	line : Chemical				
1	Cadmium	mg/Kg	0.20	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021	
2	Chromium	mg/Kg	46.34	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021	
3	Copper	mg/Kg	26.22	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021	
4	Zinc	mg/kg	14.39	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021	
5	Soil Texture	-	Loam	FAO of United Nations, Rome Chapter III 2008	
6	Soil Texture i)Sand	%	25.8	FAO of United Nations, Rome Chapter III 2008	
7	Soil Texture ii)Silt	%	48.4	FAO of United Nations, Rome Chapter - III 2008	
8	Soil Texture iii)Clay	%	25.8	FAO of United Nations, Rome Chapter - III 2008	
9	pH Value @ 25 ° C (1 : 2.5)	*	6.64	IS 2720 (Part 26) 1987	
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	105.3	IS 14767: 2000	



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Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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# TEST REPORT

: M/s. SIPCOT

Page: 2 of 2

ULR

: TC1231025000014803F

Report No.

: HECS/PE/018/050325

Sample ID No

: 050325118

Sampling Date

: 02/03/2025

: Vaniamallee

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

Name of the Client

Address of the Client

: Soil

Commenced Date: 05/03/2025

: 28/03/2025

Sample Mark

: NA

Completed On

Sample Reference

: NA

Report Date

: 28/03/2025

Sample Drawn By

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

Sample Location

: Guruvarajakandigai

Sample quantity: 1 Kg

Environmental Condition

: Temperature (°C): 26.8 | Humidity (%): 55.0

unling Mathod & Pla

S.No.	Test Parameters	Units	Results	Test Method	
11	Bulk Density	gm/cm3	0.97	FAO of United Nations Rome 2007	
12	Organic Carbon	%	0.33	IS 2720 (Part 22) Section I 1972	
13	Organic Matter	%	0.57	IS 2720 (Part 22) Section I 1972	
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter - III 2008	
15	Available Potassium	mEq/100g	17.73	FAO of United Nations, Rome Chapter - III 2008	
16	Boron as B	mg/kg	BLQ(LOQ 0.1)	HECS-G/ENV/SSW/SOP/018 Issue No.:01 Issue Date:02:07 2020	
17	Total Nitrogen as N	%	0.0132	IS 14684 Clause 4 1999	
18	Exchangable Calcium as Ca	mEq/L	10.37	FAO of United Nations, Rome Chapte III 2008	
19	Exchangable Magnesium as Mg	mEq/L	3.45	FAO of United Nations, Rome Chapte III 2008	
20	Cation Exchange Capacity	mEq/100g	1.8	IS 2720 (Part 24) Clause 5 1976	
21	Water Holding capacity	%	28.8	IS 14765: 2000	
22	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02:07: 2020	

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

\*\*\*End of Report\*\*\*



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Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

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#### **TEST REPORT**

Page: 1 of 1

Report No.

: HECS/PE/018/050325N

Sample ID No Sampling Date : 050325118

Address of the Client

Name of the Client

: Vaniamallee

: M/s, SIPCOT

: 02/03/2025

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 28/03/2025

Sample Reference

: NA

Report Date

: 28/03/2025

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

Sample quantity: 1 Kg

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: ICARDA:2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			
1	Manganese	mg/kg	39.21	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	5.01	Inhouse method
3	Infiltration Rate	-	0.7	Inhouse method
4	Moisture	%	4.22	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, % - Percentage. \*\*\*End of Report\*\*\*



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HECS\_C/O/FMT/40 HECS-G/Q/FMT/49

A-21, III Phase, Thiru Vi Ka Industrial Estate,

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Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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Name of the Client

#### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014804F

Report No.

: HECS/PE/019/050325

Sample ID No

: 050325119

Address of the Client

: Vaniamallee

: M/s. SIPCOT

: Pollution & Environment

Sample Name

: Soil

Sample Mark

Group

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Teruvai

**Environmental Condition** Sampling Method & Plan : Temperature (°C): 26.8 | Humidity (%): 55.0

: ICARDA :2013

Sampling Date : 02/03/2025

Received Date

: 05/03/2025 Commenced Date: 05/03/2025

Completed On

: 28/03/2025

Report Date

: 28/03/2025

Sample quantity: 1 Kg

S.No. **Test Parameters** Units Results **Test Method** Discipline: Chemical Cadmium HECS-G/INS/SOP/ 042 Issue No.:01 mg/Kg 0.23 Issue Date:01.03.2021 2 Chromium mg/Kg 71.78 HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021 Copper mg/Kg 36.73 HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021 Zinc mg/kg 23.31 HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021 Soil Texture Silt loam FAO of United Nations, Rome Chapter III 2008 6 Soil Texture i)Sand % 30.8 FAO of United Nations, Rome Chapter -III 2008 7 Soil Texture ii)Silt % 50.4 FAO of United Nations, Rome Chapter -III 2008 8 Soil Texture iii)Clay FAO of United Nations, Rome Chapter -% 18.8 111 2008 9 pH Value @ 25 ° C (1:2.5) 6.76 IS 2720 (Part 26) 1987 10 Electrical conductivity @ 25 ° C (1:2) µS/cm 125.8 IS 14767: 2000



D.Anusuya Lab Manager

**Authorized Signatory** 

A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014804F

Report No.

: HECS/PE/019/050325

Sample ID No

: 050325119

Sampling Date

: 02/03/2025

Address of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Pollution & Environment

Sample Name

: Soil

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Teruvai

**Environmental Condition** Sampling Method & Plan

: ICARDA:2013

Received Date : 05/03/2025

Commenced Date: 05/03/2025 Completed On : 28/03/2025

Report Date

: 28/03/2025

Sample quantity: 1 Kg

: Temperature (°C): 26.8 | Humidity (%): 55.0

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.98	FAO of United Nations Ro
12	Organic Carbon	%	0.26	IS 2720 (Part 22) Section
13	Organic Matter	%	0.46	IS 2720 (Part 22) Section
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rom

Nations Rome 2007 22) Section I 1972 22) Section I 1972 tions, Rome Chapter -III 2008 15 Available Potassium 14.83 FAO of United Nations, Rome Chapter mEq/100g III 2008 16 Boron as B BLO(LOQ 0.1) HECS-G/ENV/SSW/SOP/018 Issue mg/kg No.:01 Issue Date:02:07 2020 IS 14684 Clause 4 1999 17 Total Nitrogen as N % 0.0127 18 FAO of United Nations, Rome Chapter -Exchangable Calcium as Ca mEq/L 13.22 111 2008 19 Exchangable Magnesium as Mg mEq/L 6.61 FAO of United Nations, Rome Chapter -III 2008 20 Cation Exchange Capacity mEq/100g 2.1 IS 2720 (Part 24) Clause 5 1976 21 Water Holding capacity % 32.6 IS 14765: 2000 22 Colour Brown HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02:07: 2020

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

\*\*\*End of Report\*\*\*



<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. HECS-G/Q/FMT/049

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

**Laboratory Services Division** 

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

#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/019/050325N

Sample ID No Sampling Date

: 050325119

: 02/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s. SIPCOT

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 28/03/2025

Sample Reference

: 28/03/2025

Sample Drawn By

: NA

Report Date

Sample quantity: 1 Kg

Sample Location

: M/s. Hubert Enviro care Systems (P) Ltd. : Teruvai

**Environmental Condition** 

: Temperature (°C): 26.8 | Humidity (%): 55.0

Sampling Method & Plan

: ICARDA:2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			
1	Manganese	mg/kg	207.25	HECS-G/INS/SOP/ 042
2	Iron	mg/kg	12.31	Inhouse method
3	Infiltration Rate		1.5	Inhouse method
4	Moisture	%	13.47	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, % - Percentage. \*\*\*End of Report\*\*\*



D.Anusuya Lab Manager

**Authorized Signatory** 

#### **Hubert Enviro Care Systems (P) Ltd.**

A-21, III Phase, Thiru Vi Ka Industrial Estate,

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



#### **Laboratory Services Division**

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



#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016175F

Report No.

: HECS/AP/073/050325

Sample ID No

: 050325109

: 05/03/2025

: 03/04/2025

: 03/04/2025

Commenced Date: 05/03/2025

Sampling Date

Received Date

Completed On

Sample quantity: NA

Report Date

: 01/03/2025 To 02/03/2025

Address of the Client

Name of the Client

: Vaniamallee

: M/s, SIPCOT

Group

: Atmospheric Pollution

Sample Name

: Ambient Noise Levels (Excluding vibration) (Env)

Sample Mark

: Noise

Near Project Site(Vaniyamalli)

Near Gummidipundi

Near Iguvarpalaiyam

Near Guruvarajakandigai

Sample Reference

: NA

Sample Drawn By

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

Sample Location

S.No

1

2

3

4

5

Environmental Condition

: NA : Temperature (°C): 31.8

Sampling Location

| Humidity (9/ ) + 53 0

: IS 9989:1981 Sampling Method & Plan

Day Noise level in dB (A)	Night Noise level in dB (A)
55.0	44.8
54.2	44.6
54.8	43.9
53.6	42.5
54.7	44.0

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). Night Time-45 dB (A).

iii. iv.

Near Teruvai

Residential Area Silence Zone

: Day Time-55 dB (A); : 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.

\*\*\*End of Report\*\*\*



D.Anusuya Lab Manager **Authorized Signatory** 

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. HECS-G/Q/FMT/049





#### **CHENNAI METROPOLITAN WATER SUPPLY** AND SEWERAGE BOARD



#### SUPERINTENDING ENGINEER(WT&T)

2798 | 2023

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

To.

The Superintending Engineer,

No.19 - A, RukmaniLakshmipathy Road.

Post box no. 7223.

Egmore,

SIPCOT.

Chennai - 600008.

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

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 2<sup>nd</sup> 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.

Superintending Engineer (WT&T)

Abh3



#### 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

The Managing Director. SIPCOT. No.19 - A, RukmaniLakshmipathy Road, Eamore. 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 & Thervoykandigai - 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

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 takeup 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,

- i. Conducting Pre- design survey, Soil investigations, Detailed Design and estimate, etc.
- ii. 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 ThervoyKandigai industrial complex for a length of 17km.
- iii. 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.

Temporary Address: Urban Administrative Building, 1st to 4th Floor, No. 75, Santhome High Road, MRC Nagar, Chennai - 28. Permanent Address: No. 1, Pumping Station Road, Chintadripet, Chennai - 600 002.

