



#### EC/Manallur/HYC/June/2025

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

Sir/Madam,

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

Ref: 1. EC obtained vide File No. 21-59/2015-IA.III Dated: 10.11.2020 (Now suspended vide Hon'ble NGT Order dated 30.09.2022)

2. EC Amendment obtained vide EC Identification No.EC24A3101TN5735699N; File No. 21-59/2015-IA.III Dated: 17.03.2025

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With reference to the above, we hereby submit the Half Yearly Compliance Report for the Development of Industrial Park at Manallur 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

Yours faithfully,

CONSULTANT (PROJECT MANAGEMENT)

Date: 30.05.2025

Encl: As above.

Copy to:

 The Chairman, Tamil Nadu Pollution Control Board, No-76, Mount Road, Guindy, Chennai-600 032

P.T.O.

# State Industries Promotion Corporation of Tamil Nadu Limited

(A Government of Tamil Nadu Undertaking)





- 2. The Director, CPCB Zonal Office, 77-A, South Avenue Road, Ambattur Industrial Estate, Ambattur Taluk, Thiruvallur District, Chennai - 600 058.
- 3. The Project Officer SIPCOT Industrial Park, Manallur

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

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"

At

Manallur & Soorapoondi Villages, Gummidipoondi Taluk Thiru vallur District, Tamil Nadu

EC obtained vide File No .21-59/2015-IA.III Dated: 10.11.2020 EC amendment obtained vide EC Identification No. EC24A3101TN5735699N ;File No. 21-59/2015-IA.III Dated: 17.03.2025

Submitted by



## M/s STATE INDUSTRIES CORPORATION OF TAMILNADU LIMITED

19/A, Rukmanilak shmipathy road,

Egmore, Chennai – 600008

Prepared by



**HUBERT ENVIROCARE SYSTEMS (P) LTD** 

**CHENNAI** 

(ENVIRONMENTAL CONSULTANT)

**MAY 2025** 

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# LIST OF ANNEXURE

S. No	List of Annexure
Annexure 1	Environmental Clearance Copy
Annexure 2	EC Amendment Copy
Annexure 3	CMWSSB Approval Letter Copy
Annexure 4	Environmental Monitoring Reports
Annexure 5	SIPCOT Board Resolution of Approved Environment Policy
Annexure 6	Environmental Management Cell
Annexure 7	Newspaper Advertisement
Annexure 8	EC copy submission to Local body/relevant Government offices
Annexure 9	Screenshot of EC copy uploaded in our website
Annexure 10	Screenshot of Compliance Report uploaded in our website
Annexure 11	Acknowledgement of Form V submission
Annexure 12	Environmental Monitoring Photos
Annexure 13	Disaster management plan & EEP
Annexure 14	Screenshot of EC amendment copy uploaded in our website
Annexure 15	PCCF letter

# 1. PROJECT DETAILS

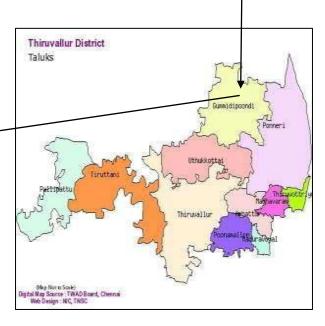
Name of the Project	Development of Industrial Park at Manallur
Name of the	M/s. State Industries Promotion Corporation of
Proponent	Tamil Nadu Ltd
Location	Manallur and Soorapoondi Villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu
EC. No	EC Obtained vide File No .21-59/2015-IA.III Dated: 10.11.2020 EC copy enclosed as <b>Annexure 1.</b> EC Amendment copy enclosed as <b>Annexure 2</b>
Total Plot Area	279.995Ha (691.587Acres)
	Construction phase: 63 KLD
Water	Operation phase: 5956 KLD
Requirements	(Fresh water- 685 KLD; TTRO Water- 3365 KLD (CMWSSB),
	Recycled water- 1906 KLD.
Project Cost	Rs. 353.28 Crores

## 2. LOCATION MAP









## 3. SITE PHOTOGRAPHS





# 4.0 HALF YEARLY ENVIRONMENTAL CLEARANCE COMPLIANCE STATEMENT (October 2024 – March 2025)

### A. SPECIFIC CONDITIONS

S.NO	CONDITION	STATUS OF COMPLIANCE
1	The Environmental Clearance to the project is	Condition noted and will be complied.
	primarily under provisions of EIA	
	Notification, 2006. It does not amount 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.	
2	The project proponent shall abide by all the	Condition will be complied.
	commitments and recommendations made in	
	the Form-II, EIA and EMP report,	
	submissions made during Public Hearing and	
	also that have been made during their	
	presentation to EAC.	
3	No groundwater shall be used at any stage of	No ground water will be used for the
	project.	Project. Water Supply letter from
		CMWSSB is enclosed as <b>Annexure - 3.</b>
4	No waste water shall be discharged to the	Condition will be complied.
	rivers/streams or water bodies. The proponent	No waste water will be discharged to any
	shall utilize the treated effluent and sewage	water bodies. SIPCOT will mandate the
	for achieving zero discharge and scheme for	individual industries to adopt ZLD system
	the same shall be approved by CPCB and	and install STP / ETP as applicable & treat
	SPCB.	the sewage / effluent. Treated sewage will
		be used for flushing and green belt
		development as per the norms.
5	Permission from Irrigation Department for	Condition complied.
	obtaining surface water to be obtained.	Water Supply letter from CMWSSB is
	Consent to Operate shall not be issued	enclosed as <b>Annexure - 3.</b>
	without obtaining permission competent	
	authority for use of surface water.	
6	Detailed plan of expenditure with	Condition will be complied.
	implementation schedule to address issues	
<u> </u>		

	raised during Public Hearing shall be	
	prepared and submitted to the Regional	
	Office of this Ministry within three months.	
	The proponent shall adhere the strict	
	compliance of above plan to utilize funds as	
	per schedule.	
7	As per the Ministry's Office Memorandum F.	Conditions will be complied.
	No. 22-65/2017-IA.III dated 30 <sup>th</sup> September,	
	2020, the project proponent shall abide by all	
	the commitments made by them to address	
	the concerns raised during the public	
	consultation. The project proponent shall	
	initiate the activities proposed by them, based	
	on the commitment made in the public	
	hearing, and incorporate in the Environmental	
	Management Plan and submit to the Ministry.	
	All other activities including pollution	
	control, environmental protection and	
	conservation, R&R, wildlife and forest	
	conservation/protection measures including	
	the NPV, Compensatory Afforestation etc,	

## **B. STANDARD CONDITIONS**

part of EMP.

either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become

S.No	Conditions	Status of Compliance
I. Stat	utory Compliance	
1.	The project proponent shall prepare a Site-	Condition is being Complied.
	Specific Conservation Plan & wild life	Site specific wildlife conservation plan was
	Management Plan and approved by the Chief	submitted to the Principal Chief Conservator
	Wildlife Warden. The recommendations of	of Forest (PCCF) and Chief Wildlife Warden
	the approved Site- Specific Conservation	(CWLW), Tamil Nadu.
	Plan / Wildlife Management Plan shall be	The PCCF and CWLW reviewed the Report
	implemented in consultation with the State	and recommended the plan without any other

	Forest Department. The implementation	additional conditions.
	report shall be furnished along with the six-	Recommendation letter of PCCF and CWLW
	monthly compliance report (incase of the	dated: 21.09.2024 is attached as <b>Annexure</b> -
		18
	presence of schedule-I species in the study	18
	area).	
2.	The project proponent shall obtain the	Condition complied.
	necessary permission from the Central	There is no ground water drawl for the project
	Ground Water Authority, in case of drawl of	Water Supply letter from CMWSSB is
	ground water / from the competent authority	enclosed as <b>Annexure - 3.</b>
	concerned in case of drawl of surface water	
	required for the project.	
3.	All excavation related dewatering shall be	No ground water abstraction is proposed for
	as duly authorized by the CGWA. A NOC	the project. Water Supply letter from
	from the CGWA shall be obtained for all	CMWSSB is enclosed as <b>Annexure - 3.</b>
	dewatering and ground water abstraction	
4.	A certificate of adequacy of available power	Condition Noted.
	from the agency supplying power to the	
	project along with the load allowed for the	
	project should be obtained.	
5.	All other statutory clearances such as the	Condition will be Complied.
5.	All other statutory clearances such as the approvals for storage of diesel from Chief	Condition will be Complied.  Individual industries will be mandated to
5.		-
5.	approvals for storage of diesel from Chief	Individual industries will be mandated to
5.	approvals for storage of diesel from Chief Controller of Explosives, Fire Department,	Individual industries will be mandated to obtain all necessary statutory clearances and
5.	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department	Individual industries will be mandated to obtain all necessary statutory clearances and
5.	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project	Individual industries will be mandated to obtain all necessary statutory clearances and
	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities	Individual industries will be mandated to obtain all necessary statutory clearances and
	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent	Individual industries will be mandated to obtain all necessary statutory clearances and
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  The project proponent shall install system to carryout Ambient Air Quality monitoring for	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  The project proponent shall install system to carryout Ambient Air Quality monitoring for common / criterion parameters relevant to the	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  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	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been done and its monitoring report and
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  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 in reference to PM emission, and SO2	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been done and its monitoring report and photographs are enclosed as Annexure – 6 &
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  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 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been done and its monitoring report and
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  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 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the project	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been done and its monitoring report and photographs are enclosed as Annexure – 6 &
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  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 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the project area at least at four locations, covering	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been done and its monitoring report and photographs are enclosed as Annexure – 6 &
11. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  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 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been done and its monitoring report and photographs are enclosed as Annexure – 6 & Annexure 14.
II. Air	approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities  quality monitoring and preservation:  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 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.  Appropriate Air Pollution Control (APC)	Individual industries will be mandated to obtain all necessary statutory clearances and approvals.  Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been done and its monitoring report and photographs are enclosed as Annexure – 6 & Annexure 14.

	generating points including fugitive dust	
	from all vulnerable sources, so as to comply	
	rescribed emission standards.	photographs are enclosed as <b>Annexure – 6 &amp;</b>
		Annexure 14.
3.	Shrouding shall be carried out in the work	Condition will be Complied.
	site enclosing the dock/proposed facility	
	area. This will act as dust curtain as well	
	achieving zero dust discharge from the site.	
	These curtain or shroud will be immensely	
	effective in restricting disturbance from wind	
	in affecting the dry dock operations,	
	preventing waste dispersion, improving	
	working conditions hrough provision of	
	shade for the workers	
4.	Dust collectors shall be deployed in all	Not applicable. This is a Greenfield project
	areas where blasting (surface cleaning) and	limited to infrastructure development activities
	painting operations are to be carried out,	such as roads, drains, street lighting, and
	supplemented by stacks for effective	greenbelt development. No blasting (surface
	dispersion.	cleaning) or painting operations are involved.
5.	Diesel power generating sets proposed as	Not applicable. SIPCOT has not proposed the
	source of backup power should be of	installation of any diesel generator (DG) sets
	enclosed type and conform to rules made	as part of the infrastructure development for
	under the Environment (Protection) Act,	the industrial park. Individual industries
	1986. The height of stack of DG sets should	requiring backup power will install DG sets
	be equal to the height needed for the	within their premises, as per the norms.
	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.	
6.	A detailed traffic management and traffic	Condition noted.
	decongestion plan shall be drawn up to	
	ensure that the current level of service of the	
	roads within a 0.5 km radius of the project is	
	maintained and improved upon after the	
	implementation of the project. This plan	
	should be based on cumulative impact of all	

	development and increased habitation being	
	carried out or proposed to be carried out by	
	the project or other agencies in this 05 Kms	
	radius of the site in different scenarios of	
	space and time and the traffic management	
	plan shall be duly validated and certified by	
	the State Urban Development department and	
	the P.W.D./competent authority for road	
	augmentation and shall also have their	
	consent to the implementation of components	
	of the plan which involve the participation of	
	these departments.	
III. Wa	nter quality monitoring and preservation	
1.	Total shall not exceed the proposed	Condition will be complied.
	requirement as provided in the project	Water Supply letter from CMWSSB is enclosed
	details. Prior permission from competent	as Annexure - 3.
	authority shall be obtained for use of fresh	
	water.	
2.	Sewage Treatment Plant shall be provided to	SIPCOT has not proposed any common STP for
	treat the wastewater generated from the	the project. Individual industries within the
	Project. Treated water shall be reused for	industrial park will adopt ZLD system and
	horticulture, flushing, backwash, HVAC	install their own STPs to treat the wastewater
	purposes and dust suppression.	generated within their premises. The treated
		water will be reused for their utilities in
		compliance with the norms prescribed by the
		CPCB / TNPCB.
3.	A certificate from the competent authority	SIPCOT will mandate all individual industries
	for discharging treated effluent/ untreated	within the industrial park to adopt Zero Liquid
	Effluents into the Public sewer/	Discharge (ZLD) systems. Accordingly, there
	disposal/drainage systems along with the	will be no discharge of treated or untreated
	final disposal point should be obtained.	effluent into any public sewer or drainage
		system. The treated water will be reused within
		the respective industrial units for their process
		and utility requirements, in compliance with
		TNPCB regulations.
4	No diversion of the natural course of the	Not applicable. There is no notified water body
	river shall be made without prior permission	present in the site.
	from the Ministry of Water resources.	

IV. Noi	ise monitoring and prevention:	
1	Noise level survey shall be carried as per	Condition is being complied.
	the prescribed guidelines and report in this	Ambient Noise level survey has been carried
	regard shall be submitted to Regional Officer	as per the prescribed guidelines and the report
	of the Ministry as a part of six-monthly	is submitted to RO of the ministry along with
	compliance report	six monthly compliance report and the same
		is enclosed as <b>Annexure - 6.</b>
		Monitoring photograph is enclosed as
		annexure 14
2	Noise from vehicles, power machinery and	Condition Noted.
	equipment on-site should not exceed the	Noise generation in the site will be
	Prescribed limit. Equipment should be	maintained within prescribed limit.
	regularly serviced. Attention should also be	Noise quality monitoring report and
	given to muffler maintenance and enclosure	photograph is enclosed as Annexure - 6 &
	of noisy equipments.	Annexure 14
3	Acoustic enclosures for DG sets, noise	Condition Noted.
	barriers for ground-run bays, ear plugs for	Noise quality monitoring report and
	operating personnel shall be implemented as	photograph is enclosed as Annexure 6 &
	mitigation measures for noise impact due to	Annexure 14.
	ground sources.	
4	The ambient noise levels should conform to	Individual member units will be instructed to
	the standards prescribed under E(P)A Rules,	follow all applicable rules and guidelines.
	1986 viz. 75 dB (A) during day time and	Ambient Noise level survey is being carried
	70 dB (A) during night time.	out and the report is attached as <b>Annexure-6.</b>
		Monitoring photograph is enclosed as
		Annexure - 14.
V. Ene	rgy Conservation measures:	
1	Provide solar power generation on roof	Condition Noted.
	tops of buildings, for solar light system	
	for all common areas, street lights, parking	
	around project area and maintain the same	
	regularly;	
2	Provide LED lights in their offices and	Condition Noted.
	residential areas	LED lights will be provided in SIPCOT
		office and residential areas.
	VI. Waste management:	
1	Necessary arrangements for the treatment of	Condition Noted.

the effluents and solid wastes must be made Individual industries within	41
	•
	naking necessary
the standards laid down by the competent arrangements for the treat	tment of effluents
authorities including the Central or State and solid wastes.	
Pollution Control Board and under the	
Environment (Protection) Act, 1986.	
2 The solid wastes shall be managed and Condition Noted.	
disposed as per the norms of the Solid Individual member units w	vill be instructed to
Waste Management Rules, 2016. follow all applicable rules a	and guidelines.
3 Any wastes from construction and demolition Condition noted.	
activities related thereto shall be managed so Individual member units w	vill be instructed to
as to strictly conform to the Construction and follow all applicable rules a	and guidelines.
Demolition Waste Management Rules, 2016	
4 A certificate from the competent authority <b>Condition Noted.</b>	
handling municipal solid wastes should be	
obtained, indicating the existing civic	
capacities of handling and their adequacy to	
cater to the M.S.W. generated from project.	
5 Used CFLs and TFLs should be properly Condition will be complied	d.
collected and disposed off/sent for recycling   Individual member units wi	
as per the prevailing guidelines/ rules of the follow all applicable rules a	and guidelines.
regulatory authority to avoid mercury	
contamination.	
VII. Green Belt:	
1 An overall green area of at-least 33% of the Condition will be Complied	2d
Industrial Area should be developed with Minimum 33% of indust	
native species. The project proponent of the developed as greenbelt	
Industrial Area shall comply with the indigenous species, as p	
additional commitment made by them in the layout.	per the approved
EIA report regarding the development of	
green belt	1. 1
The Industrial Areas are directed to Condition and will be Con	_
accordingly allocate the area to be developed Industrial units will be ins	-
as green cover to respective individual green belt in 33 % of allot	tted area.
industrial units so as to achieve the above	
mentioned condition.	