- 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 Managing DIRECTOR

#### Annexure - 6

#### SIPCOT – VANIYAMALLE

#### MONITORING PHOTOGRAPHS

#### AMBIENT AIR QUALITY MONITORING PHOTOS:



#### IGUVARPALAIYAM



#### GUMMIDIPUNDI



# GURUVARAJAKANDIGAI Amirthamangalam, Tamil Nadu, India 93w5+59, Amirthamangalam, Tamil Nadu 601201, India Lat 13.395304° Long 80.058669° 01/03/2025 03:32 PM GMT +05:30 TERUVAI



#### **GROUND WATER SAMPLING PHOTOS**





#### **GUMMIDIPUNDI**



#### NOISE SAMPLING PHOTOGRAPH







**GUMMIDIPUNDI** 









#### SOIL MONTORING PHOTOGRAPH



#### **TERUVAI**



#### SURFACE WATER SAMPLING PHOTOGRAPH

### POND NEAR VANIYAMALLI



#### LAKE NEAR SITTURNATTAM





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.

மும்படுக்

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

CIN: U74999TN1971SGC005967

ukmani Lakshmipathy Road,

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



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 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.

Encl: As above.

Yours faithfully,

SIPCOT / MANELLORE

Renewers south & menibin लिया क्लाम अस्ताम सु अस्त्रियोगम State Industries Promotion Corporation of Tamil Nadu Limited

क्रमागाः ने लम्पालां

(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

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

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



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, Tarnil 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.

Encl: As above.

ஆழ்ழுக்றர்கும் தன்போர் இப்பிண்க் கவிபடி Yours faithfully,

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 Lakshmipathy 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.**

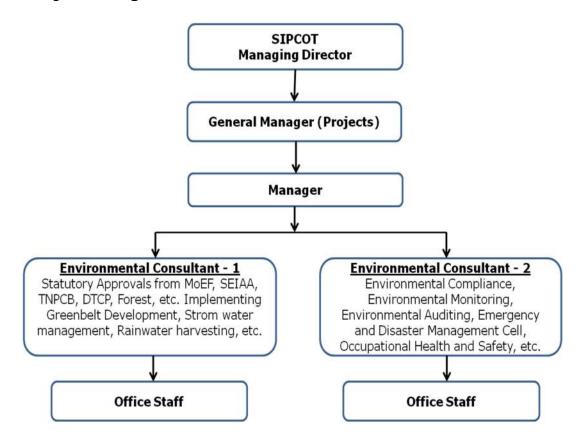


Figure - 1 Organogram for Environmental Management Cell

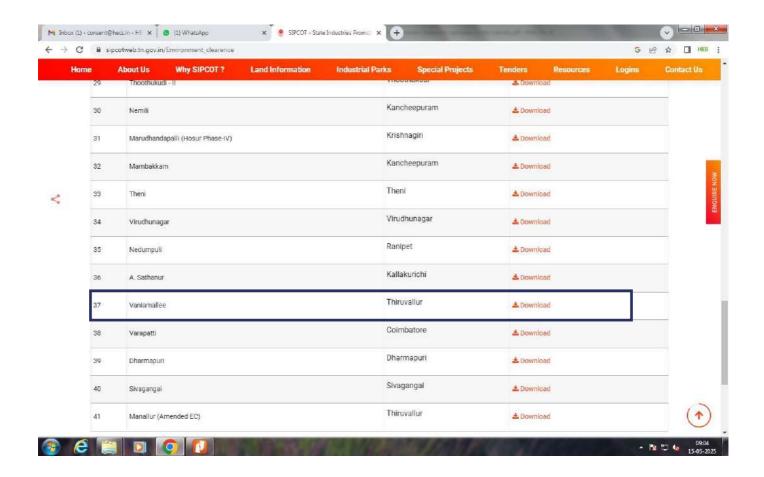
#### 2. RESPONSIBILITIES OF ENVIRONMENTAL MANAGEMENT CELL:

- 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.

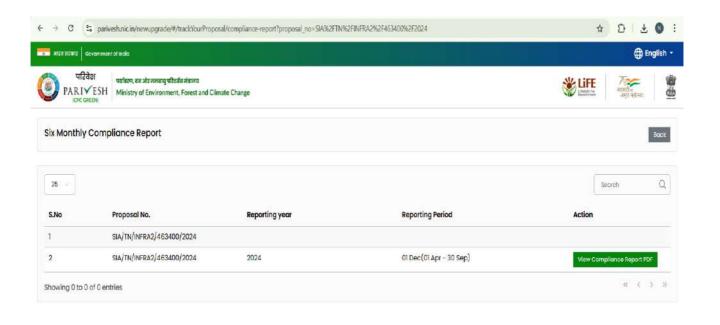
Table – 1: Roles and responsibilities of EMC

S.No.	Designation	Responsibilities		
		> Responsible for overall environmental management.		
		> Regularly conduct meeting with EMC and take feedback		
		regarding all the activities performed under		
1	Managing Director	Environmental Management and give directions to		
		succeeding component.		
		> Approval of funds for carrying out environmental		
		management activities.		
		Keep aware about all the activities performed under		
		EMC in the industrial parks.		
	GM – Projects	Issuing direction to Project officers for implementing		
2		Greenbelt development, Storm water management, rain		
		water harvesting, etc.		
		> To deal with legal entity pertaining to environmental		
		issues.		
	Manager	> To prepare and allocate budget for Environment		
		Management Plan.		
		Ensuring compliance to the conditions prescribed by		
3		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.		
	Environmental	Obtaining Statutory Approvals from MoEF&CC / SEIAA /		
		TNPCB, etc.		
		Addressing the various queries received from statutory		
4		authorities on environmental front.		
4		> Submitting Environmental compliance report and		
		coordinating with project officers for Environmental		
		monitoring, audit, etc.		
		implications which dynamically changes from time to		
		time due to the emerging challenges.		

#### Annexure - 9



### Annexure - 10





# EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### **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



# STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED



19/A, Rukmani Lakshmipathy Road, Egmore, Chennai – 600008.

ΑT

Villages: Soorapoondi and Vaniamallee

Taluk: Gummidipoondi

**District: Thiruvallur** 

State: Tamil Nadu

Prepared by



**HUBERT ENVIRO CARE SYSTEMS (P) LTD, CHENNAI** 

**JANUARY 2024** 



EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

0 1 25-01-24

VER REV DATE



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VER REV DATE



# EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

0 1 25-01-24

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EMERGENCY EVACUATION AND DISASTER
MANAGEMENT PLAN

0 1 25-01-24

VER REV DATE



#### 1. INTRODUCTION

SECTION

#### 1.1DEFINITIONS

#### 1.2 Definitions

**Accident /Incident:** An event or chain of events, which has caused or could have caused fatality, injury, illness and/or damage (loss) to assets, the Environment, reputation or third parties.

**Emergency:** A sudden, abnormal or unplanned situation that requires immediate attention and may endanger human life, the environment or have an adverse effect on the building or third party assets. An emergency can be associated with a major hazard as identified in the HSE Study, fire/ explosion, medical case, natural calamities and third party intervention.

**Evacuation.** Evacuation is an organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

**Assembly Point/Area**: Designated safe area for gathering groups of people during an emergency.

**Special Needs Populations.** Individuals with physical, mental or medical care needs who may require assistance before, during, and/or after a disaster or emergency after exhausting their usual resources and support network.



## EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

0 1 25-01-24

REV DATE

VER



#### 1.3 PURPOSE

The purpose of an Emergency Evacuation Plan is to protect the occupants from serious injury, property loss, or loss of life, in the event of an actual or potential major disaster. A major disaster may include, but not limited to, any of the following: fire, tornado, earthquake, bomb threat, or hazardous chemical spill. In the event of a major disaster, this Emergency Evacuation Plan (EEP) describes the initial responsibilities and actions to be taken to protect all occupants until the appropriate authority responders take over.

#### 1.4 SCOPE

It is also necessary and prudent for the protection of the occupants and staff. It is a requirement that the employer review with each employee upon their initial assignment or when the plan changes, those parts of the plan that the employee must know to protect her/himself in the event of an emergency. In addition, the written plan shall be made available for visitors to review and plan for their evacuation.

#### 1.5 OVERVIEW

The primary objectives of this evacuation plan are to ensure that:

- 1. Everyone leaves the premises safely.
- 2. A procedure to safely evacuate individuals who cannot negotiate stairs is in place.
- 3. Building occupants are accounted for after an emergency evacuation.
- 4. Personnel are selected among building occupants, with functions to ensure plan objectives are met.

For the purpose of this Plan, the following are emergencies for which a total or partial evacuation of a building is necessary.

- Fire.
- Explosion.
- Building Air contamination.
- Severe Weather

The plan will be updated and exercised by conducting evacuation drills at least annually



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This EEP is intended to communicate the policies and procedures for all occupants and contractors to follow in an emergency situation. This written plan should be made available, upon request, to occupants and other interested parties by the Emergency Coordinator.



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#### 1.6 PROJECT DESCRIPTION

State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) is the nodal agency of Government of Tamil Nadu to ensure sustainable development of industries. The objective of SIPCOT is to establish, develop, maintain and manage industrial complexes, parks and Growth Centres at various locations across the State of Tamil Nadu.

SIPCOT has so far developed 28 Industrial Complexes including 6 Sector Specific Special Economic Zones (SEZs) in 16 Districts across Tamil Nadu. SIPCOT is the Nodal Agency for Government of Tamil Nadu to sanction and for the disbursement of Structured Package of Financial Assistance to large industrial units. The role of SIPCOT in the industrialization of the State is not only quantitative but also qualitative. Instead of just accelerating the pace of industrial growth, SIPCOT strives to ensure that disbursal of financial incentives, which resulted in the growth of industries in backward and hitherto under developed areas.

SIPCOT propose to establish an Industrial Park with Industrial housing at Soorapoondi and Vaniamallee Villages of Gummidipoondi Taluk, Thiruvallur district and Tamil Nadu State over an extent of 215.834 Ha (533.11 Acres). The Industrial Park is to accommodate industries that will not fall under category 'A' or 'B' as per EIA Notification, 2006 and amendments thereof.

SIPCOT will develop the physical infrastructure such as road, water, Industrial housing and other amenities and allot the developed plots to the potential industries based on the comprehensive assessment of Investment, technology, employment, expert, compliance to environmental regulations etc.,



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#### 1.7 PROJECT LOCATION

The project site is located at Soorapoondi Village S.No. 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 and Vaniamallee Village S.No. 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, Thiruvallur District and Tamil Nadu State.



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INDIA
States and Union Territories INDIA FLAG (TIBET) Cuddalore Arivalu Ramanathapuram Tiruvallur District Legend Project Site

Figure 1: Location Map of the Project



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#### 1.8. PROJECT LAYOUT & ZONATION MAP

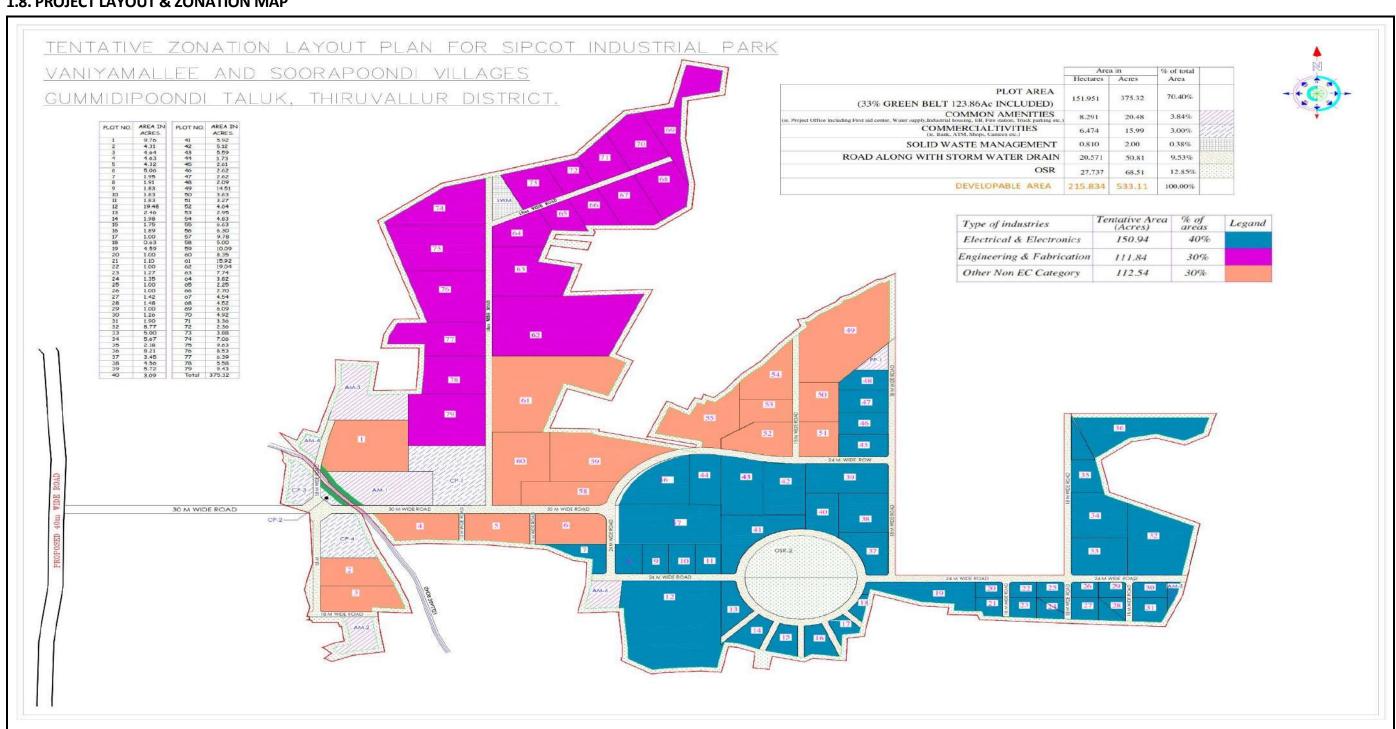


Figure 2: Project Layout and Zonation Map



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#### 1.9. PROJECT DETAILS AND EMERGENCY CONTACTS

SIPCOT has proposed to develop an IP for Engineering & fabrication / Electrical & Electronics and Other Non EC category industries with Industrial Housing over an extent of 215.834 Ha (533.11 Acres) at Soorapoondi and Vaniamallee Villages of Gummidipoondi Taluk, Thiruvallur district and Tamil Nadu State.

**Table 1: Zonation Details of the Industrial Park** 

S. No	Industry Type	% of industrial plot area
1	Electricals and Electronics	40%
2	Engineering and Fabrications	30%
3	Other Non EC category industries	30%
	Total	100%

The table 1 shows the emergency contact details and other basic details of the proposed project.

Table 2: Project details and emergency contacts

FACILITY NAME	Proposed Development of Industrial Park at Virudhunagar	
	over an extent of215.834 Ha (533.11 Acres)	
LOCATION	The project is located at Soorapoondi and Vaniamallee	
	Villages of Gummidipoondi Taluk, Thiruvallur district and	
	Tamil Nadu State	
EMERGENCY COORDINATOR	To be identified	
PHONE:	To be identified	
ALTERNATE EMERGENCY	To be identified	
COORDINATOR		
PHONE:	To be identified	



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OPENING HOURS	
AVERAGE NO. OF MANPOWER IN THE PARK	
NO. OF STAFF OCCUPYING THE FACILITY	
EMPLOYEE POPULATION AFTER THE OFFICE HOURS	Will be identified after the occupancy of all the plots.
LOCATIONS, WHERE THE EVACUATION PLAN DRAWINGS ARE PASTED	<ol> <li>Entrance of the industrial Park</li> <li>Key Locations, within the park</li> <li>At the gates of Individual Industry</li> <li>SIPCOT office buildings</li> <li>Utility Area</li> <li>Commercial and Common Amenities Areas</li> <li>Parking</li> </ol>
ASSEMBLY POINTS	Nearby the high ways. Each individual industry will identify their own assembly point.
EMERGENCY TELEPHONE NUMBERS	To be identified
NEAREST HOSPITALS:	<ul> <li>Eguvarapalayam Govt Upgraded PHC - 1.68km(E)</li> <li>Madaharpakkam Govt PHC - 3.24km (WNW)</li> <li>Billakuppam Govt PHC - 3.25km (ESE)</li> <li>Kannankottai Govt PHC - 5.91km (WSW)</li> <li>Sathyavedu Govt Hospital - 7.67km (W)</li> <li>Gummidipoondi ESI Dispensary - 7.92km (E)</li> <li>Gummidipoondi Govt Hospital - 8.81 km (E)</li> <li>Arani Govt Hospital - 10.03 km (SSE)</li> <li>Arambakkam Govt PHC - 10.54 km (N)</li> <li>Periyapalayam Govt Hospital - 11.61 km (S)</li> <li>Sunnambukulam Govt PHC - 12.41 km(ENE)</li> <li>Lachivakkam Govt PHC - 13.16 km (SSW)</li> <li>Melmaligaipattu Govt PHC - 14.59 km (SSW)</li> </ul>



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OTHER	<b>EMERGENCY</b>	CONTACT
NUMBERS		

- To be identified

#### 1.10 GENERAL PROCEDURES

It is impossible to provide specific information for all situations. There is no guarantee implied by this plan that a perfect response to disaster emergency incidents will be practical or possible. Therefore, this plan is a guide for occupants and staff to familiarize themselves with basic emergency planning, response and evaluation.

#### A. Pre-planning

Preparation will increase the margin of safety in an emergency. To evacuate successfully:

- Train employees/security staff in ways of assisting occupants.
- Provision of induction to the occupants through Visual Display Units and Posters.
- Inform security staff how to communicate in an emergency.
- Assign specific tasks to the employees in charge.
- Identify occupants with specific needs.
- Provide a building specific plan.
- Evacuation route maps to be pasted in the entire building. Occupants should know at least two evacuation routes. The following information is marked on the maps.
- ✓ Emergency and accessible exits
- ✓ Evacuation routes
- ✓ Location of fire extinguishers
- ✓ Fire alarm pull station location
- ✓ Areas first searched



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#### **B. Notification of Emergency Warning**

In the event of a disaster, the warning may come from any of the following sources:

- Building smoke detection or sprinkler system, emergency siren
- A person receiving notification of a possible disaster or a building emergency should immediately sound the alarm to notify occupants. (e.g. Yell "Evacuate", pull building alarm, call other offices, etc.)
- Inform immediate supervisor who will continue notification up the Chain of Command. The building emergency alarm system is reserved for total evacuation of the building.

#### C. Emergency Alarms and Advisories

Sprinkler Alarm – Smoke Detection – Fire Alarm in the event of a fire, sprinkler and/or HVAC smoke detection systems will/will not activate the alarm automatically. The fire alarm monitoring team will notify police once alarm is activated. Manual alarms, pull station or break glass models, are located on each floor.

#### D. Emergency evacuation drills

A minimum of 2 separate emergency evacuation drills should be held annually to comply with Rules and Regulations, one announced and one unannounced. The Emergency Evacuation Team, Emergency Coordinator, Floor Wardens etc., should preplan these drills and properly alert building occupants prior to the drill to avoid panic and possible injury.

While conducting evacuation drills, emphasis should be placed on orderly evacuation rather than speed, and making sure occupants clear the exit doorways and proceed across the streets Emergency evacuation drills must involve and evacuate ALL OCCUPANTS without exception.

During emergency evacuation drills the Emergency Coordinator, Floor Wardens etc. will perform duties for an actual emergency evacuation. Provisions should be made for timing and evaluation of each drill.



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#### 2. GENERAL GUIDELINES

SECTION

#### 2.1 Guidelines applied to this EEP

- 1. The Emergency Coordinator and alternate must be trained in emergency evacuation procedures. It is the responsibility of the department to train their staff accordingly.
- 2. All personnel must be trained in safe evacuation procedures. Refresher training is required whenever the employee's responsibilities or designated actions under the plan change, and whenever the plan itself is changed.
- 3. The training may include use of floor plans which clearly show the emergency escape routes included in the EEP. Floor plans and maps shall be posted at all times in main areas (i.e. offices, meeting rooms, stairwells, exit corridors etc.) to provide guidance in an emergency.
- 4. No visitor is permitted to re-enter a previously evacuated area until advised by the authorities.
- 5. Each staff member must also be trained and drilled in accordance with the evacuation plan.

#### 2.2 Assembly Occupancies

The residential development has been assigned with an assembly point near by the exit of the facility. Assembly occupancies are areas of a facility that are designed to accommodate all the staff. The following guidelines are designed to ensure compliance of applicable codes for emergency evacuation in assembly occupancies:

- All staff must be trained and drilled in their duties and responsibilities related to emergency evacuation.
- Conducting mock drills (including fire drills and toxic release drills) to check whether the planned arrangements are working as per the required norms or not along with a few occupants.