3	The individual industrial unit, at the time of	Condition noted.
	obtaining EC, shall bring a letter from the	
	Industrial Area for the area allocated to them	
	to be developed as green cover as a part of	
	obligation from the Industrial Area	
4	Wherever possible, plantations around the	Condition noted.
4	periphery of the Industrial Area, in the	Condition noted.
	downwind direction and along the road sides	
	shall be provided for containment of	
	pollution and for formation of a screen	
	between the industrial area and the outer civil	
	area. The choice of plants should include	
	shrubs of height 1 to 1.5 m and tree of 3 to 5	
	m height. The intermixing of trees and	
	shrubs should be such that the foliage area	
	density in vertical is almost uniform.	
5	The parameters like selection of plant	Condition noted.
	species, procedure for plantation, density of	
	tree plantation etc shall be as per the CPCB	
	guidelines.	
VIII. I	Public hearing and human health issues:	
1	Workers shall be strictly enforced to wear	Condition will be complied.
	personal protective equipments like dust	
	mask, Ear muffs or ear plugs, whenever and	
	wherever necessary/ required. Special	
	viscous-elastic gloves will be used by labour	
	exposed to hazards from vibration.	
2	Safety training shall be given to all workers	Condition will be complied.
	specific to their work area and every worker	
	and employee will be engaged in fire hazard	
	awareness training and mock drills which	
	will be conducted regularly. All standard	
	safety and occupational hazard measures	
	shall be implemented and monitored by the	
1		
	concerned officials to prevent the occurrence	
	of untoward incidents/ accidents.	
3	of untoward incidents/ accidents.	Condition Noted.
3	-	Condition Noted.  Disaster management plan is enclosed as

	(HIRA) and Disaster Management Plan shall	annexure -15
	be implemented.	anneaure -13
4	•	C. P.C. N. A. I.
4	Provision shall be made for the housing of	<b>Condition Noted</b>
	construction labour within the site with all	
	necessary infrastructure and facilities such as	
	fuel for cooking, mobile toilets, mobile STP,	
	safe drinking water, medical health care,	
	crèche etc. The housing may be in the form	
	of temporary structures to be removed after	
	the completion of the project.	
5	Occupational health surveillance of the	Condition Noted.
	workers shall be done on a regular basis.	
IX. Co	rporate Environment Responsibility:	
1.	The company shall have a well laid down	Condition complied.
	environmental policy duly approved by the	SIPCOT have a well laid environmental
	Board of Directors. The environmental	policy duly approved by the Board of
	policy should prescribe for standard	Directors of SIPCOT. Board Res
	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.	
2	A separate Environmental Cell both at the	Condition complied.
	project and company head quarter level,	A separate Environmental Cell with qualified
	with qualified personnel shall be set up under	personnel has been set up and it is attached as
	the control of senior Executive, who will	an Annexure – 8.
	directly report to the head of the	
	organization.	
3	Action plan for implementing EMP and	Condition will be complied.
	environmental conditions along with	
	responsibility matrix of the company shall be	
	Transfer 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	
4	Self-environmental audit shall be conducted	Condition Noted.
	annually. Every three years third party	
	Environmental audit shall be carried out.	
Miscell	aneous:	
1	The project proponent shall make public the	Condition complied.
	environmental clearance granted for their	SIPCOT have advertised in two local
	Project along with the environmental	newspapers in Tamil and English that we
	conditions and safeguards at their cost by	have obtained Environmental clearance from
	prominently advertising it at least in two	SEIAA /TN along with the details of SEIAA
	local newspapers of the District or State, of	website where it is displayed.
	which one shall be in the vernacular	
	language within seven days and in addition	Newspaper advertisement copy is enclosed as
	this shall also be displayed in the project	Annexure- 9.
	proponent's website permanently.	The screenshot of EC copy uploaded in
		SIPCOT website is enclosed as Annexure- 11
		<b>&amp;17</b> .
2	The copies of the environmental clearance	Condition Complied.
	shall be submitted by the project proponents	The copies of the environmental clearance are
	to the Heads of local bodies, Panchayat and	submitted to the Heads of local bodies,
	Municipal Bodies in addition to the relevant	Panchayat and Municipal Bodies in addition
	offices of the Government who in turn has	to the relevant offices of the Government.
	to display the same for 30 days from the	Acknowledgement copies are enclosed as
	date of receipt	Annexure- 10.
3	The project proponent shall upload the	Condition is being complied.
	status of compliance of the stipulated	SIPCOT uploaded the status of compliance of
	environment clearance conditions, including	the stipulated environment clearance
	results of monitored data on their website and	conditions along with monitoring data in our
	update the same on half-yearly basis.	website
		The screenshot of uploaded Half Yearly
_		

		compliance report in our website is enclosed
		as Annexure- 12.
4	The project proposent shall submit six	
4	The project proponent shall submit six-	Condition is being complied.
	monthly reports on the status of the	SIPCOT submit six-monthly reports on the
	compliance of the stipulated environmental	status of the compliance of the stipulated
	conditions on the website of the ministry of	environmental conditions on the website of
	Environment, Forest and Climate Change at	the MoEF&CC at environmental clearance
	environment clearance portal.	portal and the same is enclosed as Annexure
		12.
5	The project proponent shall submit the	Condition is being complied.
	environmental statement for each financial	SIPCOT submitted the environmental
	year in Form-V to the concerned State	statement for each financial year in form V to
	Pollution Control Board as prescribed under	the SPCB.
	the Environment (Protection) Rules, 1986, as	Acknowledgement from TNPCB on
	amended subsequently and put on the	submission of Form V is enclosed as
	website of the company.	Annexure- 13.
6	The criteria pollutant levels namely; PM2.5,	Condition will be complied.
	PM10, S02, NOx (ambient levels) or critical	Air quality monitoring report and monitoring
	Sectoral parameters, indicated for the project	photograph is enclosed as Annexure 6 &
	shall be monitored and displayed at a	annexure 14,
	convenient location near the main gate of the	·
	company in the public domain.	
7	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.	
8	The project authorities must strictly adhere to	Condition Noted.
	the stipulations made by the State Pollution	Condition Folds
	Control Board and the State Government.	
9		Condition Noted.
9	The project proponent shall abide by all the	Condition Noted.
	commitments and recommendations made in	
	the EIA/EMP report, commitment made	
	during Public Hearing and also that during	
	their presentation to the Expert Appraisal	
	Committee.	

10	No further expansion or modifications in the	Condition Noted.
	Industrial Area shall be carried out without	
	prior approval of the Ministry of	
	Environment, Forests and Climate Change	
	(MOEF&CC)	
11	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	
12	The Ministry may revoke or suspend the	Condition Noted.
	clearance, if implementation of any of the	
	above conditions is not satisfactory.	
13	The Ministry reserves the right to stipulate	Condition Noted.
	additional conditions if found necessary. The	
	Company in a time bound manner shall	
	implement these conditions.	
14	The Regional Office of this Ministry shall	Condition Noted
	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.	
15	The above conditions shall be enforced,	Condition Noted.
	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.	
16	Any appeal against this EC shall lie with the	Condition Noted.

National Green Tribunal, if preferred, within	
a period of 30 days as prescribed under	
Section 16 of the National Green Tribunal	
Act, 2010.	
	National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant amendment in the environmental clearance granted vide letter no. F.No.21-59-2015-IA.III dated 10.11.2020 by the Ministry for 'Development of Industrial Park over an area of 279.995 Ha (691.587 Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu by M/s State Industries Promotion Corporation of Tamilnadu Limited (SIPCOT)' under the EIA Notification, 2006 as amended, subject to strict compliance of the following specific conditions mentioned at Annexure-I.

### **Annexure- I - Specific Conditions**

S.NO	CONDITION	STATUS OF COMPLIANCE
i.	The PP to prepare and implement a Conservation Plan/Species Habitat Restoration Plan for the 39 Schedule-I species in consultation with State Forest Department and the same shall be submitted to the concerned IRO of MoEFCC for monitoring of implementation in along with first 6 monthly compliance report.	Currently construction activities have not yet commenced, the condition will be complied during the start of construction activities and reported in the subsequent six-monthly compliance report
ii.	The PP shall maintain a minimum 50 mtrs wide green belt along the boundary inside the industrial estate towards habitations.	Condition noted and will be complied.
iii	. The red category industries proposed in the Industrial Park layout has to be relocated 500 mtrs from the habitation area located nearby the industrial estate so that the habitations at all sides shall be at a minimum of 500m away from the proposed redcategory industries.	Condition noted and will be complied.
iv.	The proponent has to comply with the Ministry's OM no. J-11011/321/2016-IA.II(I), dated 27.04.2018 which made it mandatory for certain type of industries to conduct public hearing irrespective of their location within Industrial Area or outside the industrial area.	Condition noted and will be complied.
v.	The proposed individual units need to take Environmental Clearance separately as per the applicability of the schedule of EIA Notification, 2006.	Condition noted and will be complied.

vi.	Conservation and mitigation action plan prepared by M/s Salim Ali Centre for Ornithology and Natural History (SACON) for all schedule-I species and other wildlife species shall be implemented in consultation with the State Forest Department; the status of the implementation shall be submitted to the IRO, MoEF&CC along with the 6 monthly EC Compliance report.	Condition noted and will be complied.
vii.	The recommendations of the PCCF and CWLW vide letter no.WL5/HOTNFD/305/2024 dated 21.09.2024 shall be implemented and the status of the implementation shall be submitted to the IRO, MoEF&CC along with the 6 monthly EC Compliance report.	Condition noted and will be complied.
viii.	Pulicat Bird Sanctuary is located at a distance of ~5.77km in the direction of NE direction from the proposed project site. Standing Committee of National Board for WILD life has recommended the proposal vide letter no.WL-6/16/2024-WL dated 7th February, 2021. Based on the recommendation of the NBWL office of the Principal Chief Conservator Forests(HoFF),Chennai granted the No objection certificate vide letter Ref No.WL5/24360/2023 dated 12.02.2024. All the recommendation made in the Standing Committee of National Board for Wild life shall be submitted to the IRO, MoEF&CC along with the 6 monthly EC Compliance report.	Condition noted and will be complied.
ix.	PP to prepare and implement a Conservation Plan/Species Habitat Restoration Plan for the 39 Schedule-I species in consultation with State Forest Department and thesame shall be submitted to the concerned IRO of MoEFCC for monitoring of implementation in along with first 6 monthly compliance report.	Condition noted and will be complied.  Currently construction activities have not yet commenced, the condition will be complied during the start of construction activities and reported in the subsequent six-monthly compliance report
х.	Enhancement of the Environmental Management Plan budget i.e., revision in the amount for activities like desilting of the lakes, creation of mounds within lake; within the Industrial Area, peripheral multilayered greenbelt of 15m with some herbs and shrubs (considering the nearby flora and fauna) to be provided along the project	Condition noted and will be complied.

xi.	boundary with atleast 50 mtr wide green belt around the water bodies and lake boundaries and human settlements nearby the project boundary. Revision of activities budget shall be done in consultation with SFD and same shall be communicated to IRO of the Ministry.  Project Proponent shall strive to enhance the Green Belt beyond 33% and that the trees	Condition noted and will be complied.
	planted in this regard would be planted under the campaign" एक _□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	
xii.	As proposed, the overall area of 106.575 Ha(38.07% of the developable area) shall be maintained as a green belt/green area, in which 65.572 ha (23.42%) will develop individual industrial plot area (33% by industries), and an area of 41.003ha (14.65%) will be developed by the SICOT. The Green belt and green space shall be maintained with a thick plantation.	Condition noted and will be complied.
xiii.	Water demand during development/ construction should be reduced by use of premixed concrete, curing agents and other best practices referred.	Condition noted and will be complied during constructional phase.
xiv.	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Condition noted and will be complied.
xv.	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 and should be operated only during nonpeak hours.	Condition noted and will be complied.
xvi.	Any hazardous waste generated during development/ construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.	Condition noted and will be complied.
xvii.	The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted along with the six	SIPCOT has not proposed any Sewage Treatment Plant (STP) for the project. Individual industries will be mandated to adopt Zero Liquid Discharge (ZLD) systems

	monthly EC compliance report to the concern IRO of the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problems from STP.	and install their own STPs to treat the sewage generated within their premises. The treated sewage will be reused for flushing and greenbelt development, in accordance with applicable norms and regulatory requirements.
xviii.	Sewage shall be treated in the STP with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing and landscaping.	SIPCOT has not proposed any Sewage Treatment Plant (STP) for the project. Individual industries will be mandated to adopt Zero Liquid Discharge (ZLD) systems and install their own STPs to treat the sewage generated within their premises. The treated sewage will be reused for flushing and greenbelt development, in accordance with applicable norms and regulatory requirements.
xix.	As proposed the industrial estate shall	Condition will be complied.
	ensure the individual industries will have their own Effluent Treatment Plants and will be mandated to ensure Zero Liquid Discharge concept as per CPCB/TNPCB guidelines.	No wastewater will be discharged to any water bodies. Individual industries will be mandated to install ZLD system and to install STP / ETP as applicable & treat the sewage / effluent. Treated sewage will be used for their process or utilities.
XX.	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.	SIPCOT has not proposed any Sewage Treatment Plant (STP) for the project. Individual industries will be mandated to adopt Zero Liquid Discharge (ZLD) systems and install their own STPs to treat the sewage generated within their premises. The treated sewage will be reused for flushing and greenbelt development, in accordance with applicable norms and regulatory requirements.
xxi.	No sewage or untreated effluent water would be discharged through storm water	Condition will be complied.  No wastewater will be discharged to any
	drains.	water bodies. Individual industries will be mandated to install ZLD system and to install STP / ETP as applicable & treat the sewage / effluent. Treated sewage will be used for their process or utilities.
xxii.	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants. Frequent monitoring of groundwater and surface water will be done to ensure that the quality of water is being maintained within the norms the report of the same shall be submitted to the concern IRO, MoEF&CC along with the six monthly EC&CRZ	Presently there is no construction at site. Soil and ground water Quality monitoring has been done and its monitoring report and photographs are enclosed as <b>Annexure – 6 &amp; Annexure 14.</b>

	compliance road.	
xxiii.	The PP shall construct a garland drain, with catch pits of appropriate capacity at appropriate distance, all around the industrial estate and also around the water bodies falling with in project boundary to prevent runoff of any contaminants/ waste into the nearby water bodies. The garland drains shall be designed such that the runoff within the boundary of the industrial area is collected in the garland drains, which shall be treated appropriately, conform to CPCB standards.	Condition noted and will be complied
xxiv.	Rain water harvesting for roof run-off and surface run- off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging shall be kept at least 4 m above the highest ground water table.	Condition noted and will be complied
xxv.	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six-Monthly Monitoring reports.	Condition noted and will be complied
xxvi.	Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board/CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.	Ground water quality monitoring has been done and its monitoring report and photographs are enclosed as Annexure – 6 & Annexure 14.
xxvii.	Ambient air quality monitoring stations should be established in the downward directions as well as where maximum ground level concentration of PM10, PM2.5, SO2 and NOx are anticipated in consultation with SPCB within and outside the industrial estate area at least at four locations (one within and three outside the port area at an angle of 120° each), covering upwind and downwind directions. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points	Condition is being Complied.  Presently there is no construction at site.  Ambient Air Quality monitoring has been done and its monitoring report and photographs are enclosed as Annexure – 6 & Annexure 14.