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- Testing of critical equipment
- All staff must be trained in the proper use of portable fire extinguishers, have knowledge of the facility's fire protection systems, and know how to activate the facility fire alarm system.
- There must be one staff member to advise emergency personnel of vital information related to the emergency and any person unaccounted for at the assembly location
- A written evacuation plan must be available to all staff responsible for evacuating the facility.



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3. DUTIES AND RESPONSIBILITIES

3

#### 3.1 Responsibilities of emergency Coordinator:

- Obtaining and posting the layout showing "here you are" note and route evacuation maps in their facilities if need be.
- 2. Overseeing the development, communication, implementation and maintenance of the overall EEP for the fabrication area and office.
- 3. Ensuring the training of building/office staff (including themselves), Wardens and notifying all personnel of changes to the plan.
- 4. Maintaining up to date count of occupants, and any other personnel with assigned duties under this plan.
- 5. Having the count of visitor at the time of evacuation, so a head count can be made at their designated evacuation Assembly Area and information passed to the person in charge (Security officer/Emergency Coordinator) of the evacuation who is normally stationed at the Assembly Sign.
- 6. In the event any emergency, relaying applicable information to occupants and to the emergency department.
- 7. Establishing designated point at the evacuation Assembly Areas for evacuees of the facility.
- 8. Communicating information to the occupants of the facility in the assembly area on developments and other relevant information.
- 9. Be familiar with the location of emergency equipment such as first aid kits, oxygen cylinders, fire extinguishers etc.
- 10. Ensuring that occupants and disabled persons, if any are assisted in evacuating the premises.
- 11. Evaluating and reporting problems to the government authorities and/or security after an emergency event.
- 12. Can take on multiple roles



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#### 3.2 Responsibilities of emergency Coordinator /The Floor Wardens:

- 1. Ensuring that occupants have vacated the area in the event of an evacuation and for checking assigned areas prior to leaving.
- 2. Ensuring project layout and route evacuation maps are posted in all relevant places.
- 3. Participate in the development, communication, implementation and maintenance of the overall EEP for the entire building.
- 4. Coordinating between the other emergency coordinators on different floors, like ground and basement to ensure the training of building/ occupants and notifying all personnel of changes to the plan.
- 5. Maintaining up to date count with the number of occupants during the normal visiting hours.
- 6. Having the above list for immediate retrieval at the time of emergency to submit to the Incident Commander.
- 7. In the event of a fire or other emergency, take their position and direct the flow of people traffic relaying applicable information to Security, occupants, Govt. Emergency personnel and directing the flow of people traffic.
- 8. Communicating the flow of information between the emergency coordinators and other security/police officers etc. after the evacuation on developments, head count check etc.
- **9.** Be familiar with the location of emergency equipment such as first aid kits, fire extinguishers etc.
- 10. Ensuring that occupants and disable persons, if any are assisted in evacuating the building.
- 11. Evaluating and reporting problems to the security after the emergency event
- 12. Can take on multiple roles



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### 3.3 Alerting or Signalling Building Occupants in Case of Fire and other Emergencies

- In case of a fire/smoke, security staff should actuate the nearest fire alarm box The locations of the fire alarm boxes are noted on the evacuation plans.
   The alarm alerts building occupants of the need for evacuation and sends a signal to Security officer notifying that there is an alarm condition in the building.
- 2. It may be necessary to activate additional fire alarm boxes, or shout the alarm, if people are still in the facility and the alarm has stopped sounding, or if the alarm does not sound. This can be done while exiting.
- 3. Persons discovering a **fire**, **smoky condition**, **or explosion** should activate the fire alarm box. Pertinent fire or rescue information should be conveyed to the emergency response personnel (Security or fire department). All emergency telephone numbers are listed at the beginning of this EEP.
- 4. To report an emergency, state your name, your location, and the nature of the call. Speak slowly and clearly. Wait for the dispatcher or operator to hang up first.



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### 4. EVACUATION PROCEDURES FOR FACILITY OCCUPANTS

**SECTION** 

4

#### 4.1. Evacuation

When the fire alarm sounds,

- All personnel should ensure that nearby personnel are aware of the emergency and exit the facility through normal and emergency exits.
- All occupants should proceed to their designated evacuation assembly area and contact the emergency coordinator (ec) or alternate ec.
- Await further instructions from their ec, facility coordinator, emergency department or police /fire department personnel.
- All personnel should know where primary exits are located, and be familiar with the
  various evacuation routes available. Floor plans with escape routes, alternate escape
  routes, exit locations and designated evacuation assembly areas should be posted in
  the building.

### **Notes and Precautions:**

- Small/Insipid fires can be extinguished only if you are trained to use a fire
  extinguisher. However, an immediate evacuation is essential for any and all fires
  occurring in the building.
- All fires, even those that have been extinguished, must be reported to the authorities concerned.
- Never enter an area that is smoke filled.

#### 4.1.1. Evacuation Route

A map of evacuation routes will be displayed in corridor, at the entrance and inside the buildings wherever relevant. Each map will show the way to an exit, depending on where occupants are located in the facility. It will be the responsibility of the security to



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inform the occupants of these evacuation routes. The person in charge shall verify that the signs are in place and up to date.

In the facility, the evacuation routes are pasted at the following places but not limited to:

- Entrance of the industrial Park
- Key Locations, within the park
- At the gates of Individual Industry
- SIPCOT office buildings
- Utility Area
- Commercial and Common Amenities Areas
- Parking
- Corridors and meeting rooms of the buildings, wherever applicable.



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The following details will also be displayed along with the evacuation route.

## **Emergency Management Team**

First Aiders	
(FABs are placed in supervisor's office	
and watchman of	ffice.)
Emergency	Vehicle/Ambulance
i	
Driver Contact	Details



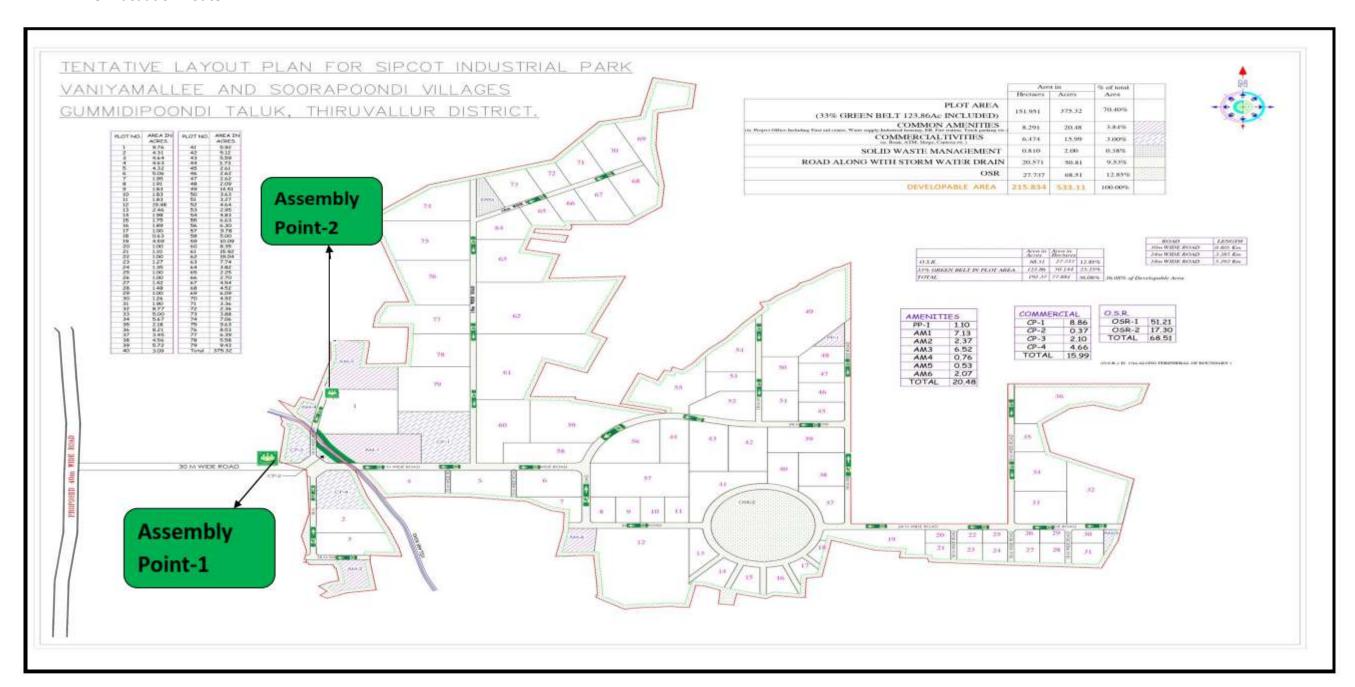
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#### 4.1.1. The Evacuation Route



**Figure 3: Evacuation Route Map** 



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## 4.1.2. EVACUATION PROCEDURE

#### **DISABILITIES**

- Each person has different skills and abilities. This reality calls for specific provisions for individuals with disabilities in the event of an emergency. The occupant with a disability is responsible for informing the security officer, while entering the building, that she/he will require assistance during an evacuation. (This can be done using a checklist form) It is important not to assume that persons with obvious disabilities need assistance, or to assume what type of assistance they may need.
- Persons with disabilities must study and remain aware of the features of each facility
  they are in, including stairways, exits, phone locations, and elevator procedures. At
  times, assistance from others may be needed. Individuals with disabilities may seek
  assistance (escorts) from others in their classes or work areas if emergency evacuation
  becomes necessary.
- Assign a designated area for persons who may need assistance in evacuation.
   The area for rescue assistance will have direct access to an exit, where those who are unable to use stairs or who are unable to navigate the emergency route may remain.
- Most people with vision limitations will be familiar with their immediate area at a given time. In the event of an emergency, tell the individual how and where to exit.
- Have the person take your elbow and escort them, as you walk, tell the person where
  you are and advise them of any obstacles. When you reach safety, orient the person to
  where they are and ask if any further assistance is needed.
- Since a person with impaired hearing may not perceive audio emergency alarms, an alternative warning technique is required. Two methods of warning are:
  - 1. Write a note advising them of the emergency and the nearest evacuation route.



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2. Turn the light switch on and off to gain attention, and then indicate through gestures or in writing what is happening and what to do. It may be prudent to

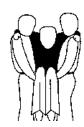
escort the person with a hearing impairment as you leave the building.