xxviii.	including fugitive dust from all vulnerable sources, so as to comply prescribed fugitive emission standards. Date on ambient air quality and emission shall be regularly submitted to the IRO, MoEF&CC along with the six monthly EC&CRZ compliance road.  Installation of Ambient Air Quality data shall display unit for public display.	Condition is being Complied.  Presently there is no construction at site.
		Ambient Air Quality monitoring has been done and its monitoring report and photographs are enclosed as <b>Annexure</b> – 6 & <b>Annexure</b> 14.
xxix.	The total renewable energy capacity will be up to solar power shall be explored and accordingly plan shall be submitted to IRO of the Ministry in its first six monthly compliance report. And, progress of implementation of this plan be submitted in subsequent 6 monthly compliance reports. Apart from this SIPCOT shall ensure that individual industries utilize at least 10% of their total power requirement through renewable energy like solar etc.	Currently construction activities have not yet commenced, the condition will be complied during the start of construction activities and reported in the subsequent six-monthly compliance report
XXX.	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.	Condition Noted.
xxxi.	The project should not amend or alter the pathways of the natural streams or creeks/nallah flowing.	Condition noted and will be complied
xxxii.	Red category industrial units to be avoided near residential areas and habitations and water bodies. A distance of approximately 500 meters shall be maintained for the establishment of red category industry from the residential area.	Condition noted and will be complied
xxxiii.	Compliance of the directions of Hon'ble NGT in the matter of D. Ranjith Kumar Versus Union of India with G. Praveena Versus Union of India. Appeal No. 32 of 2020 (SZ) With Appeal No. 34 of 2020 (SZ) Judgement dated 30th September 2022 to be ensured.	Condition noted and will be complied
xxxiv.	Based on the Socio, Economic and Demography study prepare Environment Management Plan to improve the life of the Communities around the Project with	Condition noted and will be complied

	measurable indicators.	
xxxv.	The land related issues and any compensation, R&R issues have to be resolved. Further, justification required from the PP regarding the rectification of the project or resolution of the public opinions if any and written clarification from the gram sabha to be submitted by the PP to avoid any complications in the future.	Condition noted and will be complied
xxxvi.	All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to RO, MoEF&CC along with half yearly compliance report.	Condition noted and will be complied
xxxvii.	As per the Ministry's Office Memorandum F.No.22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry along with 6 monthly compliance report.	Condition noted and will be complied
xxxviii.	All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory Afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.	Condition noted and will be complied

### 5. ENVIRONMENTAL CLEARANCE SIX MONTHLY REPORTS

It is mandatory to submit six-month compliance report to MoEF&CC Regional Office by the proponent for the purpose of obtaining six month compliance certificate the environmental monitoring was carried out at site by M/s. Hubert Enviro Care Systems Pvt. Ltd an NABL accredited laboratory for 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 matter (PM2.5), Sulphur dioxide, Oxides of Nitrogen (NO<sub>X</sub>) and Carbon monoxide were monitored. The test report of ambient air quality recorded during the month of October 2024 – March 2025and it is attached as **Annexure-6.** 

#### **5.2** Ambient Noise Level Monitoring

Ambient Noise level was Monitored and the test report of ambient noise recorded during the month of October 2024 – March 2025it is attached as **Annexure - 6.** 

### 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. it is attached as **Annexure -6**.

#### 5.4 Ground Water Quality Monitoring

Ground water was collected and analyzed for various water quality parameters during the period of October 2024 – March 2025. The test report is attached as **Annexure - 6.** 

#### 5.5 Surface Water Quality Monitoring

The surface water samples were collected and analyzed during the period of October 2024 – March 2025 The test report of surface water collected and analyzed is enclosed as **Annexure - 6.** 

Environmental monitoring photographs are enclosed as **Annexure 14.** 

## 6. CONCLUSION

- 1. The environmental monitoring was carried out at site during the period of October 2024 March 2025.
- 2. All the conditions stipulated in Environmental Clearance are being / 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.: 21-59/2015-IA.III

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan, Jor Bagh Road, Ali Ganj New Delhi – 110 003

Dated: 10th November, 2020

To

The Managing Director,

State Industries Promotion Corp. of Tamil Nadu Ltd. (SIPCOT), 19/A, Rukmani Lakshmipathy Road, Egmore, Chennai - 8

Subject: Development of Manallur Industrial Park in Gummidipoondi Taluk of District Thiruvallur, Tamil Nadu by M/s State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited – Environmental Clearance

Sir,

This has reference to your online proposal to this Ministry on 24<sup>th</sup> December, 2019 regarding Environmental Clearance for Development of "Industrial Park at Manallur and Soorapoondi villages of Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu State" over an extent of 279.99.5 Ha (691.587 Acres) area at Manallur and Soorapoondi villages,Gummidipoondi Taluk, Thiruvallur District.

- 2. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other Miscellaneous projects in its 241st meeting on 25-26th August, 2020.
- 3. The project proponent along with the EIA consultant M/S Hubert Enviro Care Systems (P) Ltd., Chennai, made a presentation through Video Conferencing and provided the following information:
- (i) Brief description of the Proposal: M/s State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited had proposed the development of a Industrial Park at Manallur and Soorapoondi villages of Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu State" over an extent of 279.99.5 Ha (691.587 Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District. The ToR for the proposal was issued on 22<sup>nd</sup> July 2015, and its extension issued on 13th November, 2018. The required EIA studies were undertaken including conduct of Public Hearing on 03/07/ 2019. The project was earlier taken in 230<sup>th</sup> EAC meeting on 28 29 January, 2020. The EAC had raised queries and based on the queries, the EAC suggested for submission of revised EIA report. The extant proposal falls under Schedule 7 (c), Category A under EIA Notification, 2006.
- (ii) Nature of project (New/Expansion/Amendment/Extension etc.): New Project.
- (iii) Whether the proposal was considered in earlier meetings of EAC: If yes, provide date of EAC meeting and reasons for deferment, if any: The project was taken in 230<sup>th</sup> EAC meeting for Projects related to Infrastructure Development, Industrial estate/parks/complexes/areas, Export Processing Zones, Special Economic Zones, Biotech



Parks, Leather Complexes and National Highways projects held on 28 - 29 January, 2020. The EAC has raised queries and based on the queries, the EAC suggested revising the EIA report and submitting.

- (iv) Whether proposal is part of interlinked project: If yes, provide details in brief: No.
- (v) Address of project site (Plot No./Village/ Tehsil/ District/State): Plot No: Manallur village Survey No. 203/1, 204/2, 207/2, 208, 209/1, 209/3, 210/1, 210/3, 211, 212/1, 212/3, 213, 214, 215, 216/1, 216/3, 217/1, 217/3, 218/1, 218/3, 219/1, 220/1, 223/4, 224, 225/1, 226/1, 227/1, 227/3, 228, 229, 230, 231, 232, 233/1, 234/1, 234/3, 235/3, 236, 237/1, 237/3, 238, 239, 240, 241, 242, 243, 244, 245, 248, 249, 250, 252, 253, 270/1, 270/8, 274/1, 274/29; Soorapoondi Village Survey No. 1, 2, 3, 4, 5, 6/2, 9/1, 9/3, 9/5, 9/6, 9/11, 10/4, 10/9, 12/2, 12/3, 12/4, 12/5, 12/6, 12/7, 12/8, 12/9, 12/10, 12/11, 12/12, 12/13, 12/14, 12/15, 12/16, 12/17, 13/1, 13/2, 13/3, 13/4, 13/5, 13/6, 13/7, 13/8, 13/9,15, 16/1, 37/1, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49; Taluk: Gummidipoondi, District: Thiruvallur, State: Tamil Nadu.
- (vi) **Geo-coordinates of project site:** Latitude: 13°26'54.55"N (From 13.44295446 to 13.44596133); Longitude: 80°01'34.32"E (From 80.03484487 to 80.01417061)
- (vii) Area (ha)/Length (km) of the proposed project: 279.99.5 Ha (691.587 Acres)
- (viii) Connectivity to the site: Madharappakkam- Gummidipoondi Road is adjacent to site Chennai –Kolkata Highway (NH-5) at a distance of ~8.04 km towards E.
  - (ix) Investment/Cost of the project: The total cost of the project is ₹250 Crores.
  - (x) Item of Schedule to the EIA Notification, 2006: The proposed project is categorized under Schedule 7 (c), Category A of EIA Notification, 2006.
  - (xi) Applicability of General/Specific Conditions as per EIA Notification, 2006: Interstate Boundary TN AP is situated at ~3.13 Km (towards NNW) from the project boundary and Pulicat lake bird Sanctuary ~5.77 Km (towards NE).
  - (xii) Whether project involves any violation under notification S.O 804(E) dated 14.03.2017: Not applicable.
- (xiii) Landuse/Landcover of project site in tabular form:

S. No	Land use/Land cover	Area (Ha)	Area (%)	Remarks
01.	Plotted area (including 25% green belt in plotted area)	193.01	68.93	<ul> <li>19. 41 Ha (47.95 Acres) for 5 (f) - Non pharma - Synthetic acrylic polymers and resins, water proofing compounds and synthetic adhesives etc.</li> <li>92.11 Ha (227.51 Acres) for Non EC Category-E vehicle and its components manufacturing.</li> <li>81.49 Ha (201.27 Acres) for Non EC category - Automobiles and accessories industries, Engineering and fabrication Plastics industries etc.</li> </ul>
02.	Common amenities	5.603	2.0	
03.	Commercial activities	5.603	2.0	
04.	Solid Waste Management	9.741	3.48	
05.	Roads, Storm water drain	15.733	5.63	

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	Total plot area	279.995	100	
07.	Green belt area (road side, periphery)	22.305	7.96	
	OSR (To be developed as green belt)	28.00	10	

# (xiv) Landuse/Landcover around 10 km radius of project site (1 km in case of Highway projects):

S. No	Land use/Land cover	Area (Ha)	Area (%)
1.	Cropland	22444	
2.	Plantation	3445	54.42
3.	Fallow land		8.35
4.	Forest Plantation	3104	7.53
5.		2348	5.69
	Scrub land	2063	5.00
6.	Forest, Deciduous	1811	4.39
7.	Rural	1718	4.17
8.	Reservoirs/ Lakes/ Ponds	1654	4.01
9.	Urban	1429	
10.	Coastal Wetland	910	3.47
11.	Scrub Forest	226	2.21
12.	River/ Stream/ Canals		0.55
13.	The state of the s	46	0.11
J.	Sandy area	42	0.10
	Total	41240	100

# (xv) List to industries to be housed with the proposed project site, only for projects covered under 7(c) category of EIA Notification, 2006:

S. No.	Industry sector	Type of Industry	As per EIA notification 2006 and its amendments		Area details
1.	FG G		Schedule	Category	
	EC Category – Chemical: Non	Synthetic acrylic polymers and resins	5(f)	A	10 % of plotted area – 47.95
2.	Pharma	Synthetic resins and water proofing compounds	5(f)	A	Acres (19.41 Ha)
3.	Non EC category- E Vehicle and its	Electronic and electrical parts manufacturing industries	Nil	Nil	47.72% of plotted area -
4.	components manufacturing industries	Electronic and electrical parts assembling industries	Nil	Nil	227.51 Acres (92.11 Ha)
5.		Tyre, tube and rubber Components	Nil	Nil	42.28 % of plotted area -



6.	Non EC category-Chemical	Synthetic detergents and soaps (excluding formulation) having waste water generation < 100KLD	Nil	Nil	201.27 Acres (81.49 Ha)
7.		Paints and varnishes (mixing & blending)	Nil	Nil	
8.		Printing ink manufacturing	Nil	Nil	
9.		Spray painting, paint baking, paint shipping	Nil	Nil	
10.	Non EC	Automobile manufacturing	Nil	Nil	
11.	Automobile & accessories	Automobile parts manufacturing	Nil	Nil	
12.	Manufacturing Non EC category-	Foundry units <5	Nil	Nil	
13.	Engineering & Fabrication	Steel and steel products using furnaces	Nil	Nil	
14.	Fabrication	Fabrication Industries – dry process	Nil	Nil	
15.	Non EC		Nil	Nil	
16.	Glass and Ceramics		Nil	Nil	
17.		Glass ceramics, earthen potter and tile manufacturing	Nil	Nil	
18.	Non EC category-		Nil	Nil	
19.		Polythene and plastic	Nil	Nil	

- (xvi) **Terrain and topographical features:** The site is a plain terrain. Elevation of site is 28 m AMSL. The site is mostly barren land with some trees. There are no water bodies within the site.
- (xvii) Details of water bodies, impact on drainage, if any: There are no water bodies within the site. But there are two water bodies adjacent to the site. One towards the south and other on the East. There will not be any impact on the nearby water bodies or the drainage. Storm water drains will be provided along the road and rainwater harvesting pits are proposed for the project.
- (xviii) Water requirements, sources (during construction and operation phases) and NOC: Construction phase: Water requirement is estimated to be 63 KLD. Source will be private tankers. Operation phase: Total water requirement 8627 KLD, Fresh water 900 KLD



- (CMWSSB), TTRO water- 4339 KLD, (CMWSSB) Recycled water 3388 KLD, Source: Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB).
- (xix) Groundwater extraction/usage and NOC/Clearance from CGWA/State Ground Water Department: Not applicable. Water requirement will be met from CMWSSB and recycling of treated wastewater.
- (xx) ToR details: File No.: 21-59/2015-IA.III, Proposal No.: IA/TN/NCP/27117/2015, Date of ToR Application Submission: 13 Mar 2015, Date of EAC Meeting (Infra-1): 147<sup>th</sup> EAC meeting held on 23<sup>rd</sup> - 24<sup>th</sup> April, 2015, Date of ToR Issue: 22<sup>nd</sup> July, 2015.
- Public Hearing Details and Summary of issues raised and response/commitments by Proponent: The public hearing was conducted on 03/07/2019 at K.V.C. Mahal, Sathyavedu Road, Madharapakkam, Gummidipoondi Taluk, Thiruvallur District under the supervision of District Collector. The Project was appraised in 230th EAC meeting on 28-29th January, 2020. Following are the Summary of issues raised and response/commitments given by the Proponent:

S. No	Category of issues raised	Response / Commitment by proponent	Remarks if any
1	Employment opportunity	Skill development centre will be established for providing training related to E-Vehicle/ auto components repairing, etc to local people at cost of Rs.25 lakhs	SIPCOT will earmark ₹3.75 crores for undertaking the following CER Activities in Manallur, Soorapoondi Ramachandrapuram,
2	Proposed development will lead to Health issues in nearby areas	Health camps will be conducted once in six months by SIPCOT at Manallur and Soorapoondi villages to ensure the health condition of local people. The cost for the same will be around Rs.15 Lakhs.	Madharapakkam, Sathyavedu, Irukulam villages:  Construction of toilets Providing water supply and sewerage system Conducting Health camps Desliting of two nearby
3	Adequate toilet facilities are not available	10 no. of common toilets will be constructed. 5 Nos at Manallur Village and 5 Nos at Soorapoondi village. Total cost recurred towards construction, operation and maintenance of 10 common toilets will be Rs. 25 Lakhs.	<ul> <li>lakes</li> <li>PC with a printer and scanner to the Government schools.</li> <li>Drinking water dispensers for the Government schools.</li> </ul>
4	Water availability is a problem in the areas  75 KLD of water will be provided for Manallur villages by SIPCOT along with 75 KLD water storage tank also Sewerage system will be provided. Cost towards the same will be around Rs.50 Lakhs		<ul> <li>Class room furniture for the Government schools.</li> <li>Sports equipments for the Government schools.</li> <li>Solar lighting facilities for the Government schools.</li> <li>Providing Modical</li> </ul>
5	Desilting has not been done in two	Desilting will be undertaken in the nearby 2 lakes. The Cost for same will be around Rs.15 lakhs	Providing Medical equipments for primary health centre.



	lakes near project site		Providing trolleys to Local Panchayat for transport of  Municipal Solid Waste
6	No approach to burial ground	As per the Thiruvallur Collector Letter dated 10.06.2019, the burial ground is excluded from the proposed Industrial Park area and SIPCOT will provide and maintain access road for the burial ground	Municipal Solid Waste  Solid Waste Disposal Bins  Construction of Rainwater Harvesting Pits  Avenue Plantation  Solar lighting facilities  Scientific Support/Awareness to farmers  Skill development for youth

- (xxii) Whether the project involves diversion of forest land and status of the forest clearance: Not applicable.
- (xxiii) Whether the project is located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc.: Pulicat Bird Sanctuary is located 5.77 km (NE) from the project site. No Objection Certificate (NOC) from National Board for Wildlife (NBWL) has been applied.
- (xxiv) Whether the project is located within the Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC: The project site is not located within any Eco-Sensitive Zone or Eco-Sensitive Area notified by MoEF&CC.
- (xxv) Waste Management: M/s State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited will handles and disposes various waste generated in the following ways:
  - Sewage generation- 210 KLD. Individual industries will be mandated to provide STP for recycling of treated sewage for green belt development
  - Effluent generation -3472 KLD Individual industries will be mandated to provide ETP to achieve Zero Liquid Discharge concept. Treated effluent will be recycled by industries for process and utilities. The rejects from RO will be treated by individual industries in ATFD and salt will be disposed as hazardous waste. ATFD condensate will be recycled for utilities/ process.

Following are the Municipal Solid Waste Generation and Management plan:

S. No.	Waste type	Construction phase (kg/day)	Operation phase (kg/day)	Management measure (for operational phase)
1	Organic waste	13.5	1350	MSW in Industrial Plots:  SIPCOT will mandate all the
2	Inorganic waste	9	900	industries to manage the Municipal Solid generated by them within their premises as per norms.  Municipal Solid wastes will be segregated by individual industries.



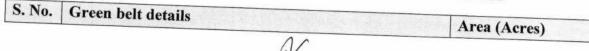
3 Total	22.5	2250	
			Organic wastes will be composted by vermi composting and compost will be used as manure for green belt development. Inorganic waste will be sold to TNPCB authorized recyclers
		38	SIPCOT has earmarked 24.060 Acres of land for establishment of Solid Waste Management facility
			MSW in area apart from Industrial Plots:
			as organic and inorganic wasted Organic wastes will be composted by individual industries in Organ Waste Convertor or Bimethanation plant and used for green belt development. Inorganic wastes will be sold to TNPC authorized recyclers by the industries.

Norms: waste generation @0.45 Kg/capita/day.

Population for construction phase - 50 nos. operation phase - 5000 nos. As a provision to have in house and independent Solid Waste Management facility 24.060 Acres (3.48% of Industrial Park area) has been earmarked for Solid Waste Management Facility. In future, based on need, SIPCOT will float tender and provide land to private players for the establishment of Municipal Solid Waste Management facility on BOOT basis. Hazardous waste generation and Management: Individual industries, will have their own storage area for storing Hazardous waste, within their premises and the hazardous wastes will be sent to TNWML for recycling /disposal as per the Hazardous and other Wastes (Management and transboundary movement) amended rules 2016.

- (xxvi) CETP/STP details: Not applicable. Individual industries will be mandated to provide ETP/STP. Treated sewage will be recycled for green belt development and flushing by
- (xxvii) Details of tree cutting and Green belt development: The trees available at site are Mango, Coconut, Guava, Sappota, Eucalyptus, amla, Neem, Cashew, Banyan, Papaya, Palm, Teak and Naga. The trees along the periphery of the site and in OSR area will be preserved as such. If not possible the trees will be uprooted and planted along the green belt area allotted at site. In case of necessity to cut the trees by individual industries in their plots, the industry will plant additional 3 trees for cutting one tree as compensation in their greenbelt area. Greenbelt area is 243.437 Acres (35.20% of total area of Industrial Park).

Following are the proposed Green belt area breakup within the Industrial Park:





69.160 119.18
15.94
39.157
243.437
243.437

- (xxviii) Energy conservation measures with estimated saving: Solar lighting is proposed for 70% of lighting along the roads. The estimated solar power generation would be around 40KW. Apart from this, individual industries will be insisted to provide roof top solar panels to reduce power consumption.
  - (xxix) Parking requirement with provision made: 100 Sq.m areas will be allotted for parking in the common amenities. Upon establishment of the Industrial Park, individual industries will have their own parking area within the industrial plots.
  - (xxx) **Details of Rain Water Harvesting:** Rainwater harvesting pits are proposed in common amenities, green belt area and roads for recharging the ground water table. Around 166 no of pits are proposed with 250mm dia and 1000mm depth. Apart from these individual industries will be mandated to provide rain water harvesting pits in their plots.
  - (xxxi) **Brief description of Socio-economic condition of local people:** Though agriculture is the main occupation of Thiruvallur district, being close to Chennai and fast industrialization has resulted in shift in the occupation pattern. Out of the total workers only 4.78% of workers are cultivators and 17.59% of workers are Agricultural labourers. The district has good number of public health systems accessible and affordable apart from the private health facilities. The project site is free from habitation. The entire extent of land (279.995 ha) is Government poramboke land and is already handed over to SIPCOT by Government of Tamil Nadu for development of Industrial Park. Hence, there is no Rehabilitation and Resettlement for this project.
  - (xxxii) Land acquisition and R&R issues involved: The entire land of 279.995 Ha has been allotted to SIPCOT. While obtaining ToR for the Industrial Park, the land area was considered as 303.75 Ha (300.765 Ha of poramboke land and 2.985 Ha of patta land) based on the administrative sanction issued by Government of Tamil Nadu for development of Industrial Park at Manallur vide G.O (Ms) No.119 dated 07.06.2013. Details are given below.
    - G.O (Ms) No.119 dated 07.06.2013: While applying for EC, the poramboke land extent was reduced to 283.08 ha *vide* Government of Tamil Nadu land alienation GO (Ms) No. 285 dated 03/08/2018. Accordingly, in EC application the land extent was considered at 286.065 Ha (283.08 Ha of poramboke land vide per GO (Ms) No. 285 dated 03/08/2018 and 2.985 Ha of patta land *vide* GO.(Ms) no. 119 dated 07.06.2013).
    - GO (Ms) No. 285 dated 03/08/2018: The project area is now further reduced from 286.065 ha to 279.99.5 ha due to the following reasons:
      - 3.085 Ha of poramboke land has been excluded by Thiruvallur District Collector vide letter no. 14888/2018 dated 10.06.2019.
      - 2.985 Ha of patta land is also excluded from land acquisition and the total area of the Industrial Park is reduced to 279.99.5 Ha.



- Land Delivery Receipt in proof of taking over possession of 279.99.5 Ha of land from Zonal Deputy Tahsildar.
- Land Delivery Receipt: As per the Land delivery receipt, the entire land has been handed over to SIPCOT. There is no R&R involved for this project.

(xxxiii) **Employment potential, No. of people to be employed:** A total of 100,000 people will be employed for the current project, inclusive of temporary and permanent employees. The detailed breakup of employee numbers during both construction and operation phases are given below:

Phase	Employment Type	No. of Persons	
Construction	Permanent	100	
	Temporary	1000	
Operation	Permanent	10,000	
	Temporary	88900	
	Total	100,000	

# (xxxiv) Benefits of the project:

- Development of facilities and infrastructure will lead to economic growth in the region.
- Proposed development will help in revenue generation for the State as well as to the Country.
- This project will have positive impact on the socio economic status of the surrounding human environment and increased inflow to the Tamil Nadu Government.
- Proposed Development will lead to creation of both direct and indirect job opportunities.
   SIPCOT in coordination with the candidate industries will improve the employment potential directly in its activities of processing, purchase/sale, management, etc., and will also indirectly enable the community to have alternative earnings through opportunities of hotels, travels, transfer, etc.
- (xxxv) Brief summary of specialised Studies carried out for the project as per the ToR: Not applicable.
- (xxxvi) Details of Court cases: There are no court cases against the proposed project.
  - 4. The EAC during its 241<sup>st</sup> meeting on 25-26<sup>th</sup> August, 2020, taken into account the submissions made by the project proponent M/s State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited that the current proposal only pertains to the development of a Industrial Park at Manallur and Soorapoondi villages of Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu State" over an extent of 279.99.5 Ha (691.587 Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District. After a detailed deliberation, the EAC recommended the proposal for grant of Environmental Clearance subject to fulfilment of specific conditions other than all standard conditions applicable for this project.
  - 5. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant Environmental Clearance for the



development of an Industrial Park over an extent of 279.99.5 Ha (691.587 Acres) land area at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu under the EIA Notification, 2006 as amended, subject to strict compliance of the following specific conditions, in addition to all standard conditions applicable for such projects.

#### SPECIFIC CONDITIONS A.

- The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc required (i) 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.
- The project proponent shall abide by all the commitments and recommendations made in the Form-II, EIA and EMP report, submissions made during Public Hearing and also that (ii) have been made during their presentation to EAC.
- No groundwater shall be used at any stage of project. (iii)
- No waste water shall be discharged to the rivers/streams or waterbodies. The proponent (iv) shall utilize the treated effluent and sewage for achieving zero discharge and scheme for the same shall be approved by CPCB and SPCB.
- Permission from Irrigation Department for obtaining surface water to be obtained. Consent to Operate shall not be issued without obtaining permission competent authority (v) for use of surface water.
- Detailed plan of expenditure with implementation schedule to address issues raised during Public Hearing shall be prepared and submitted to the Regional Office of this (vi) Ministry within three months. The proponent shall adhere the strict compliance of above plan to utilize funds as per schedule.
- As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them (vii) to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory Aforestation etc, either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.

# B. STANDARD CONDITIONS:

# I. Statutory compliance:

The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be

- implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (incase of the presence of schedule-I species in the study area).
- (ii) The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- (iii) All excavation related dewatering shall be as duly authorized by the CGWA. A NOC from the CGWA shall be obtained for all dewatering and ground water abstraction
- (iv) 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.
- (v) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

### II. Air quality monitoring and preservation:

- (i) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.
- (ii) Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.
- (iii) Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.
- (iv) Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.
- (v) 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.
- (vi) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

### III. Water quality monitoring and preservation:

X

- Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- (ii) Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression.
- (iii) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- (iv) No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.

## IV. Noise monitoring and prevention:

- (i) 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.
- (ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- (iii) 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.
- (iv) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

# V. Energy Conservation measures:

- Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- (ii) Provide LED lights in their offices and residential areas.

# VI. Waste management:

- (i) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- (ii) The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- (iii) 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.
- (iv) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (v) 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.

### VII. Green Belt:

- (i) An overall green area of at-least 33% of the Industrial Area should be developed with native species. The project proponent of the Industrial Area shall comply with the additional commitment made by them in the EIA report regarding the development of green belt.
- (ii) The Industrial Areas are directed to accordingly allocate the area to be developed as green cover to respective individual industrial units so as to achieve the above mentioned condition.
- (iii) The individual industrial unit, at the time of obtaining EC, shall bring a letter from the Industrial Area for the area allocated to them to be developed as green cover as a part of obligation from the Industrial Area.
- (iv) Wherever possible, plantations around the periphery of the Industrial Area, in the downwind direction and along the road sides shall be provided for containment of pollution and for formation of a screen between the industrial area and the outer civil area. The choice of plants should include shrubs of height 1 to 1.5 m and tree of 3 to 5 m height. The intermixing of trees and shrubs should be such that the foliage area density in vertical is almost uniform.
- (v) The parameters like selection of plant species, procedure for plantation, density of tree plantation etc shall be as per the CPCB guidelines.

# VIII. Public hearing and human health issues:

- (i) Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.
- (ii) Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/ accidents.
- (iii) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- (iv) 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.
- (v) Occupational health surveillance of the workers shall be done on a regular basis.

# X. Corporate Environment Responsibility:

(i) 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.



- (ii) 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.
- (iii) 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.
- (iv) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

### XI. Miscellaneous:

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) 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.
- (iii) 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.
- (iv) 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.
- (v) 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.
- (vi) The criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (vii) 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.
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
  - (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
  - (x) No further expansion or modifications in the Industrial Area shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).



- (xi) 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.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) 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.
- (xv) 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.
- (xvi) 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.
- 7. This issues with the approval of the Competent Authority.

Copy to:

- The Member Secretary, Tamil Nadu Pollution Control Board, No. 76, Mount Salai, Guindy, Chennai - 32
- 2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi.
- 3. The APCCF (C), MoEF& CC, RO Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai 34
- 4. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 5. Guard File/Record File
- 6. Notice Board.

Amardeen Raju) Scientist-E

### Annexure 2



### File No: 21-59/2015-IA.III Government of India

# Ministry of Environment, Forest and Climate Change IA Division

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Date 17/03/2025



To,

Kumaragurubaran J

State Industries Promotion Corporation of TamilNadu Limited (SIPCOT)

19-A, Rukmani Lakshmipathy Road, Egmore, Chennai , Egmore, Chennai , Tamil Nadu-600008

projects@sipcot.in

**Subject:** 

Amendment in the Environmental Clearance granted by the Ministry vide letter F.No.21-59-2015-IA.III dated 10.11.2020 for 'Development of Industrial Park in the area of 279.995 Ha. (691.587 Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu by M/s State Industries Promotion Corporation of Tamilnadu Limited-Regarding.

Sir/Madam,

This has reference to your online application vide proposal no:IA/TN/INFRA1/463864/2024 dated 23/02/2024, submitting the above mentioned proposal to this Ministry for grant of amendment in Environmental Clearance (EC) granted by the Ministry vide letter F.No.21-59-2015-IA.III dated 10.11.2020 in compliance to the Order of the Hon'ble NGT dated 30th September 2022 and in terms of the provisions of the Environment Impact Assessment Notification (EIA), 2006 under the Environment (Protection), Act, 1986.