Security Officer should discuss emergency procedures with individual occupants who have obvious disabilities, those who have informed them of any special needs. It must be determined what assistance they may need and how they best to communicate.

- If a person remains in an area other than a designated area of rescue, then she/he must inform evacuating building occupants of their location.
- In an emergency, do not hesitate to inform others you need assistance, if your regular assistant is absent. Inform people unfamiliar with your needs how to assist you.

#### TWO-HANDED SEAT CARRY

The two-handed seat carry is an option to move a physically impaired individual when two people are available. The assistants lock arms such that the disabled person is supported at the shoulders and thighs (see figure).



#### **CHAIR CARRY**

The chair carry method is an option for individuals using a wheelchair or with limited ability. One assistant holds the chair backrest while the second assistant, located at the lower position, faces the disabled person and holds the front legs of the chair (see figure).



#### 4.1.3. RESPONDING TO EMERGENCIES

Each emergency requires a different response. In bomb threat, hazardous material spill or natural calamity emergencies, occupants may be sheltered in place. At other times, evacuation is the appropriate action. Following is information to summon emergency personnel and/or evacuate the building:



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A. To summon assistance, telephone 108 to report an accident or life-threatening situation.

- B. Fire Procedures: To evacuate the building upon seeing smoke/fire or hearing the fire alarm.
  - 1. Verbally warn occupants in the immediate area, (such as, yelling "FIRE!") and activate alarm upon discovery of smoke or fire. The signal for a building
  - Wide evacuation will be the sound of the fire alarm. All occupants are required to
    evacuate the building, unless otherwise assigned or authorized to remain by the
    emergency agency in charge.
  - 3. Give your name, building room number and type of emergency.
  - 4. Stay on the line until you have given all necessary information.
  - Use Stairways. When out, move away from building to a prearranged assembly area for a head count. Leave walks and drives open for fire and emergency responders.
  - 6. If necessary for a safe, orderly evacuation, activate fire extinguishers or firehouse. At the discretion of the individual, use extinguisher if trained and assigned to do so. Notify:
  - A. Fire-fighters if you suspect someone may be trapped inside the building.
  - B. Immediate supervisor and proper agencies for any needed services.
  - 1. Designated personnel involved in critical operations may remain on the site.

Work Area Name	Job Title	Assignment

2. If emergency situation will not permit any of the personnel to remain, contact the following offices:





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Police	100
Fire	101
Ambulance	102
Disaster force	108

#### 4.1.4. ACCOUNTABILITY PROCEDURES FOR EMERGENCY EVACUATION

### **Designated Evacuation Assembly Areas:**

Groups working together on or in the same area should meet outside the building in the prearranged designated Evacuation Assembly Area. Security Officers and Emergency Coordinators will conduct head counts once evacuation has been completed and report to the Incident Coordinator. The Emergency coordinator of the property is responsible to do an immediate head count (not later than 2 minutes) and report to the person in charge of the building evacuation (Incident Commander) who is normally from Security unless the Authorities have taken over the situation.

Again, all trained personnel should be made aware of occupants with disabilities that may need extra assistance and of hazardous areas to be avoided during emergencies. Before leaving, the Floor Warden or Emergency Coordinator are to check other enclosed spaces in the facility for other visitor/staff who may be trapped or otherwise unable to evacuate the area, and convey this information to emergency personnel.

#### Housekeeping

- Good housekeeping will be the responsibility of ALL occupants.
- Waste materials are to be discarded in their proper places.
- All aisles and exits will be kept clear.
- Access areas to fire extinguishers will be kept clear.
- Emergency telephone numbers will be posted on all telephones.



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• All fire/smoke doors are to remain closed and unobstructed from their intended function of retarding the spread of fire and smoke.

- Maintenance of Fire Equipment and Systems
- Refer questions and problems regarding the fire sprinkler and/or smoke detector systems, fire extinguishers and their locations to the Person in charge.

### 4.2. POST-EMERGENCY EVALUATION

Following any emergency, a post-emergency evaluation will be conducted to evaluate the cause, employee and outside department actions, and to determine what corrective or preventative actions are necessary.

### **Post Evacuation Activities**

- Provide a system to account for all disabled occupants `in designated Evacuation
   Assembly Areas
- Ensure access to appropriate facilities (i.e., beds, toilet, and other necessities) are monitored and made available to individuals with disabilities. Affected individuals may require bladder bags, insulin, pumps, walkers or wheelchairs.
- Ensure emergency personnel are trained in the use of such equipment.
- Establish procedures for further evacuation of disabled individuals in case the incident expands

### 4.15 Training and communications

- Emergency coordinator and his/her assistant must be trained in emergency evacuation and response with additional trainings on emergency care such as First Aid/CPR. Each occupant should know when an evacuation is necessary and what his/her role is in carrying out the plan. Occupants should also have made aware what is expected of them during an emergency to assure their safety.
- On exiting the facility occupants are required to report immediately to their emergency coordinator at the Assembly area for a head count. It is vital that this is



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done within minute so that the information can be passed to the Emergency/fire

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department as they arrive on the scene.

 A method of training building occupants in the requirements of the emergency evacuation plan is to give all staff a thorough briefing and demonstration by conducting periodic emergency evacuation drills.

### **Exercises**

Local drills, table top exercises, functional exercises, and full-scale exercises shall periodically include an evacuation scenario based on the hazards faced by this jurisdiction.



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## 5. DISASTER MANAGEMENT PLAN



An emergency in the industrial area has potential to cause serious injuries or loss of live or extensive damage to the property and / or environment and serious disruption both inside and / or outside the works. In such cases sometimes outside agencies are required to call for help in handling the situation. The causative factors like equipment failure, human error, earthquake, sabotage etc. will normally manifest in various forms viz. Fire and Structure collapse etc.

Despite best design and layout of office, safe operating procedures and various preventive measures the possibility of a disaster cannot be totally ruled out. During this event timely and organized action must be taken to control the situation and to minimize the damage or loss to the office, human beings and environment. Hence the need of a proper "Emergency Preparedness and Response Plan (EPRP)". Such plan gives the guidelines for employees, contractors, transporters and Visitors etc. The EPRP not only defines the responsibilities but also inform about prompt rescue / evacuation / coordination operations and some more.

## 5.1. On Site Disaster Management Plan

### 5.1.1. Emergencies

An emergency is a situation, which may lead to or cause a large-scale damage or destruction to life or property or environment within or outside the site. Sometimes the Emergency results into uncontrollable situations and leads towards disaster. Such an



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unexpected severe situation may be too great for the normal workforce of SIPCOT as

- i. The possible emergencies are as follows
  - Fire.
  - ➤ Electrical fire/short circuiting.
  - Natural calamities-earthquake, flood, cyclone.
  - ➤ Structural collapse.

well as Individual Industries in the park.

➤ Medical Emergency.

### **5.1.1. ACTION PLAN TO VARIOUS EMERGENCIES**

### a) FIRE

In case of any fire incident the following steps are to be followed by the building occupants:

- > Be concerned about your own safety as well as that of others.
- ➤ Inform others by verbal signal: "FIRE, FIRE, FIRE".
- ➤ If the fire is controllable by nearby fire extinguishing equipment and you know firefighting, control the fire without undue personal risk.
- > Shut off the electrical supply quickly.
- > Use fire hydrant system point located nearer to the affected area.
- If you can't extinguish it alone, activate the fire alarm/MCP and get help.
- ➤ Inform to Safety and security team-nearest helpdesk
- Inform to manager and site controller
- Make certain you know your escape route and assembly point.
- > Do not panic.
- People not involved in firefighting operation directly, should quickly move through emergency exit routes & assemble at nearest emergency assembly point.
- For any other assistance Call emergency number.



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### b) **ELECTRICAL FIRE**

In case of any electrical fire occurred due to short circuiting or any other reason the following procedure needs to be followed by the occupants:

- Switch off the main switch.
- Activate the fire alarm/MCP and get help.
- Before using a fire extinguisher make sure that it is not outdated, and it is of Carbon dioxide type.
- Don't use water to extinguish the fire if the main line is live.
- Inform to site controller/location Head
- Make certain you know your escape route and assembly point.
- > Do not panic. Inform Utility or security person
- Inform to Admin and site controller
- Make certain you know your escape route and assembly point.
- Do not panic.
- People not involved in firefighting operation directly, should quickly move through emergency exit routes & assemble at nearest emergency assembly point.
- For any other assistance call emergency number.

### c) NATURAL CALAMITIES

In case any natural disaster like earthquake the following procedure should be followed by the occupants:

### i) When you are inside the building & earthquake is felt:

- Take a safe position (e.g. Under the table, concrete wooden beam, concrete column, door bracket.
- Do not use lift. Do not stand near doors, gate
- > If you are driving, or on road, go to open space



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- Keep away from walls, building, and electric pole/wires.
- Keep away from building, sheds, electric wires
- Keep cool & keep others cool.

#### After the earthquake:

- There can be more such jerks immediately hence go to open space.
- Close connections of LPG, Electricity, water.
- > Do not smoke, ignite matchstick, or put on main switches.
- Do not touch electric wires.
- Drink clean water.
- > Do not go near partially collapsed buildings.
- Keep roads clear for traffic.

#### i. In case of flood:

- > Be ready to evacuate as directed by the Emergency Coordinator.
- Follow the recommended primary or secondary evacuation routes.
- Climb to high ground and stay there.
- Avoid walking or driving through flood water.
- Avoid walking or driving through flood water.
- For further help, contact emergency.

### ii. In case of cyclone alert (before cyclone hits):

- Leave early before your way to high ground or shelter gets flooded
- > Do not delay and run the risk of being marooned
- ➤ If your house is securely built on high ground take shelter in the safe part of the house. However, if asked to evacuate do not hesitate to leave the place.
- Board up glass windows or put storm shutters in place.
- Provide strong suitable support for outside doors.



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➤ If you do not have wooden boards handy, paste paper strips on glasses to prevent splinters. However, this may not avoid breaking windows.