2. The particulars of the proposal are as below:

(i) EC Identification No. EC24A3101TN5735699N

(ii) File No. 21-59/2015-IA.III

(iii) Clearance Type Fresh EC

(iv) Category A

7(c) Industrial estates/ parks/ complexes/ areas,

(v) **Project/Activity Included Schedule No.** export processing Zones (EPZs), Special Economic

Zones

(vi) Sector INFRA-1

Development of Industrial Park at Manallur and

(vii) Name of Project Soorapoondi villages, Gummidipoondi Taluk,

Thiruvallur District, Tamil Nadu over an extent of

279.995Ha. (691.587Acres)

STATE INDUSTRIES PROMOTION

(viii) Name of Company/Organization CORPORATION OF TAMILNADU LIMITED

(SIPCOT)

(ix) Location of Project (District, State) THIRUVALLUR, TAMIL NADU

(x) Issuing Authority MoEF&CC

(xi) Applicability of General Conditions as per

**EIA Notification, 2006** 

Yes

- 3. The proposed project is for Development of Industrial Park in the area of 279.995Ha. (691.587Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu by M/s State Industries Promotion Corporation of Tamilnadu Limited- (SIPCOT). The project site is falling in between the geographical coordinates ranging from 13<sup>0</sup>26" 48.15" to 13<sup>0</sup> 27" 15.37" N and 80<sup>0</sup> 01" 21.79" to 80<sup>0</sup> 01"56.24" E.
- 4. The proposed project activity is listed at S.No.7(c) Industrial Estates/Parks/SEZ,etc under Category "A" of the schedule of the EIA Notification, 2006, and appraised at Central Level as General Condition is applicable due to proximity of Interstate Boundary TamilNadu–AndhraPradesh Boundary situated at ~3.13 Km (towards NNW) from the project boundary and Pulicat lake bird Sanctuary is located at the distance of ~5.77 Km (towards NE). The total cost of the project is 353.28 crores.
- 5. Earlier, the above project was received in the Ministry on 24<sup>th</sup> December, 2019 for grant of EC. The proposal was considered by the Expert Appraisal Committee(EAC) for Infrastructure, CRZ and Other Miscellaneous projects in its meeting on 25<sup>th</sup>-26<sup>th</sup> August, 2020. The EAC after detailed deliberation recommended for grant of the EC with certain conditions, Ministry accorded the EC vide letter no. 21-59/2015-IA.III dated 10<sup>th</sup> November, 2020.
- 6. The Hon'ble NGT Southern zone, Chennai vide Judgement dated 30<sup>th</sup> September 2022 in the matter of D.Ranjith Kumar Versus Union of India with G. Praveena Versus Union of India, Appeal No.32 of 2020(SZ) with Appeal No.34 of 2020(SZ) has suspended the Environmental Clearance granted vide F.No.21-59-2015-IA.III dated 10.11.2020 for establishing an industrial park in Manallur Village, Thiruvallur District till further studies and appraisal to be done as directed by Hon'ble Tribunal and also directed the MoEF&CC to refer the matter to the EAC for the purpose of issuing additional ToR so as to conduct further studies by the project proponent.
- 7. In compliance to the Hon'ble Tribunal Judgment, an application for ToR was uploaded vide Proposal No.: IA/TN/INFRA1/407090/2022 dated 18.11.2022 by the project proponent and the project was considered in the 316<sup>th</sup> EAC meeting held on 16.12.2022. The proposal was recommended by the EAC and the ToR was issued for the project vide File no.21-59/2015 IA.III dated 25/01/2023.
- 8. Public Hearing Details: The public hearing was held in Tiruvallur District, Tamil Nadu, on 22<sup>nd</sup> August 2023. The details are as follows.

Date	Venue	District and State	Chairman
22.08.2023	K.V.C Mahal, Sathyavedu road,	<mark>Tiruvallur D</mark> istrict, Tamil	District Collector, Tiruvallur
	Madharpa <mark>kkam V</mark> illage, Gummidipoondi	Nadu State	District.
	Taluk, Tiruvallur		

9. List to industries to be housed with the proposed project site.

Sl.No	Type Industries	Approximate	Percentage	(%)	ofIndustrial plot a	rea in Industrial plo	t area in
	**	Industrial plot	•		На.	Acres	
1	5(f) Non pharma industries	10			19.838	49.00	
	such as Synthetic Acrylic	;					
	polymers and resins, water	,					
	proofing compounds						
	synthetic adhesives etc.,						
2	Non EC Category industries	90			178.866	441.80	
	such as E vehicle and its	,					

components manufacturing,			
Automobile and accessories			
manufacturing, Engineering			
and fabrication, Plastic			
Industries etc.,			
Total	100	198.704	490.80

10. Water requirements: Construction Phase: The water requirement for the project is 63 KLD, which will be sourced from Private water suppliers. Operation Phase: The total water requirement for the project during the operation phase is 5956 KLD, out of which 685 KLD Freshwater is required, and TTRO water requirement of 3365 KLD will be sourced from Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB). The balance water of 1906 KLD will be met by recycling treated wastewater. There will be no extraction of the groundwater.

11. Waste Management: Due to the proposed industrial estate during construction phase Organic waste is expected to generate 27kg/day and during operational phase 2430(kg/day). Inorganic waste will be generated 18kg/day during construction phase and 1620 kg/day will generated during operational phase. An in house independent Solid Waste Management facility over an area of 5 Acres (Sheds for recovery and recycling facility including shed for E-waste management) has been earmarked for Solid Waste Management Facility. Hazardous waste: Hazardous wastes generated from the allotted industries will be managed by the industries and it will be stored in designated areas within their premises and disposed as per Hazardous waste (Management and Transboundary) Rules 2016. E-waste: Individual industries will have their own E-waste storage areas and the same will be disposed by individual industries as per E-waste management rules 2022. Construction & demolition waste: Construction and demolition waste generated during the site clearance activities will be collected and disposed as per C&D rules, 2016. Plastic waste: As per Tamil Nadu Government Order (Ms) No.84 Environment and Forests (EC.2) department dated 25.06.2018 regarding ban on one time use and throw away plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986. SIPCOT will instruct the individual industries to comply according with the G.O. Wastewater: Individual industries will have their own Sewage Treatment Plants. Treated sewage will be recycled for flushing and green belt development within their premises as per CPCB/TNPCB guidelines. Individual industries will have their own Effluent Treatment Plants and will be mandated to ensure Zero Liquid Discharge concept as per CPCB/TNPCB guidelines. Treated effluent will be recycled for process and utilities purpose. Individual industries will be instructed to provide all pollution control measures as per CPCB/TNPCB norms. There will be no outfall outside their Premises.

12. Details of tree cutting and Green belt development: Total No. of trees within the site are 2153. Out of which 170 trees will felled down due to proposed project. To Compensate that trees 1700 trees will be planted in green belt area. Green belt is proposed in an area of 106.575 Ha(38.07% of the developable area). The details are as following.

• •		<u> </u>
Green belt	Area (Ha)	Percentage of developable
GRE		area
Green belt in industrial plot area (33% by industries)	65.572	23.42
Green belt by SIPCOT	41.003	14.65
Total	106.575	38.07

Around 3,34,750 numbers of trees will be planted (for 106.575 ha @ 2500 trees / Ha by considering 80% survival rate& rate and 1700 Tree compensation).

13. Diversion of the Forest land: The instant proposal does not involve any forest land. However, Pulicat Bird Sanctuary is located at a distance of ~5.77km in the direction of NE direction from the proposed project site. Rapid Biodiversity Inventory Survey has been conducted by the Green Works Trust (GWT) for an area of 10 km radius around proposed SIPCOT Industrial Park, Manallur. The Biodiversity Inventory Survey report was submitted to the M/s Salim Ali Centre for Ornithology and Natural History (SACON) for review; the same was reviewed and updated. The Final Biodiversity Report and the Conservation Plan prepared by SACON were submitted for the approval/recommendation of the Principal Chief Conservator Forest (PCCF) and Chief Wildlife Warden (CWLW), Tamil Nadu. The PCCF and CWLW reviewed the report and recommended the plan vide letter No: WL5/HOTNFD/305/2024 dated 21.09.2024. Standing Committee of National Board for Wild life has recommended the proposal vide letter no.WL-6/16/2024-WL dated 7<sup>th</sup> February, 2021. Based on the recommendation of the NBWL, office of the Principal Chief Conservator Forests, Chennai granted the No objection certificate vide letter Ref No.WL5/24360/2023 dated 12.02.2024. Revised Conservation Plan with a budget of

Rs. 3.25 Cr. has been submitted: the details are as follows:

	Activities	Approx. Cost (INR
Sl. No.		Lakhs)
1	Establishment of artificial wetlands for aquatic dependent flora and fauna -5 nos.(40ft*10ft*3ft*)	50.00
2	Creating Avenue Tree plantations along the Road/ pathways	20.00
3	Establishing Butterfly Gardens and Pollinator Microhabitats (for Two gardens)	20.00
4	Creating a Green Belt along the Periphery of the Project Site	100.00
5	Wetland Management Activities of De-siltation of Lake Area, Creation of Mounds within	100.00
	Pallavada Lake: the lake, Removal of Invasive species	
	Provision of Artificial Nesting Platforms	
	Long-term monitoring of waterbirds	30.00
6	Wildlife Conflict Mitigation:Dos and Don'ts for a Snake Encounter, First Aid for snake Bite	5.00
	Total	325.00

Further, SIPCOT has allocated INR 17.75 Crores towards Environment Management Plan (EMP).

- 14. Energy conservation measures with estimated saving: The total renewable energy capacity will be up to 3.46 MVA through Solar power will be generated based on the feasibility and necessary provisions. Apart from this, SIPCOT will promote individual industries to utilize at least 10% of their power requirement through renewable energy like solar etc. Solar panels will be proposed in the roof top of project office. Solar power will be utilized for the IP internal road lighting/common areas/wherever possible. Apart from this, individual industries will be advised to utilize solar energy to reduce power consumption.
- 15. Details of Rain Water Harvesting: Hydro-geological Study has been conducted for the proposed project site. Based on the geophysical investigation of the site, the results of the Vertical Electrical Sounding shows the ground water conditions of the locations which clearly indicates that the depth of water level varies from 2.9-6.2 m BGL in shallow aquifers, whereas 45-50 m depth BGL in deep aquifers. It is concluded that the neighbouring core zone area is considered to have good groundwater potential. 6594 No"s of rain water harvesting pits are proposed and Excess runoff will be diverted to nearby water bodies (after filtration) through storm water drain (provided along the Road side).
- 16. Land acquisition and R&R issues involved: Entire land is under the possession of SIPCOT and there is no R & R for the proposed IP. Originally, Administrative Sanction was given for acquisition of 303.75 Ha (300.765 Ha of poramboke land and 2.985 Ha of patta land) for the development of Industrial Park at Manallur vide G.O (Ms) No.119 dated 07.06.2013. Later, poramboke land extent was reduced to 283.08 Ha vide Government of Tamil Nadu land alienation G.O(Ms)No.285 dated 03/08/2018. Further, 3.085 Ha of poramboke land has been excluded vide Thiruvallur District Collector vide letter no. 14888/2018 dated 10.06.2019 and 2.985 Ha of patta land is also excluded from land acquisition and the total area of the Industrial Park is reduced to 279.99.5 Ha.
- 17. Employment potential: The manpower requirement includes both the technical and non-technical personnel. During construction phase total 100 people will get employment and during the operational phase total 9000 people will get employment. Local People will be employed from the surrounding villages During Operational phase.
- 18. Benefits of the project: there will be both Direct and Indirect employment generation. Proposed project will also attract generation of additional revenue to the Government by means of Taxes and duties. Proposed Industrial Park facility will attract commercial establishments in the surrounding area.
- 19. Details of Court cases: There are no court cases. However, National Green Tribunal (NGT) has passed Judgment vide Order dated 30.09.2022 and has directed MoEF &CC to issue the Environmental Clearance.
- 20. The EAC taking note of the submission made by the project proponent had a detailed deliberation in its 360<sup>th</sup> meeting held on 21<sup>st</sup> March, 2024, 377<sup>th</sup> meeting held on 16<sup>th</sup>-17<sup>th</sup> October, 2024 and 382<sup>nd</sup> meeting held on 09th December, 2024, and 389th EAC meeting held on 29th-30th January, 2025. Based on the information submitted and clarifications provided by the project proponent, the EAC recommended that, as per the directions of Hon'ble NGT, an amendment to the earlier environmental clearance, issued vide letter No.21-59/2015-IA.III dated 10th November, 2020, may be issued by

the Ministry. The amendment shall be based on the recommendations of the EAC prescribed in its 377th meeting held on 16th-17th October 2024.

- 21. The EAC also re-examined the recommendations of 377<sup>th</sup> meeting and suggested that the following additional condition may be incorporated in the recommendations of 377<sup>th</sup> meeting for this proposal:
- i. The PP to prepare and implement a Conservation Plan/Species Habitat Restoration Plan for the 39 Schedule-I species in consultation with State Forest Department and the same shall be submitted to the concerned IRO of MoEFCC for monitoring of implementation in along with first 6 monthly compliance report.
- ii. The PP shall maintain a minimum 50 mtrs wide green belt along the boundary inside the industrial estate towards habitations.
- iii. The red category industries proposed in the Industrial Park layout has to be relocated 500 mtrs from the habitation area located nearby the industrial estate so that the habitations at all sides shall be at a minimum of 500m away from the proposed red-category industries.
- 22. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant amendment in the environmental clearance granted vide letter no. F.No.21-59-2015-IA.III dated 10.11.2020 by the Ministry for 'Development of Industrial Park over an area of 279.995 Ha (691.587 Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu by M/s State Industries Promotion Corporation of Tamilnadu Limited (SIPCOT)' under the EIA Notification, 2006 as amended, subject to strict compliance of the following specific conditions mentioned at Annexure-I.
- 23. All other terms and conditions mentioned in the Environmental Clearance vide letter no. 21-59/2015-IA.III dated 10.11.2020 shall remain unchanged.
- 23. This issues with the approval of the Competent Authority.

#### Copy To

- 1. The Principal Secretary, Department of Environment, Climate Change and Forests Department, Government of Tamil Nadu, Environment, Climate Change and Forests Department Secretariat, Chennai-600 009, Tamil Nadu.
- 2. The Principal Chief Conservator of Forests, Head of Department, Forest Headquarters Building, Near Kannikapuram Checkpost, Guindy-Velacherry Main Road, Guindy, Chennai-600 032, Tamil Nadu.
- 3. The Regional Officer, Ministry of Environment, Forest and Climate Change (MoEF&CC), Integrated Regional Office Chennai, 1st Floor, Additional Office Block for GPOA, Shastri Bhawan, Haddows Road, Nungambakkam, Chennai–600 006, Tamil Nadu.
- 4. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi 32.
- 5. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032, Tamil Nadu.
- 6. Compliance and Monitoring Division, Ministry of Environment, Forest and Climate Change (MoEF&CC), Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110 003.
- 7. Parivesh Portal.
- 8. Guard File/ Monitoring File/ Record File.

#### **Annexure-I Specific Conditions**

- i. The PP to prepare and implement a Conservation Plan/Species Habitat Restoration Plan for the 39 Schedule-I species in consultation with State Forest Department and the same shall be submitted to the concerned IRO of MoEFCC for monitoring of implementation in along with first 6 monthly compliance report.
- ii. The PP shall maintain a minimum 50 mtrs wide green belt along the boundary inside the industrial estate towards habitations.
- iii. The red category industries proposed in the Industrial Park layout has to be relocated 500 mtrs from the habitation area located nearby the industrial estate so that the habitations at all sides shall be at a minimum of 500m away from the proposed red-category industries.
- iv. The proponent has to comply with the Ministry's OM no. J-11011/321/2016-IA.II(I), dated 27.04.2018 which made it mandatory for certain type of industries to conduct public hearing irrespective of their location within Industrial Area or outside the industrial area.
- v. The proposed individual units need to take Environmental Clearance separately as per the applicability of the schedule of EIA Notification, 2006.
- vi. Conservation and mitigation action plan prepared by M/s Salim Ali Centre for Ornithology and Natural History (SACON) for all schedule-I species and other wildlife species shall be implemented in consultation with the State Forest Department; the status of the implementation shall be submitted to the IRO, MoEF&CC along with the 6 monthly EC Compliance report.
- vii. The recommendations of the PCCF and CWLW vide letter no.WL5/HOTNFD/305/2024 dated 21.09.2024 shall be implemented and the status of the implementation shall be submitted to the IRO, MoEF&CC along with the 6 monthly EC Compliance report.
- viii. Pulicat Bird Sanctuary is located at a distance of ~5.77km in the direction of NE direction from the proposed project site. Standing Committee of National Board for WILD life has recommended the proposal vide letter no.WL-6/16/2024-WL dated 7th February, 2021. Based on the recommendation of the NBWL office of the Principal Chief Conservator Forests(HoFF), Chennai granted the No objection certificate vide letter Ref No.WL5/24360/2023 dated 12.02.2024. All the recommendation made in the Standing Committee of National Board for Wild life shall be submitted to the IRO, MoEF&CC along with the 6 monthly EC Compliance report.
  - ix. PP to prepare and implement a Conservation Plan/Species Habitat Restoration Plan for the 39 Schedule-I species in consultation with State Forest Department and the

- same shall be submitted to the concerned IRO of MoEFCC for monitoring of implementation in along with first 6 monthly compliance report.
- x. Enhancement of the Environmental Management Plan budget i.e., revision in the amount for activities like desilting of the lakes, creation of mounds within lake; within the Industrial Area, peripheral multi-layered greenbelt of 15m with some herbs and shrubs (considering the nearby flora and fauna) to be provided along the project boundary with atleast 50 mtr wide green belt around the water bodies and lake boundaries and human settlements nearby the project boundary. Revision of activities budget shall be done in consultation with SFD and same shall be communicated to IRO of the Ministry.
- xi. Project Proponent shall strive to enhance the Green Belt beyond 33% and that the trees planted in this regard would be planted under the campaign" ਪ੍ਰਾ ਪ੍ਰਤ੍ਰਿਸ਼ ਰਾਜ਼ਸ " and the details of the trees planted would be uploaded on the portal https://merilife.nic.in.
- xii. As proposed, the overall area of 106.575 Ha(38.07% of the developable area) shall be maintained as a green belt/green area, in which 65.572 ha (23.42%) will develop individual industrial plot area (33% by industries), and an area of 41.003ha (14.65%) will be developed by the SICOT. The Green belt and green space shall be maintained with a thick plantation.
- xiii. Water demand during development/ construction should be reduced by use of premixed concrete, curing agents and other best practices referred.
- xiv. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- xv. 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 and should be operated only during nonpeak hours.
- xvi. Any hazardous waste generated during development/ construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
- xvii. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted along with the six monthly EC compliance report to the concern IRO of the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problems from STP.

- xviii. Sewage shall be treated in the STP with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing and landscaping.
  - xix. As proposed the industrial estate shall ensure the individual industries will have their own Effluent Treatment Plants and will be mandated to ensure Zero Liquid Discharge concept as per CPCB/TNPCB guidelines.
  - xx. 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.
  - xxi. No sewage or untreated effluent water would be discharged through storm water drains.
- xxii. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants. Frequent monitoring of groundwater and surface water will be done to ensure that the quality of water is being maintained within the norms the report of the same shall be submitted to the concern IRO, MoEF&CC along with the six monthly EC&CRZ compliance road.
- xxiii. The PP shall construct a garland drain, with catch pits of appropriate capacity at appropriate distance, all around the industrial estate and also around the water bodies falling with in project boundary to prevent runoff of any contaminants/ waste into the nearby water bodies. The garland drains shall be designed such that the runoff within the boundary of the industrial area is collected in the garland drains, which shall be treated appropriately, conform to CPCB standards.
- xxiv. Rain water harvesting for roof run-off and surface run- off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging shall be kept at least 4 m above the highest ground water table.
- xxv. 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.
- xxvi. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board/CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.

- xxvii. Ambient air quality monitoring stations should be established in the downward directions as well as where maximum ground level concentration of PM10, PM2.5, SO2 and NOx are anticipated in consultation with SPCB within and outside the industrial estate area at least at four locations (one within and three outside the port area at an angle of 120° each), covering upwind and downwind directions. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed fugitive emission standards. Date on ambient air quality and emission shall be regularly submitted to the IRO, MoEF&CC along with the six monthly EC&CRZ compliance road.
- xxviii. Installation of Ambient Air Quality data shall display unit for public display.
- xxix. The total renewable energy capacity will be up to solar power shall be explored and accordingly plan shall be submitted to IRO of the Ministry it its first six monthly compliance report. And, progress of implementation of this plan be submitted in subsequent 6 monthly compliance reports. Apart from this SIPCOT shall ensure that individual industries utilize at least 10% of their total power requirement through renewable energy like solar etc.
- xxx. Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.
- xxxi. The project should not amend or alter the pathways of the natural streams or creeks/nallah flowing.
- xxxii. Red category industrial units to be avoided near residential areas and habitations and water bodies. A distance of approximately 500 meters shall be maintained for the establishment of red category industry from the residential area.
- XXXIII. Compliance of the directions of Hon'ble NGT in the matter of D. Ranjith Kumar Versus Union of India with G. Praveena Versus Union of India. Appeal No. 32 of 2020 (SZ) With Appeal No. 34 of 2020 (SZ) Judgement dated 30th September 2022 to be ensured.
- xxxiv. Based on the Socio, Economic and Demography study prepare Environment Management Plan to improve the life of the Communities around the Project with measurable indicators.
- xxxv. The land related issues and any compensation, R&R issues have to be resolved. Further, justification required from the PP regarding the rectification of the project or resolution of the public opinions if any and written clarification from the gram sabha to be submitted by the PP to avoid any complications in the future.
- xxxvi. All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format

and the compliance for each mitigation plan shall be submitted to RO, MoEF&CC along with half yearly compliance report.

xxxvii. As per the Ministry's Office Memorandum F.No.22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry along with 6 monthly compliance report.

xxxviii. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory Afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.







# 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,

SIPCOT.

No.19 - A, RukmaniLakshmipathy Road,

Post box no. 7223,

Egmore,

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.

23.02.23

Superintending Engineer (WT&T)



6/2/23

TAM



### CHENNAI METROPOLITAN WATER SUPPLY - AND SEWERAGE BOARD -MANAGING DIRECTOR



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

To.

The Managing Director. SIPCOT. No.19 - A. RukmaniLakshmipathy Road. 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 - Rea.

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, PC3, 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

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### **ANNEXURE - 4 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

: TC1231025000016097F

Report No.

: HECS/AP/062/050325

Sample ID No

: 050325088

Sampling Date

: 27/02/2025

Address of the Client

Name of the Client

: M/s. SIPCOT : Manalur

: Atmospheric Pollution

Received Date : 05/03/2025

: Ambient Air

Commenced Date: 05/03/2025

Sample Mark : NA Completed On

: 03/04/2025

Sample Reference

Sample Name

Group

: NA

Report Date Sample quantity: NA

Sample Drawn By

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

: Near Project area

: 03/04/2025

Sample Location Environmental Condition

Humidity (%): 56.0

Sampling Method & Plan

: Temperature (°C): 30.0 : IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stand	dards : 2009
Discip	oline : Chemical		201	•		
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	μg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m³	BLQ (LOQ: 0.1)	IS: 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	μg/m³	BLQ(LOQ 5)	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/m³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	μg/m³	11.28	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	88.04	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu m$ )	μg/m³	25.56	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	8.69	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.02	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\*\*\*



<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

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**Laboratory Services Division** 

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

#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/062/050325/N

Sample ID No

: 050325088

Sampling Date

: 27/02/2025

Address of the Client

Name of the Client

: Manalur

: M/s. SIPCOT

Group Sample Name : Atmospheric Pollution

Received Date : 05/03/2025

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

Sample quantity: NA

: Near Project area

: Temperature (°C): 30.0 | Humidity (%): 56.0

Environmental Condition Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method		
Discip	line : Chemical					
1 TVC	VOC	ppmv	BLQ(LOQ 0.01)	HECS-G/ENV/AAQ/SOP/005 Issu		
				No.:01 Issue Date:02:07 2020		

Note:- ppmv- Parts per million by Volume.

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



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### **Laboratory Services Division**

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#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016098F

Report No.

: HECS/AP/063/050325

Sample ID No

: 050325089

Sampling Date

: 27/02/2025

Address of the Client

: M/s. SIPCOT : Manalur

Received Date : 05/03/2025

: Ambient Air

Commenced Date: 05/03/2025

Sample Mark

Sample Name

Group

: 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

: Soorapundi

**Environmental Condition** 

: Temperature (°C): 29.0

: Atmospheric Pollution

| Humidity (%): 55.0

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	μg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m³	BLQ (LOQ: 0.1)	IS: 5182 Part 12: 2004	1 (Annual)	l (Annual)
5	Ammonia as NH3	μg/m³	BLQ(LOQ 5)	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/m³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	μg/m³	20.46	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	72.01	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu m)$	μg/m³	25.98	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	7.97	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.003	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\*\*



<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-C/O/FMT/049 HECS-G/Q/FMT/049

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

#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/063/050325/N

Sample ID No Sampling Date

: 050325089

Address of the Client

Name of the Client

: Manalur

: 27/02/2025

Group

: Atmospheric Pollution

: M/s. SIPCOT

Received Date : 05/03/2025

Sample Name

: Ambient Air

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 03/04/2025

: NA

Sample Reference

Report Date

: 03/04/2025

Sample Drawn By

: NA

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

Sample Location

: Soorapundi

: Temperature (°C): 29.0 | Humidity (%): 55.0

Environmental Condition 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 0.01)	HECS-G/ENV/AAQ/SOP/005 Issue No.:01 Issue Date:02:07 2020

Note:- ppmv- Parts per million by Volume.

\*\*\*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/O/FMT/49

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#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016099F

Report No.

: HECS/AP/064/050325

Sample ID No Sampling Date

Received Date

Completed On

Sample quantity: NA

Report Date

: 050325090 : 27/02/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

Commenced Date: 05/03/2025

Address of the Client : 1

: Manalur

: M/s. SIPCOT

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

Sample Reference

: NA

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

Environmental Condition

: Temperature (°C): 30.0

Humidity (%): 55.0

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	2.13	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	μg/m³	BLQ (LOQ: 0.1.)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m³	BLQ (LOQ: 0.1)	IS: 5182 Part 12: 2004	l (Annual)	l (Annual)
5	Ammonia as NH3	$\mu g/m^3$	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	10.37	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	70.68	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu m$ )	μg/m³	24.29	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	6.71	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.004	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,  $\mu g/m^3$ - Micrograms per cubic meter,  $mg/m^3$ -Milligrams per cubic meter,  $ng/m^3$ -Nanograms per cubic meter.

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

\*\*\*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/O/FMT/049

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

#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/064/050325/N

Sample ID No

: 050325090

Sampling Date

: 27/02/2025

Address of the Client

Name of the Client

: Manalur

: M/s. SIPCOT

Sample Name

Group

: Atmospheric Pollution

Received Date : 05/03/2025

: Ambient Air

Commenced Date: 05/03/2025

Completed On : 03/04/2025

Sample Mark Sample Reference

: NA

Report Date

: 03/04/2025

Sample Drawn By

: NA

Sample quantity: NA

Sample Location Environmental Condition : M/s. Hubert Enviro care Systems (P) Ltd. : Roshan Nagaram

: Temperature (°C): 30.0 | Humidity (%): 55.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method
Discipl	ine : Chemical			
1	TVOC	ppmv	BLQ(LOQ 0.01)	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/40 HECS-G/Q/FMT/49

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### **Laboratory Services Division**

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#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016100F

Report No.

: HECS/AP/065/050325

Sample ID No

Received Date

Completed On

Sample quantity: NA

Report Date

Commenced Date: 05/03/2025

: 050325091

Sampling Date

: 28/02/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

Sample Reference

: NA

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

: Madharpakkam

**Environmental Condition** 

: Temperature (°C): 29.0

| Humidity (%) : 56.0

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	μg/m³	BLO (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m³	BLQ (LOQ: 0.1)	IS: 5182 Part 12: 2004	l (Annual)	l (Annual)
5	Ammonia as NH3	μg/m³	10.86	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	15.80	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	μg/m³	11.15	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours
9	Particulate matter (Size less than 10 μm)	μg/m³	90.76	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu m$ )	μg/m³	37.20	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	12.71	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.005	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/m'- 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\*\*\*



<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/O/FMT/049 HECS-G/Q/FMT/049

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TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/065/050325/N

Sample ID No Sampling Date

Completed On

Sample quantity: NA

Report Date

Received Date : 05/03/2025

Commenced Date: 05/03/2025

: 050325091 : 28/02/2025

: 03/04/2025

: 03/04/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Atmospheric Pollution

: Ambient Air

Sample Name

Sample Mark

: NA

Sample Reference Sample Drawn By : NA

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

Sample Location Environmental Condition

Name of the Client

: Madharpakkam

: Temperature (°C): 29.0

| Humidity (%): 56.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method
Discipline :	Chemical			1
1 TVO	С	ppmv	BLQ(LOQ 0.01)	HECS-G/ENV AAQ/SOP/005 Issue No.:01 Issue Date:02:07 2020

\*\*\*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/49

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### **Laboratory Services Division**

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#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016101F

Report No.

: HECS/AP/066/050325

Sample ID No

Received Date

Completed On

Sample quantity: NA

Report Date

: 050325092

: 05/03/2025

: 03/04/2025

: 03/04/2025

Sampling Date : 28/02/2025

Commenced Date: 05/03/2025

Address of the Client

: M/s. SIPCOT : Manalur

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

: Papankuppam

Sample Location **Environmental Condition** 

: Temperature (°C): 30.0

| Humidity (%): 55.0

Sampling Method & Plan

. 18 5187 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	μg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m³	BLQ (LOQ: 0.1)	IS: 5182 Part 12: 2004	l (Annual)	1 (Annual)
5	Ammonia as NH3	μg/m³	7.51	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	13.52	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	μg/m³	13.34	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 $\mu$ m)	μg/m³	80.45	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu$ m)	μg/m³	28.91	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	11.14	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.008	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

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

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

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



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### TEST REPORT

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Report No.

: HECS/AP/066/050325/N

Sample ID No

: 050325092

Sampling Date

Received Date

Completed On

Sample quantity: NA

Report Date

Commenced Date: 05/03/2025

: 28/02/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

Address of the Client

Name of the Client

: Manalur

Group

: Atmospheric Pollution

: M/s. SIPCOT

Sample Name

: Ambient Air

Sample Mark Sample Reference

Sample Drawn By

Sample Location

· NA

: NA

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

: Papankuppam

Environmental Condition

: Temperature (°C): 30.0 | Humidity (%): 55.0

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 0.01)	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/EMT/40 HECS-G/Q/FMT/49

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#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000013306F

Report No.

: HECSL/WT/010/050325

Sample ID No

: 050325094

Sampling Date

: 27/02/2025

Address of the Client

: Manalur

: M/s. SIPCOT

: 05/03/2025

Sample Name

Group

: Water

Received Date

: Ground Water

Commenced Date: 05/03/2025 : 19/03/2025

Sample Mark

Completed On

: NA

Sample Reference

: NA

Report Date

: 19/03/2025 Sample quantity: 2 Litres

Sample Drawn By

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

Sample Location **Environmental Condition** 

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	1S 1050	0:2012
D					Acceptable Limits (Max)	Acceptable Limit
Disci	pline : Chemical					
1	Bi carbonate	mg/l	158.6	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/1	64.13	IS 3025 Part 40: 1991 (EDTA Titrimetric Method)	75	200
4	Carbonate	mg/1	BLQ(1.0Q:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	128.67	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	811.0	IS 3025 Part-14: 2013	NA	NA
9	Fluoride as F	mg/l	0.37	APHA 23rd edition (Method 4500F- B, D): 2017	1.0	1.5
10	Iron as Fe	mg/I	0.061	IS 3025 (Part 53): 2003	1.0	No relaxation
11	Magnesium as Mg	mg/l	24.30	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
12	Nitrate as NO3	mg/l	12.97	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation



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#### TEST REPORT

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ULR

: TC1231025000013306F

Report No.