- Get extra food, which can be eaten without cooking. Store extra drinking water in suitably covered vessels.
- If you have to evacuate the house move your valuable articles to upper floors to minimize flood damage.
- Ensure that your hurricane lantern, torches or other emergency lights are in working condition and keep them handy.
- Small and loose things, which can fly in strong winds, should be stored safely in a room.
- ➤ Be sure that a window and door can be opened only on the side opposite to the one facing the wind.
- ➤ Make provision for children and adults requiring special diet.
- ➤ If the centre of the cyclone is passing directly over your house, there will be a lull in the wind and rain lasting for half an hour or so. During this time do not go out; because immediately after that, very strong winds will blow from the opposite direction.
- > Switch off the electrical mains in your house.
- Remain calm

### Post cyclone measures:

- You should remain in the shelter until informed that you can return to your home.
- You must get inoculated against diseases immediately.
- > Strictly avoid any loose and dangling wires from lamp posts.
- If you have to drive, do drive carefully.
- Clear debris from your premises immediately.
- Report the correct losses to appropriate authorities



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## d)Structural Collapse

- Raising the emergency alarm.
- Evacuate the building immediately and assemble at Assembly Point
- Isolate & Barricade if necessary.
- ➤ Head count to be taken by the security or emergency response team.
- Rescue Operation to be carried out in case of missing personals.
- Hospitalize the victims in case of injury.
- Inform the disaster management force immediately.

### e) MEDICAL EMERGENCY

- Provide information to Emergency Response Team immediately.
- Move injured person to hospital
- > Local legal requirement to be carried out.
- > Information to be given to branch manager.
- Contact the nearest medical centre.

## 5.2. Off Site Emergency Plan

### 5.2.1. Introduction

An offsite emergency arising out due to any incident, which has the potential to cause serious damage or loss of life beyond the project area. The snowballing of a small incident into a major disaster and the subsequent effects on the life and property can be mitigated if there is a readily implementable emergency preparedness plan available with the concerned district authorities. In order to be in a state of preparedness to respond to the accidents/disasters and minimize their adverse impacts on the offsite population, requires an offsite emergency plan to be prepared by the District Magistrate for every district in consultation with The Chief Inspector of Factories & with the members of District Crisis Group.



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To provide resources and methods for effective control of emergencies arising out due to the fire, explosion or toxic release involving hazardous chemicals; To prevent emergency that may turn into disaster; To minimize damage to the property, people and the environment; Effective rescue operation of public and treatment of the injured; Synchronized action from all the coordinating agencies with least possible delay; To bring back normal situation in the least possible time;

## 5.2.2. Objectives

The main objectives of the Off-site Emergency Plan are:

- To provide resources and methods for effective control of emergencies arising out due to the natural calamities, Terrorists attacks, structural collapse, explosion or fire;
- To prevent emergency that may turn into disaster;
- To minimize damage to the property, people and the environment;
- Effective rescue operation of public and treatment of the injured;
- Synchronized action from all the coordinating agencies with least possible delay;
- To bring back normal situation in the least possible time;
- To provide authoritative information to the news media and government agencies;
- To train the people and the concerned to act efficiently and with confidence in an emergency.

### **5.2.3.** Purpose

An off-site emergency plan is an important element of overall Occupational Safety & Health (OSH) Programme but also it is an important tool to mitigate emergency situations arising out due to accidents. The lack of an emergency plan could lead to severe losses such as financial collapse of the area or even casualties. Since emergencies will occur, preplanning is necessary to prevent possible disaster. An urgent need for rapid decisions,



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shortage of time, and lack of resources and trained personnel can lead to chaos during an emergency. Time and circumstances in an emergency mean that normal channels of authority and communication cannot be relied upon to function routinely.

Being prepare for emergencies means making sure that the necessary equipment and supplies are readily available and that various government/private authorities/agencies know what to do when something unplanned happens such as a natural calamities, , fire or injury. These procedures must be documented and all stakeholders should have the opportunity to practice their emergency response skills regularly.

The purpose of this plan is to describe the activities to be carried out in case of a major emergency or a disaster, assist concerned agencies in planning for hazardous materials incidents and to serve as a guide & training aid. This plan is developed for the Govt. agencies and the industries to help them in understanding their roles in case of an emergency.

The purpose of this plan is also to outline the procedures for immediate action, if major off-site emergencies occur involving Major Hazard installations in the district. Every Major Accident Hazard installation has its Onsite Emergency Plan to deal with an emergency inside the premises of the factory. If an emergency arises beyond the resources of the factory, they have an obligation to seek assistance from the Government.

## **5.2.4.** Scope

This plan is developed basically for the agencies under the Govt. to make them understand their roles in case of an emergency. Also the crisis groups and the industries are expected to be clear in their roles and responsibilities while dealing with any disaster.

The plan will apply to the following emergency scenario:

Any disaster outside/ beyond the Emergency team of the project;



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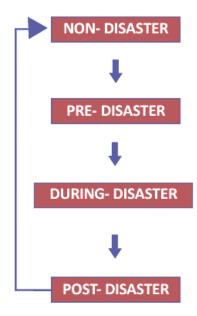
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- Any emergency situation that is uncontrolled by Emergency team of the project;
- Or any hazards that may extend to the other parts of Thiruvallur District.

### 5.3. The State Disaster Management Plan

The State Disaster Management Plan provides for an Approach that looks at the four possible phases of a disaster in an overlapping manner. Each phase requires a different orientation and different responses to the situation on hand. The four phases are depicted in the form of a diagram below and will provide the framework for the entire plan.



**Non Disaster** - by very definition would be when normalcy prevails and this setting provides the best possible opportunity to prepare to face any eventuality. During the Non-Disaster phase, existing and potential risks need to be identified and action taken to reduce potential casualties and damage from disasters.

**Pre-Disaster** - this phase is the narrow window when the impending disaster is going to happen and there is high possibility of panic or steps that would help to mitigate the impact of the disaster. During this phase, the focus is on steps necessary for safeguarding lives and assets of the area likely to be affected by taking appropriate action so as to reach out to potential damage areas in a prompt and coordinated manner.



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**During Disaster** - when the disaster is running its course. This phase will test the preparedness and training being given to a community for a holistic and effective approach to attend to the immediate needs of the affected population in minimum time possible even while the disaster is on. Fast response, mobilization, organization of search and rescue, safety to life and property and other disaster mitigation steps will determine the effective response at this stage.

**Post Disaster** - when the disaster has struck and the impact of the disaster requires several urgent steps to restore normalcy - both in the immediate and long-term. This phase will work on building back the community so as to attain normalcy in the community utilizing both local resources and the government machinery in the most effective manner within the shortest possible time. Recovery, Rehabilitation and Building Back Better (BBB) are the key words.

### **5.4.** Community Based Disaster Management (CBDM)

While planning to manage or tackle disasters, it is natural to assume that a Government run approach would be the norm. The fact remains that in every disaster, the local community is the first to respond along with any departmental team that is the first to arrive. Hence, disaster preparedness and response are to be seen as not solely the work of Government but also in harnessing the efforts of affected community, local volunteers, citizens, organizations and businesses. Every citizen has an active and important role to play prior to, during and after major emergencies and disasters. Therefore, the Disaster Management Plan seeks to set in place a process that seeks to develop and implement a locally appropriate and locally "owned" strategy for disaster preparedness and risk reduction with the machinery and resources of the Governmental at all levels.

Local communities are usually the first to be involved in search and rescue activities as well as in providing emergency treatment and relief to their families, friends and neighbours. Therefore, Government ideally in partnership with other community organizations, can play an important role in improving the skills and knowledge of these "spontaneous" disaster responders by providing them with education and training in preparedness measures, basic rescue techniques, first aid and emergency treatment.

### Community-based disaster management (CBDM) – Approaches

Community-based disaster management (CBDM) is an approach that is incorporated in the State Disaster Management Plan that will contribute to building the capacity of



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communities to assess their vulnerability to both natural and man-made hazards and develop strategies and resources necessary to prevent and mitigate the impact of identified hazards as well as respond, rehabilitate, and reconstruct following its onset.

Adequate awareness and preparedness of the community to respond to any such situation can be crucial in mitigating damage and suffering. Therefore, there is no better alternative to community and local level capacities for disaster response. The state and the district administration shall enhance the community's resilience against through various measures:

- As first responders, in providing necessary education and training to the community to enhance their capacity and resilience.
- Provide necessary resources and support for disaster risk reduction at the community level.
- Identify the most vulnerable groups at risk.
- Prepare local specific risk mitigation and management plans with the support of the community.
- Constituting Disaster Management Committees and Teams at Village, Taluk/ Block,
   District and State levels and train them appropriately.
- Conduct annual mock drills / rehearsals at the community level

Hence, the State Disaster Management Plan for Tamilnadu will work to harness local resources and manpower in the community while mobilizing Government machinery and resources in tackling a disaster. All line departments in Government will work to integrate their response with their immediate stakeholders and that of the local Community and this can also be done through training, knowledge and mock drills during non-disaster times.

A strong and resilient community with a pro-active State Government that will converge its resources to mitigate any disaster is the purpose of this Plan.

### Tamil Nadu State Disaster Management Agency (TNSDMA)

In order to implement, co-ordinate and monitor the activities of disaster management in the State, and to implement the decisions taken by the State Disaster Management Authority, an executive agency viz., Tamil Nadu State Disaster Management Agency [TNSDMA] has been established in the year 2013. The Agency strives to reduce the negative impact of all kinds of disasters through vibrant disaster management machinery so that loss of lives and damage to property and critical infrastructure is minimized. It coordinates with all departments and agencies to converge Disaster Risk Reduction with



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department-specific Disaster Management activities namely plans, policies, prevention, mitigation and post disaster activities. The SDMA declares an emergency situation in case of a State level disaster and also announces the conclusion of disaster management activities.

### **District Disaster Management Authority**

The District Disaster Management Authority is similar in functioning to the State Level Authority and is the planning, coordinating and monitoring body at the district level. Headed by the District Collector, the DDMA plays the role of an anchor within the district for all disaster management activities both during the non-disaster period and when there is an actual disaster happening. Meetings are held periodically during the year to ensure that alertness and preparedness levels are maintained within the district. The Members of District Disaster Management Authority are:

- District Collector
- District Panchayat Secretary Co. Chairperson
- Superintendent of Police (SP)
- Personal Assistant (General) to the Collector District Revenue Officer (DRO) Chief Executive Officer
- Additional Collector Development
- Joint Director (Health)
  - ➤ The DDMA shall monitor the district preparedness throughout the year and particularly review non-disaster activities and preparedness of the departments to handle situations.
  - DDMA is required to assess the situation and give directions to the department heads in the district for better handling of any disaster situation.
  - The DDMA calls for outside support if necessary and will keep the SDMA/SEC informed about the handling of the situation
  - ➤ Process requests for the NDRF/Army or any other specialized help requested by the government.
  - During a disaster, the DDMA operates through the DEOC which is similar to the SEOC in functioning.