: HECSL/WT/010/050325

Sample ID No

: 050325094

Sampling Date

Received Date

Completed On

Report Date

: 27/02/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Commenced Date: 05/03/2025

Sample quantity: 2 Litres

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

: NA

Sample Reference

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

Sample Drawn By Sample Location

**Environmental Condition** 

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Acceptable Limit
13	pH at 25°C		7.34	IS 3025(Part 11) : 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K.	mg/l	5.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	52.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	43.9	IS 3025 Part 24 Sec 1: 2022( Turbidity Method)( Turbidity Method)	200	400
17	Total dissolved solids	mg/l	427.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/I	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	0.042	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	260.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
23	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
24	Chromium	mg/I	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation



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#### TEST REPORT

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ULR

: TC1231025000013306F

Report No.

: HECSL/WT/010/050325

Sample ID No

: 050325094

Sampling Date

Received Date

Report Date

Commenced Date: 05/03/2025

Completed On : 19/03/2025

Sample quantity: 2 Litres

: 27/02/2025

: 05/03/2025

: 19/03/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location **Environmental Condition** 

: Soorapundi

: Temperature (°C): 22.0 | Humidity (%): 45.0

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

S.No.	Test Parameters	Units	Results	Test Method	IS 10500	0:2012
					Acceptable Limits	Acceptable Limits
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	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
32	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
33	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 ( Nesslerization Method)	0.5	No relaxation
34	Sodium Adsorption Ratio(SAR)	Square root of (millimole/litr e)		IS 11624 : 2019	NA	NA



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#### TEST REPORT

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ULR

: TC1231025000013306F

Report No.

: HECSL/WT/010/050325

Sample ID No

: 050325094

Sampling Date

: 27/02/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

Completed On : 19/03/2025

: NA

: 19/03/2025

Sample Reference

: NA

Report Date

Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location

: Soorapundi

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

: Temperature (°C): 22.0 | Humidity (%): 45.0

S.No.	Test Parameters	Units	Results	Test Method	IS 10500: 2012	
					Acceptable Limits (Max)	Acceptable Limits
35	Dissolved oxygen	mg/l	6.7	IS 3025 (Part 38): 1989 ( Titrimetric Method)	NA	NA
36	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
37	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
38	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
39	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
40	Total alkalinity as CaCO3	mg/l	130.0	IS 3025 (Part 23): 1986	200	600
41	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
42	Percent Sodium	%	29.67	HECS /WT/SOP/002:: 2019	NA	NA
43	Phosphate as PO4	mg/l	0.136	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA

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



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HECS-G/O/FMT/049 HECS-G/Q/FMT/049

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/010/050325/N

Sample ID No

Report Date

: 050325094

: 19/03/2025

Sampling Date : 27/02/2025

Received Date : 05/03/2025

Commenced Date: 05/03/2025

Completed On : 19/03/2025

Sample quantity: 2 Litres

Address of the Client

Name of the Client

: Manalur

: M/s. SIPCOT

Group

Sample Name

: Water

: Ground Water

Sample Mark

Sample Drawn By

Sample Location

: NA

Sample Reference

: NA

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

: Temperature (°C): 22.0 | Humidity (%): 45.0

Environmental Condition Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method
Discipli	ne : Chemical			
ı	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\*\*\*



D.Anusuya Lab Manager Authorized Signatory

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#### TEST REPORT

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ULR

: TC1231025000013307F

Report No.

: HECSL/WT/011/050325

Sample ID No

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity: 2 Litres

: 050325095

Sampling Date

: 27/02/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Address of the Client

: M/s. SIPCOT

: Manalur

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Near project Area

**Environmental Condition** 

: Temperature (°C): 22.0 | Humidity (%): 45.0

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
Disci	pline : Chemical					
1	Bi carbonate	mg/l	19.52	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/I	5.61	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/I	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	19.79	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	146.0	IS 3025 Part-14: 2013	NA	NA
9	Fluoride as F	mg/l	BLQ(LOQ:0.2)	APHA 23rd edition (Method 4500F- B, D): 2017	1.0	1.5
10	Iron as Fe	mg/l	0.11	IS 3025 (Part 53): 2003	1.0	No relaxation
11	Magnesium as Mg	mg/l	3.89	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
12	Nitrate as NO3	mg/l	3.71	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation



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#### TEST REPORT

Page: 2 of 4

ULR

: TC1231025000013307F

Report No.

: HECSL/WT/011/050325

Sample ID No

: 050325095

Sampling Date

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity: 2 Litres

: 27/02/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Near project Area

Environmental Condition

: Temperature (°C): 22.0 | Humidity (%): 45.0

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
13	pH at 25°C	-	7.17	IS 3025(Part 11): 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K	mg/l	1,0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/!	10.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	7.69	IS 3025 Part 24 Sec 1: 2022( Turbidity Method)( Turbidity Method)	200	400
17	Total dissolved solids	mg/l	79.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	6.0	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	30.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	2.7	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
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



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### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000013307F

Report No.

: HECSL/WT/011/050325

Sample ID No

: 050325095

Sampling Date

: 27/02/2025

Address of the Client

: Manalur

: 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: 2 Litres

Sample Location

: Near project Area

Environmental Condition Sampling M

: Temperature (°C): 22.0 | Humidity (%): 45.0

lethod & Plan	: IS 17614(Part-1):

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits
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	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	%	41.12	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	0.2	1.0



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## **Laboratory Services Division**

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#### TEST REPORT

Page: 4 of 4

ULR

: TC1231025000013307F

Report No.

: HECSL/WT/011/050325

Sample ID No

: 050325095

Sampling Date

: 27/02/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Commenced Date: 05/03/2025

Sample quantity: 2 Litres

Address of the Client

: Manalur

: M/s. SIPCOT

Received Date

Completed On

Report Date

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

: NA

Sample Reference

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

Sample Drawn By

: Near project Area

Sample Location Environmental Condition

: Temperature (°C): 22.0 | Humidity (%): 45.0

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/litr e)	0.8	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/i	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	16.0	IS 3025 (Part 23): 1986	200	600
43	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA

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



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## TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/011/050325/N

Sample ID No Sampling Date

: 050325095

Address of the Client

Name of the Client

: Manalur

: M/s. SIPCOT

: 27/02/2025

Group

Received Date

: 05/03/2025

Sample Name

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

Sample quantity: 2 Litres

Environmental Condition

: Near project Area

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method
Disciplin	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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#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000013308F

Report No.

: HECSL/WT/012/050325

Sample ID No

: 050325096

Sampling Date

Received Date

Completed On

Report Date

: 28/02/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Commenced Date: 05/03/2025

Sample quantity: 2 Litres

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Madharpakkam

**Environmental Condition** 

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 10500	): 2012
					Acceptable Limits (Max)	Acceptable Limit
Disci	pline : Chemical	,	<u> </u>			
1	Bi carbonate	mg/l	134.2	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	44.09	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/1	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	123.72	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	781.0	IS 3025 Part-14: 2013	NA	NA
9	Fluoride as F	mg/l	0.35	APHA 23rd edition (Method 4500F-B, D): 2017	1.0	1.5
10	Iron as Fe	mg/l	0.048	IS 3025 (Part 53): 2003	1.0	No relaxation
11	Magnesium as Mg	mg/l	21.87	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
12	Nitrate as NO3	mg/l	20.92	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation



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#### TEST REPORT

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ULR

: TC1231025000013308F

Report No.

: HECSL/WT/012/050325

Sample ID No

: 050325096

Sampling Date

Received Date

Completed On

Report Date

: 28/02/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

Commenced Date: 05/03/2025

Sample quantity: 2 Litres

Address of the Client

: Manalur

: 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

**Environmental Condition** 

: Madharpakkam

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits	Acceptable Limit
13	pH at 25°C	-	7.53	IS 3025(Part 11) : 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K	mg/l	5.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	- NA	NA
15	Sodium as Na	mg/l	61.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	47.58	IS 3025 Part 24 Sec 1: 2022( Turbidity Method)( Turbidity Method)	200	400
17	Total dissolved solids	mg/l	408.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	0.052	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	200.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
23	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



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#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000013308F

Report No.

: HECSL/WT/012/050325

Sample ID No

: 050325096

Sampling Date

: 28/02/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 19/03/2025

: NA : NA

Report Date

: 19/03/2025

Sample Reference Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location

: Madharpakkam

**Environmental Condition** 

21

: Temperature (°C): 22.0 | Humidity (%): 45.0

ampling l	Method &	& Plan	: IS	17614	(Part-1	):202

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Acceptable Limits
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	%	38.96	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	0.2	1.0
35	Ammonia as NH3	mg/l	BLQ(LOQ:0.02	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation



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#### TEST REPORT

Page: 4 of 4

ULR

: TC1231025000013308F

Report No.

: HECSL/WT/012/050325

Sample ID No

: 050325096

Sampling Date

: 28/02/2025

Address of the Client

: Manalur

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

: M/s. SIPCOT

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 19/03/2025

: NA

Report Date

: 19/03/2025

Sample Reference

Sample quantity: 2 Litres

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

: Madharpakkam

: Temperature (°C): 22.0 | Humidity (%): 45.0

**Environmental Condition** 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
36	Sodium Adsorption Ratio(SAR)	Square root of (millimole/litr e)	1.9	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	110.0	IS 3025 (Part 23): 1986	200	600
43	Phosphate as PO4	mg/l	0.171	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA

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



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## TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/012/050325/N

Sample ID No Sampling Date

: 050325096 : 28/02/2025

Address of the Client

Name of the Client

: Manalur

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

Sample quantity: 2 Litres

**Environmental Condition** 

: Madharpakkam

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method
Disciplin	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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Address of the Client

#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000016236F

Report No.

: HECSL/WT/013/050325

Sample ID No

: 050325097

Sampling Date

: 28/02/2025

Group

: Manalur

: M/s. SIPCOT

: Water

Received Date : 05/03/2025

Sample Name

: Surface Water

Sample Mark

: NA

Commenced Date: 05/03/2025

Sample Reference

Completed On : 04/04/2025

: NA

Report Date : 04/04/2025

Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location

: Pallavada Lake

: Temperature (°C): 22.0 | Humidity (%): 45.0

**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				(benedure vi)
1	Bi carbonate	mg/l	46.36	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	8.82	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA
5	Chemical Oxygen Demand (COD)	mg/l	12.0	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	187.0	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	0.19	IS 3025 Part 53: 2003	3.0
12	Nitrate as NO3	mg/l	3.34	APHA 23rd edition Method 4500 NO3B: 2017	NA



D.Anusuya Lab Manager Authorized Signatory

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Address of the Client

### TEST REPORT

Page: 2 of 4

ULR

: TC1231025000016236F

Report No.

: HECSL/WT/013/050325

Sample ID No

: 050325097

Sampling Date

: 28/02/2025

Group

: Manalur

: Water

Received Date

: 05/03/2025

Sample Name

: Surface Water

: M/s. SIPCOT

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location

: Pallavada Lake

Environmental Condition Sampling Method & Plan

: Temperature (°C): 22.0 | Humidity (%): 45.0 : IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
13	pH at 25°C		7.45	IS 3025 Part 11: 2022 ( Electrometric Method)	5.5 - 9.0
14	Total dissolved solids	mg/l	100.0	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/i	5.35	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	14.0	IS 3025 Part 45: 1983	NA
20	Sulphate as SO4	mg/l	10.45	IS 3025 Part 24 Sec 1: 2022	NA
21	Total Hardness as CaCO3	mg/l	44.0	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	3.0	IS 3025 Part 17: 1984	100



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#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000016236F

Report No.

: HECSL/WT/013/050325

Sample ID No

: 050325097

Sampling Date

: 28/02/2025

Address of the Client

Name of the Client

: M/s. SIPCOT : Manalur

: Water : Surface Water Received Date: 05/03/2025

Sample Name

Group

· Surrac

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On : 04/04/2025

Sample Reference : NA

Report Date

port Date : 04/04/2025

Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location Environmental Condition : Pallavada Lake

: Temperature (°C): 22.0 | Humidity (%): 45.0

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	0.9	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/f	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	2.0
28	Соррег	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	38.0	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	0.081	APHA 23rd edition Method 4500-P B,D: 2017	NA



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#### TEST REPORT

Page: 4 of 4

ULR

: TC1231025000016236F

Report No.

: HECSL/WT/013/050325

Sample ID No

: 050325097

: 05/03/2025

: 04/04/2025

: 04/04/2025

Commenced Date: 05/03/2025

Sample quantity: 2 Litres

Sampling Date

Received Date

Completed On

Report Date

: 28/02/2025

Address of the Client

: Manalur

Group

Sample Name

: Water : Surface Water

: M/s. SIPCOT

Sample Mark

: NA : NA

Sample Reference

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

Sample Drawn By Sample Location

: Pallavada Lake

Environmental Condition

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
37	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.02)	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	%	39.36	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/i	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 /litre)	0.91	IS 11624: 2019	NA

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



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## TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/013/050325/N

Sample ID No Sampling Date

: 050325097 : 28/02/2025

Address of the Client

Name of the Client

: Manalur

: M/s. SIPCOT

Group Sample Name

: Water

Received Date

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

Sample Mark

: Surface Water

Completed On

: 04/04/2025

Sample Reference

: NA : NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location Environmental Condition : Pallavada Lake

: Temperature (°C): 22.0 | Humidity (%): 45.0

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				
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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Address of the Client

#### TEST REPORT

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ULR

: TC1231025000016237F

Report No.

: HECSL/WT/014/050325

Sample ID No

: 050325098

Sampling Date

: 28/02/2025

Group

: Manalur

: 05/03/2025

Sample Name

: Water : Surface Water

: M/s. SIPCOT

Received Date

Commenced Date: 05/03/2025 : 04/04/2025

Sample Mark Sample Reference : NA

Completed On

: NA

Report Date : 04/04/2025

Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location

: Madharpakkam Eri

Environmental Condition

: Temperature (°C): 22.0 | Humidity (%): 45.0

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				1
1	Bi carbonate	mg/l	91.5	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	20.04	IS 3025 Part 40: 1991 (EDTA Titrimetric Method)	NA
5	Chemical Oxygen Demand (COD)	mg/l	8.0	IS 3025 Part 58: 2006	250
6	Chloride as Cl	mg/l	56.91	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	5.9	IS 3025 Part 38: 1989	NA
9	Electrical Conductivity at 25°C	μS/cm	459.0	IS:3025 Part 14: 2013	NA
10	Fluoride as F	mg/l	0.57	APHA 23rd edition Method 4500 F -B,D: 2017	2.0
11	Iron as Fe	mg/l	0.087	IS 3025 Part 53: 2003	3.0
12	Nitrate as NO3	mg/l	3.23	APHA 23rd edition Method 4500 NO3B: 2017	NA



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Address of the Client

### TEST REPORT

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ULR

: TC1231025000016237F

Report No.