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### Roles and Responsibilities of Government Departments/Officials

#### **District Collector**

All departments of the State Government, including the Police, Fire Services, Public Works, Irrigation, Rural Development and others shall work in a coordinated manner under the leadership of the district collector during disasters. The overarching role of the DC in handling the situation during a disaster is highlighted below.

- ➤ On taking charge, a District Collector shall hold a full-fledged session within ten days with all key members of the District department team heads to:
  - a. Take stock of the vulnerability of the district to different types of disasters
  - b. (To review the districts preparedness for tackling disasters
  - c. To examine the Disaster Management Plan for the district and
  - d. To Ensure a robust Decision Support System (online and offline communication system) is in place in the DEOC and connected with the Sub-Division, Taluk / Block and Zone level.
    - Access funds from the State Government for activities and ensure that a training calendar is in place for Disaster Management;
    - ➤ Coordinate all disaster response activities with the DEOC and ensure that the Incident Response Teams are in place;
    - > Stay well-connected with Community leaders through the line departments and their respective stakeholders at the field level;
    - ➤ Give directions for the release and deployment of resources available with any department of the Government, Local Authority, public / private sector etc. in the District;
    - Ensure that the NGOs carry out their activities in an equitable and nondiscriminatory manner;
    - ➤ Ensure provision for accountability of personnel and a safe operating environment;
    - ➤ Mobilize experts and consultants in the relevant fields to advise and assist as may deem necessary

In the event of a Disaster - the District Collector is required to send a report immediately, to the State Emergency Operation Centre (SEOC) that will indicate the severity of the disaster, action being taken; resources required in addition to the resources on hand; logistics for delivering relief and any other information found necessary. Thereafter, a daily situation report that will give a clear picture to the State administration needs to be sent.



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### Taluk/Block/Zone level Disaster Management Committee

A Disaster can effectively be handled only to the extent that adequate delegation has taken place and involvement of all wings of government are clear about their respective roles. A Taluk/ Block level disaster management committee is necessary and shall be formed under the direction of the District Collector. This Committee will monitor the development and implementation of taluk level disaster management plans.

### Village/Ward Level Disaster Management Committee

This Committee is perhaps the most important to be formed and requires maximum involvement of the District Collector in ensuring that there is no bias in its constitution. Every disaster requires maximum involvement and wholehearted cooperation of the village/ward level citizens and there needs to be good representation. The Panchayat, VAO, local institutions, NGOs, youth clubs and the like should be encouraged by the administration to be involved in the event of an emergency. They are the first responders to garner disaster response and an effort will be taken to make the communities strong and vibrant in proactively tackling the disasters.

- This will include to play a key role in organizing training (first aid, search and rescue, extrication from damaged buildings, road clearance, firefighting)
- raising awareness (about hazards, risks, disaster response)
- > community drills (annual drills for disaster response in the community)
- equipping the community with minimum resources (first aid kit, extrication equipment, lifejackets, lifebuoys, rope and the like)
- Awareness towards the safe drinking water to the community as it prevents Epidemic outburst.

then that community is bound to be strong and vibrant in proactively tackling the disaster

### **Emergency Ambulance Service System:**

Government of Tamil Nadu with the assistance of GVK-EMRI, provides free ambulance services to those in need of urgent medical assistance throughout the state. 24X7 emergency ambulance services are made available on dialling a single toll free emergency number '108'. During a disaster, they play a very important role as they are in easy access to any location in the state.



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#### **Departments & Directorates:**

- Each Department and its Directorate play an important role during a disaster situation and also initiates disaster response activities with the least possible delay. Some of the activities are listed below:
- Establishing a Control room by respective line departments with contact number and emails. The control room will direct and coordinate all activities related to Disaster Management pertaining to the respective departments. Appoint a nodal contact person for Disaster Management who will also be a part of the technical cell.
- Establish a Technical /Special Cell to take care of the following:
- Evaluate department specific DM plans prepared by various levels and wings
- Convergence of Mitigation measures into development activities or Projects of the department
- Monitoring the implementation

#### **Fire & Rescue Services Department**

Fire and Rescue Services Department of the Government of Tamil Nadu is entrusted with the task of firefighting and rescue operations in times of emergency. Apart from firefighting, this department also undertakes rescue activities and has saved hundreds of people, marooned in floods, and caught in the debris of fallen buildings, road and rail accidents and other natural and manmade disasters.

#### **Armed Forces (AF)**

The armed forces have historically played a major role in emergency support functions and this includes search and rescue operations, health and medical facilities and transportation - especially in the immediate aftermath of a disaster. Armed Forces are deployed often when the crisis situation is far beyond the State Government to manage and agencies need help due to the magnitude of the disaster. The District Collector on making an immediate assessment at the time of a disaster - may place the request to the Chief Secretary who then makes the official request to the Armed Force.

#### **National Disaster Response Force (NDRF)**

For the purpose of a specialized response to a threatening disaster situation or a disaster that's happening, the National Disaster Management Act has mandated



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the constitution of a National Disaster Response Force (NDRF). In Tamil Nadu, the NDRF is located at Arakkonam, Vellore District, which maintains a close liaison with the designated State Governments and are available in the event of any disaster situation.

#### **State Disaster Response Force (SDRF)**

State Disaster Response Force (SDRF) team has been constituted with a strength of 80 Police Personnel comprising 1 Deputy Superintendent of Police, 3 Inspectors of Police, 6 Sub-Inspectors of Police and 70 Police Personnel from other ranks on OD basis from Armed Police, Chennai to TNCF. They are involving in conducting evacuation, rescue activities in disaster situation in the state. They are trained in disaster response techniques such as detection and location; Extrication and access; Fire Fighting; Medical and First Aid

### Other Departments/Groups/Agencies

- ➤ Home Guards
- National Service Scheme (NSS)
- National Service Scheme (NSS)
- National Service Scheme (NSS)
- Coast Guard
- Nehru Yuva Kendra Sangathan (NYKS)
- Indian Red Cross Society
- Industrial Associations
- Airport Authority of India (AAI)
- Indian Railways
- India Disaster Resource Network (IDRN)
- National Disaster Management Authority
- National Disaster Management Authority
- India Meteorological Department (IMD)
- > Indian National Centre for Ocean Information Services (INCOIS), Hyderabad
- National Remote Sensing Centre
- Indian Institute of Technology, Madras (IITM)
- Anna University, Chennai
- ➤ NGOs

#### **Likely Hazards and Preventive Measures**

The following hazards and its mitigation measures and emergency plans are given in Risk Assessment and On-site DMP of this report.



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Disasters	Agencies
Cyclone/Hydro-meteorological	India Meteorological Department
Earthquake	India Meteorological Department
Floods	Central Water Commission
Drought	Ministry of Agriculture
Landslides	Geological Survey of India
Tsunami	Indian National Centre for Ocean Information Services

Natural Calamities like cyclones, Flood, Tsunami, Earthquake and manmade disasters like Structural Collapse, Stampedes, Terrorists attacks, fire etc.

### **Nodal Agencies for Early Warning**

The Following Nodal agencies in the Government of India are mandated for early warning of different natural hazards.

The major response measures which have to be undertaken cutting across different types of disasters are listed below for guidance of the concerned agencies. The emergency support functions deal with the first response whenever a disaster strikes. The major areas of emergency response activities and the respective responsible agencies are listed below:



Carcass disposal

Back to normalicy

## "DEVELOPMENT OF INDUSTRIAL PARK WITH INDUSTRIAL HOUSING FACILITY OVER AN EXTENT OF 215.834 HA. (533.11 ACRES)

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5.No.	Emergency Response Activities	Responsible Agency	
-1-	Activation of Trigger mechanism	SDMA, DDMA	
2	Risk Communication	RADM&M dept., 5EOC , DEOC, DIPR, Media and tele communication networks	
3.	Exacuation of People	RADM&M, Urban and local bodies, Police, Home Guards, Fire and Rescue services, SORF, NORF, Armed Forces, Volunteers, "108" ambulance, community and others	
4	Shelter arrangement for rescued people	RADM&M, Urban and Local bodies.	
-5	Traffic control and diversions	Traffic Police , Home Guards , Volunteers	
6	Cordoning off the disaster affected areas	SDRF , NDRF, Police , Home Guards and Volunteers	
7-	Law and Order maintenance	Police and Home Guards	
8	Search and Rescue operation	Fire and Rescue Services, SDRF, NDRF Police etc.,	
9	Provision of First Aid / Trauma Management	Health department, Local bodies and REE Cross	
10	Relief camps and basic amenities in shelters	RADM&M, Health Department & Local bodies	
**	Identification of dead and injured	RADM&M, Police, Health department and local bodies	
12	Arrangement of medical support for causalities	Health Department	
13	Impact & Resource Assessment	RADM&M, Urban and local bodies, Experts	
14	Clearance of the disaster affected areas	RD, PWD, Highways & Urban Local bodie	
15	Prevention of epidemics & organizing health camps	Health Department and local bodies	
16	Need based Establishment of Temporary Shelters	RADM&M and local bodies	
17	Mobilizing Resources for relief & restoration	RADM&M, Civil supplies, RD&PR and Urban Local bodies	
18	Clearance of debris / Solid waste	5DRF, F&RS, PWD, Highways Department and local bodies	
19	Restoration of Communication & Road networks	PWD, High ways, Urban / Rural Loca bodies, RD&PR, TANGEDCO	
20	Provision of Water	TWAD,CMW558 and local bodies	
21	Restoration of Electricity	TANGEDCO	
22	Resumption of Transportation	Road Transport and High ways	
23	Food Arrangements	RADM&M , Civil supplies and local bodies	
24	Provision of Relief supplies	RADM&M , Civil supplies, RD&PR and Urban Local bodies	
25	Temporary mortuary / Dead body disposal	Health, RADM&M and local bodies	
26	Evacuation and shelter arrangement for cattle/Livestock	Animal Husbandry Department, Blue Cross Local bodies and Volunteers	
777	Carrier disposal		

Animal Husbandry

RADM&M, all line departments



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## **6. PLAN DEVELOPMENT AND MAINTENANCE**



- SIPCOT is responsible for developing and maintaining this plan. Recommended changes to this plan should be forwarded as needs become apparent.
- This plan will be revised annually and/or updated time to time in accordance the authorities
- Departments and agencies assigned responsibilities in this plan are responsible for developing and maintaining SOPs covering those responsibilities.





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### **APPENDIX A**

#### **General Evacuation Procedures**

- 1. The following is a generalized step-by-step evacuation procedure to be followed:
- 2. The primary evacuation alarm is the fire alarm which will either be a loud ringing bell or continuous wailing siren AND /OR announcement to evacuate. All are required to evacuate a building when the Alarm is sounded.
- 3. Upon hearing an alarm or being instructed to evacuate, immediately
  - Prepare to follow the instructions of the Floor Wardens /Office emergency coordinator, Security Officers or Emergency Response Team members.
  - Walk; do not run, to the nearest exit stairwell. These are indicated by green lighted ceiling signs with arrows directing you to the exit stairwell.
  - Close all doors/windows behind you as you leave to confine the spread of fire.
  - Upon hearing an alarm or receiving the command to evacuate, evacuate the building using emergency exits stairwells to the ground floor and exit outside of the building to a designated evacuation assembly area.
  - Unless a stairwell is smoke filled, exit stairwells are to be used as the primary evacuation route.
  - While in the exit stairway, stay to the right and use the handrail, proceed in single file and evacuate in a calm manner.
  - Do not congregate in or block access roads or entrances to the building that may be needed for emergency vehicles.
  - Report any incidents, injuries, hazards or unusual conditions noted at the time of leaving the building to your supervisor/emergency coordinator or security.
  - Identify disabled individuals in the building and assist with their relocation and/or evacuation. Notify the security/ office coordinator, if evacuation of a disabled individual is required.



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 As soon as you reach your designated assembly area report to the person (Office coordinator) taking the Head count

- Once clear of the building, report directly to your designated assembly area and Emergency Coordinator. Assembly coordinators or Floor Wardens are to perform a head count of all occupants in their building evacuation area and inform the concerned officer of occupants unaccounted for. After reaching your assigned evacuation assembly area, do not attempt to return to your area or inside the building until the "all clear" signal has been given by the Authority.
- If the designated assembly area is unsafe or inaccessible, evacuate the building to outside areas that are clear from trees and the building itself. Wait for instructions from your supervisor, security or fire or police personnel.
- The on-scene employee with the highest degree of emergency response preparedness will assume charge until relieved by Security or fire or police.



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### **APPENDIX B**

### **EMERGENCY ORGANISATION**

### **Emergency Organization**

Emergency Organization requires to be entered in the format similar as given below.

## **Map: Emergency Organization**

EMERGENCY ORGANISATION CHART					
Designation	Name	Phone (O)	Phone (R)	Phone (M)	
EMERGENCY CONT	ROL CENTRE (EC	C) SITE MAIN	CONTROLLE	R	
Emergency					
Coordinator					
OTHER KEY PERSOI	NNEL (OKP)				
Alternate					
Emergency					
Coordinator					
Safety Person in					
Charge					
INCIDENT CONTRO	OLLERS (IC)		l		
Visiting Hours					
DEPUTY INCIDENT	CONTROLLERS (D	y. IC)	l		
Visiting Hours					
Communications					
Transport &					
Logistics					
EXTERNAL AGENCI	ES	•	•		
Near-by Hospital					
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## **EMERGENCY EVACUATION AND DISASTER** MANAGEMENT PLAN

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EMERGENCY ORGANISATION CHART					
Designation	Name	Phone (O)	Phone (R)	Phone (M)	
News paper					



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### **APPENDIX C**

#### Escape, Evacuation & Rescue (EER) Plan

### Escape

Non-essential personnel have to escape through safe escape route towards the nearest assembly point.

#### **Evacuation**

All non-essential personnel who have assembled at the safe assembly points have to be evacuated from the site, then noted down as part of head count and evacuated to temporary shelter outside.

#### Rescue

On receipt of Incident information, any trapped personnel have to be rescued. This requires rigorous training. The rescuers must first ensure their own safety. There should be at least two rescuers for each victim to be rescued.

The following procedure may be followed:

- Pre plan the rescue operation as to who will hold shoulders and who the legs of the victim,
- Ensure appropriate gas mask and other PPE is worn by each rescuer,
- See the nearest windsock and approach the site of victim from upwind.
   If no PPE is available nearby, then take a deep breath, hold breath and approach,
- Undertake rescue operation swiftly and confidently,
- Check victims first needs
- Impart first aid as appropriate, including CPR and oxygen breathing,
- Call for ambulance and shift victim to nearest doctor/hospital.





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## **APPENDIX D**

### **IMPORTANT CONTACT DETAILs**

### TAMILNADU STATE DISASTER MANAGEMENT AGENCY

Designation	Office	Mobile	Fax	E.Mail ID
Chairman and Project Co- ordinator	28411552 Ext101	9445000444	28546624	tnsdma.chairman@gmail.com
Director (Disaster Management	28528745/ 28411552 Ext.103	9444446881	28592921/ 28411654	relief@tn.nic.in cdrrp.osd@gmail.com
Joint Director (Disaster Management)	28411552 Ext.105	9444446559		tnsdma.jd@gmail.com
Deputy Director (Public Relations)	28411552 Ext.106	9444446558		tnsdma.ddpr@gmail.com
Assistant Director (P&M)	28411552 Ext.105	9445461709		tnsdma.adpm@gmail.com
Assistant Director (SP)	28411552 Ext.108	9444446885		tnsdma.adsp@gmail.com
Assistant Director (RR)	28411552 Extension No.109	9444446882		tnsdma.adrr@gmail.com



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### INDIAN METEOROLOGICAL DEPARTMENT

Designation	Office	Mobile	Fax	E.Mail ID
Deputy Director General	28276752	9445246157	28276752	sbthambi@gmail.com
Director	28229860	9444765065	28271581	metmds@bsnl.in, srramanan56@gmail.com
Scientist (Seismic Section)	28252002	9840460410		amudha2003@gmail.com
Control Room	28271951 28230091 28230092 28230094 Ext. 240			

### **CONTROL ROOMS**

Office	Phone /Mob	Fax
Chief Secretary's Control Room	25671388/25670372	25677128
Secretariat EPABX	25665566	
Revenue Department	25671821	25671821
State Relief Commissioner/Addl Chief Secretary and Commr of Rev Admn	28593990/28593988/1070 (Toll Free)	28410577
Director General of Police	28447777	28447703
Commissioner of Police (Control Room)	23452359-362	23453364/28555034
Inspector General of Police and Dy. Commandant General, Home Guards	9443312255/25385740 (R)/28441617(O)	28443498
Public Works Department	28410402-10/Ext 194	
Highways Department	28544370	28529798
Fire and Rescue Services Department	28294132,30,35,65	28294188
Indian Coast Guard	25395016/23460404	23460404
Fisheries	24341757	



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## LINE DEPARTMENTS

Designation	Office	Mobile	Fax	E.Mail ID
Corporation of Chennal Principal Secretary/ Commissioner of Corporation	25619200/ 25381330	9840111106/ 9445419966	25383962	commissioner@ chennalcorporation.gov.in
Home Guards IGP and Director of Civil Defence & Dy.Cint. Gen. Home Guards	28441617	9443312255	28443498	bkravi@hotmail.com
Fire and Rescue Service Additional Director General of Police Fire and Rescue Service	28294129	944000755		fireserv@tn.nic.in rckudawla@reddfmail.com
Control Room	28554176/ 309 /11/13/16		28550931	Fire_camp@gmail.com
Public Works Department EIC (WRO)	28525351	9444031951	28594148	eicwrotn@yshoo.co.in
CE (Chennai Region)	28523007	9443476626	28523007	cecwropwd@yahoo.com
Health Department Director of Public Health and Preventive Medicine	24320802	9489048909	24323942	dphpm@rediffmail.com
Director of Medical and Rural Health Services	24343271/ 24364755		24343271	dmrhs.tn@nic.in



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Fisheries Department Director of Fisheries	24320791	9444212723	2433585	tnfisheries@tn.nic.in
Rural Development and Pt. Raj Department Commr. of Rural Devip and Pt.Raj	24323794/ 24338690	9788395555	24343205	drdchamben@gmail.com
Agriculture Department Director of Agriculture	28524894	9751534567	28551763	diragriculture@tn.nic.in
Animal Husbandry Dept. Director of Animal Husbandry & Veterinary Services	24338714	9445001100	24323784 24321412	anh.tn@nic.in
Director Municipal Administration Dept. Director of Municipal Administration	28513259	9445029555	28411364	tncma@nic.in
Director of Town Panchayat	25340352	9003090099	25358742	dtp@tn.nic.in
Registrar Department Registrar of Cooperative Societies	28364848	9445434556	28364867	res@tn.nic.in



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Director of Handlooms and Textiles	25341204	9578605888	25341084	dirhandipoms@yahoo.co.in
CMWSSBMD, CMWSSB	28459000	9444072746	28458181	cmwssb@md2.vsnl.net.in
Education Department Director of School Education	28278796	9443110845	28232580	dirsedu@tn.nic.in
Director of Collegiate Education	28212090	9751237730	28275094	tndceoffice@gmail.co.in
Commissioner of Technical Education	22352299	9444343536	22201514	tndote@gmail.com
Metropolitan Transport Corporation Secretary to Government and Chairman, Managing Director	25671475 23455833	24482010	25670083 23455830	tmsec@tn.gov.in emtcedp@dataone.in
Industries and Commerce Department	044-22341646			
Tamil Nadu Agricultural University	0422-661125			
Institute of Remote Sensing (IRS) Anna University	044-22301197		22358191	dirirs@annauniv.edu
ELCOT	65512300		24330612	



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### ARMED FORCES

Office	Designation	Office	Fax	Mobile
Army	Col.	044-25316105(Di) 044-25316205 (off)	25316256	9444076956
Navy	Commodore Naval Officer (i/c) (TN) & Pondicheery	25396488/ 22392196	25391389	
Air force	SQN Leader	22392196/ 22560156	22398070	9840338648
Coast Guard	Commandant	23460/424 25672425	23460456	
NDRF	Commandant	04177-246269	04177-246594	
SDRF Control Room	ADGP (Operations) Manager	25362665		9444954422 9498107100



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# IMPORTANT CONTACT DETAILS- THIRUVALLUR DISTRICT

### **DISTRICT LEVEL OFFICERS**

### **Table 3: IMPORTANT CONTACT DETAILS-THIRUVALLUR DISTRICT**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
District	collrtlr@nic.in		044-27661600
Collector			
Superintendent	sptvlr@gmail.com		044-27666555
of Police			
District Revenue	drotlr@nic.in	9445000902	044-27662222
Officer			