: HECSL/WT/014/050325

Sample ID No

: 050325098

Sampling Date

: 28/02/2025

: Manalur

: M/s. SIPCOT

: 05/03/2025

Sample Name

: Water : Surface Water Received Date Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: 04/04/2025

Sample Drawn By

: NA

Report Date

Sample Location

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

Sample quantity: 2 Litres

Environmental Condition

: Temperature (°C): 22.0 | Humidity (%): 45.0

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	-	8.27	IS 3025 Part 11: 2022 ( Electrometric Method)	5.5 - 9.0
14	Total dissolved solids	mg/l	240.0	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/i	12.15	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	NA
18	Potassium as K	mg/l	5.0	IS 3025 Part 45: 1993	NA
19	Sodium as Na	mg/l	42.0	IS 3025 Part 45: 1983	NA
20	Sulphate as SO4	mg/l	42.04	IS 3025 Part 24 Sec 1: 2022	NA
21	Total Hardness as CaCO3	mg/l	100.0	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	2.0	IS 3025 Part 17: 1984	100



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#### TEST REPORT

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ULR

: TC1231025000016237F

Report No.

: HECSL/WT/014/050325

Sample ID No.

: 050325098

Sampling Date

: 28/02/2025

Address of the Client

: Manalur

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Surface Water

: M/s. SIPCOT

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 04/04/2025

Sample Reference

: NA

: 04/04/2025

Report Date Sample quantity: 2 Litres

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

: Temperature (°C): 22.0 | Humidity (%): 45.0

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
24	Turbidity	NTU	0.7	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	Соррег	mg/i	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	75.0	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	0.085	APHA 23rd edition Method 4500-P B,D: 2017	NA



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#### TEST REPORT

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ULR

: TC1231025000016237F

Report No.

: HECSL/WT/014/050325

Sample ID No

: 050325098

Sampling Date

: 28/02/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Sample Name

Group

: Water

Received Date

: 05/03/2025

: Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location

: Madharpakkam Eri

: Temperature (°C): 22.0 | Humidity (%): 45.0

**Environmental Condition** Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
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	%	46.01	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(1.0Q.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/ litre)	1.82	IS 11624: 2019	NA

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



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## TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/014/050325/N

Sample ID No

: 050325098

Address of the Client

Name of the Client

: M/s. SIPCOT

Sampling Date

: 28/02/2025

Group

: Manalur

Received Date

: 05/03/2025

Sample Name

: Water : Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample quantity: 2 Litres

Sample Location Environmental Condition

: Temperature (°C): 22.0 | Humidity (%): 45.0

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				
1-	Hexavalent Chromium as Cr6+	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 52 Clause 6: 2003	0.1

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

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



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#### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014795F

Report No.

: HECS/PE/010/050325

Sample ID No

: 050325099

Sampling Date

: 27/02/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 28/03/2025

: NA : NA

Report Date

: 28/03/2025

Sample Reference Sample Drawn By

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

Sample quantity: 1 Kg

Sample Location

: Project area

Environmental Condition

: Temperature (°C): 22.0 | Humidity (%): 45.0

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			
I	Cadmium	mg/Kg	- 0.22	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	49.57	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	36.00	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	16.17	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture		Silt loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	0/0	30.8	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	52.4	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	16.8	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	5.12	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	10.6	IS 14767: 2000

D.Anusuya Lab Manager

Authorized Signatory



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#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014795F

Report No.

: HECS/PE/010/050325

Sample ID No

: 050325099

Sampling Date

: 27/02/2025

Address of the Client

: Manalur

: M/s, SIPCOT

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 28/03/2025

: 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

: Project area

: Temperature (°C): 22.0 | Humidity (%): 45.0

**Environmental Condition** Sampling Method & Plan

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.98	FAO of United Nations Rome 2007
12	Organic Carbon	9/0	0.30	IS 2720 (Part 22) Section 1 1972
13	Organic Matter	9/0	0.53	IS 2720 (Part 22) Section 1 1972
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	37.88	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	9/0	0.0094	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	11.60	FAO of United Nations, Rome Chapter III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.73	FAO of United Nations, Rome Chapter III 2008
20	Cation Exchange Capacity	mEq/100g	2.4	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	33.6	IS 14765: 2000
22	Colour	100	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 kilograms. \*\*\*End of Report\*\*\*



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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/010/050325/N

Sample ID No

: 050325099

Address of the Client

Name of the Client

: Manalur

: M/s. SIPCOT

Sampling Date

: 27/02/2025

Group

Received Date : 05/03/2025

Sample Name

: Pollution & Environment

: Soil

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

Sample Reference

: NA

: 28/03/2025 : 28/03/2025

Sample Drawn By

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

Report Date Sample quantity: 1 Kg

Sample Location

: Project area

Environmental Condition Sampling Method & Plan

: Temperature (°C): 22.0 | Humidity (%): 45.0 : ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
1	Moisture	%	5.35	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Iron	mg/kg	10.15	Inhouse method
3	Infiltration Rate		1.5	Inhouse method
4	Manganese	mg/kg	82.37	HECS-G/INS/SOP/ 042

Note:- mg/kg: milligram per kilogram, % - Percentage..

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



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## **Laboratory Services Division**

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#### TEST REPORT

Page: 1 of 2

ULR.

: TC1231025000014796F

Report No.

: HECS/PE/011/050325

Sample ID No

: 050325100

Sampling Date

: 27/02/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group Sample Name : 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 quantity: 1 Kg

Sample Location Environmental Condition : Soorapundi

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	oline : Chemical			
1	Cadmium	mg/Kg	0.19	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	51.70	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	22.86	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zine	mg/kg	23.07	HECS-G/INS/SOP/ 042 Issue No :01 Issue Date:01.03,2021
5	Soil Texture		Sandy Ioam	FAO of United Nations, Rome Chapter III 2008
6	Soil Texture i)Sand	%	62.4	FAO of United Nations, Rome Chapter III 2008
7	Soil Texture ii)Silt	%	25.2	FAO of United Nations, Rome Chapter III 2008
8	Soil Texture iii)Clay	%	12.4	FAO of United Nations, Rome Chapter III 2008
9	pH Value @ 25 ° C (1:2.5)		6.14	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	16.2	IS 14767: 2000



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#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014796F

Report No.

: HECS/PE/011/050325

Sample ID No

: 050325100

Sampling Date

: 27/02/2025

Address of the Client

: M/s. SIPCOT : Manalur

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Sample Mark

Completed On

: 28/03/2025

: 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 **Environmental Condition**  : Soorapundi

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.98	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.31	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.54	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	20.25	FAO of United Nations, Rome Chapter III 2008
16	Boron as B	mg/kg	BLQ(LOQ 1.0)	HECS-G/ENV/SSW/SOP/018 Issue No:01 Issue Date:02:07 2020
17	Total Nitrogen as N	%	0.0104	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	15.59	FAO of United Nations, Rome Chapter III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.89	FAO of United Nations, Rome Chapter III 2008
20	Cation Exchange Capacity	mEq/100g	2.4	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	19.56	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 kilograms. \*\*\*End of Report\*\*\*



D.Anusuya Lab Manager **Authorized Signatory** 

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/011/050325/N

Sample ID No

: 050325100

: M/s. SIPCOT

Sampling Date

: 27/02/2025

Address of the Client

Name of the Client

: Manalur

Group Sample Name : 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 quantity: 1 Kg

Sample Location

: Soorapundi

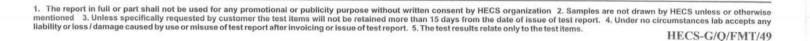
Environmental Condition Sampling Method & Plan

: Temperature (°C): 22.0 | Humidity (%): 45.0 : ICARDA: 2013

S.No. **Test Parameters** Units Results Test Method Moisture % 4.64 HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issuc Date:02:07: 2020 Infiltration Rate 1.3 Inhouse method Manganese mg/kg 41.99 HECS-G/INS/SOP/ 042 Iron mg/kg 8.88 Inhouse method

Note:- mg/kg: milligram per kilogram, % - Percentage..

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



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#### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014797F

Report No.

: HECS/PE/012/050325

Sample ID No

: 050325101

Address of the Client

: M/s. SIPCOT

Sampling Date

: 27/02/2025

Group

: Manalur

Received Date

Sample Name

: Pollution & Environment

: 05/03/2025

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

: Roshan Nagaram

Environmental Condition Sampling Method & Plan

: Temperature (°C): 22.0 | Humidity (%): 45.0

ICA	RDA .	2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			
1	Cadmium	mg/Kg	0.18	HECS-G/INS/SOP 042 Issue No.:01 Issue Date:01.03,2021
2	Chromium	mg/Kg	25.93	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	27.45	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	11.51	HECS-G/INS/SOP/ 042 Issue No01 Issue Date:01.03.2021
5	Soil Texture		Silty clay loam	FAO of United Nations, Rome Chapter III 2008
6	Soil Texture i)Sand	9/0	12.8	FAO of United Nations, Rome Chapter III 2008
7	Soil Texture ii)Silt	%	55.6	FAO of United Nations, Rome Chapter III 2008
8	Soil Texture iii)Clay	%	31.6	FAO of United Nations, Rome Chapter III 2008
9	pH Value @ 25 ° C (1 : 2.5)	5 .	5.80	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	23.2	IS 14767: 2000



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#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014797F

Report No.

: HECS/PE/012/050325

Sample ID No

: 050325101

Sampling Date

: 27/02/2025

Address of the Client

: M/s. SIPCOT : Manalur

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

Commenced Date: 05/03/2025

Completed On

: 28/03/2025

Sample Mark

: NA

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

: Roshan Nagaram

Environmental Condition Sampling Method & Plan : Temperature (°C): 22.0 | Humidity (%): 45.0

: ICARDA - 2013

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.95	FAO of United Nations Rome 2007
12	Organic Carbon	0/0	0.24	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.42	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	22.73	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	%	0.0095	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	15.7	FAO of United Nations, Rome Chapter III 2008
19	Exchangable Magnesium as Mg	mEq/L	3.94	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	%	17.2	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 kilograms. \*\*\*End of Report\*\*\*



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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/012/050325/N

Sample ID No

: 050325101

Address of the Client

: M/s. SIPCOT

Sampling Date

: 27/02/2025

Name of the Client

: Manalur

Received Date : 05/03/2025

Group Sample Name : Pollution & Environment

: Soil

Commenced Date: 05/03/2025

Sample Mark

: NA : NA

Completed On : 28/03/2025 Report Date

Sample Reference Sample Drawn By

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

: 28/03/2025

Sample Location

: Roshan Nagaram

Sample quantity: 1 Kg

Environmental Condition

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
1	Moisture	%	5.36	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Infiltration Rate	-	0.8	Inhouse method
3	Iron	mg/kg	5.41	Inhouse method
4	Manganese	mg/kg	41.56	HECS-G/INS/SOP/ 042

Note:- mg/kg: milligram per kilogram, % - Percentage..

"End of Report"



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## TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014798F

Report No.

: HECS/PE/013/050325

Sample ID No

: 050325102

Sampling Date

: 28/02/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Received Date

: 05/03/2025

Sample Name

: Pollution & Environment

Commenced Date: 05/03/2025

: Soil

: 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 quantity: 1 Kg

Sample Location

: Madharpakkam

Environmental Condition Sampling Method & Plan

: ICARDA: 2013

: Temperature (°C): 22.0 | Humidity (%): 45.0

S.No.	Test Parameters	Units	Results	Test Method
Discip	oline : Chemical		100 to 10	
1	Cadmium	mg/Kg	0.15	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	11.97	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	10.04	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	7.52	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture		Silty clay	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	4.6	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	42.8	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	9/0	52.6	FAO of United Nations, Rome Chapter - III 2008
)	pH Value @ 25 ° C (1:2.5)	-	6.08	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	55.4	IS 14767: 2000



<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.

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#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014798F

Report No.

: HECS/PE/013/050325

Sample ID No

: 050325102

Sampling Date

Received Date

Completed On

Report Date

Commenced Date: 05/03/2025

Sample quantity: 1 Kg

: 28/02/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

Address of the Client

: Manalur

: M/s. SIPCOT

: Pollution & Environment

Sample Name

: Soil

: NA

Sample Mark

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Madharpakkam

**Environmental Condition** Sampling Method & Plan

: Temperature (°C): 22.0 | Humidity (%): 45.0

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.94	FAO of United Nations Rome 2007
12	Organic Carbon	0/0	0.34	IS 2720 (Part 22) Section I 1972
13	Organic Matter	0/0	0.60	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	17.38	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	º/a	0.0115	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	7.74	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.74	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	1.4	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	21.5	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 kilograms. \*\*\*End of Report\*\*\*



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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/013/050325/N

Sample ID No Sampling Date

: 050325102

Address of the Client

Name of the Client

: Manalur

: M/s. SIPCOT

: 28/02/2025

Group

: 05/03/2025

Sample Name

: Pollution & Environment : Soil

Received Date

Commenced Date: 05/03/2025

Completed On

: 28/03/2025

Sample Mark

: NA : NA

: 28/03/2025

Sample Reference Sample Drawn By

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

Report Date Sample quantity: 1 Kg

Sample Location

: Madharpakkam

Environmental Condition Sampling Method & Plan : Temperature (°C): 22.0 | Humidity (%): 45.0

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
1	Moisture	0/0	2.10	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Infiltration Rate		0.7	Inhouse method
3	Iron	mg/kg	3.87	Inhouse method
4	Manganese	mg/kg	36.32	HECS-G/INS/SOP/ 042

Note:- mg/kg: milligram per kilogram, % - Percentage...

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



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Name of the Client

#### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014799F

Report No.

: HECS/PE/014/050325

Sample ID No

: 050325103

Sampling Date

Received Date

: 28/02/2025

: 05/03/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Group

: Pollution & Environment

Sample Name

: Soil

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By Sample Location

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

: Papankuppam

**Environmental Condition** Sampling Method & Plan : Temperature (°C): 22.0 | Humidity (%): 45.0

: ICARDA: 2013

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	0.23	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	38.26	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	46.50	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zine	mg/kg	29.08	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01 03.2021
5	Soil Texture		Clay	FAO of United Nations, Rome Chapter III 2008
6	Soil Texture i)Sand	%	6.0	FAO of United Nations, Rome Chapter III 2008
7	Soil Texture ii)Silt	%	15.4	FAO of United Nations, Rome Chapter III 2008
8	Soil Texture iii)Clay	%	78.6	FAO of United Nations, Rome Chapter III 2008
9	pH Value @ 25 ° C (1 : 2.5)	•	8.53	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	236.0	IS 14767: 2000



D.Anusuya Lab Manager Authorized Signatory

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#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014799F

Report No.

: HECS/PE/014/050325

Sample ID No

: 050325103

Sampling Date

: 28/02/2025

Address of the Client

: Manalur

: M/s. SIPCOT

Sample Name

: Pollution & Environment

Received Date : 05/03/2025

: Soil

Commenced Date: 05/03/2025

Sample Mark

Completed On : 28/03/2025

: NA

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 Environmental Condition : Papankuppam

: Temperature (°C): 22.0 | Humidity (%): 45.0

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.98	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.41	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.72	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	17.06	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	%	0.0104	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	10.80	FAO of United Nations, Rome Chapter III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.26	FAO of United Nations, Rome Chapter III 2008
20	Cation Exchange Capacity	mEq/100g	2.2	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	20.4	IS 14765: 2000
22	Colour		Black	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 kilograms. \*\*\*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-CIO/FMT/040 HECS-G/Q/FMT/049

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/014/050325/N

Sample ID No Sampling Date

: 050325103 : 28/02/2025

Address of the Client

Name of the Client

: Manalur

: M/s. SIPCOT

Group

: Pollution & Environment

Received Date : 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Sample Mark

Completed On : 28/03/2025

Sample Reference

: NA : NA

Report Date

: 28/03/2025

Sample Drawn By

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

Sample quantity: 1 Kg

Sample Location

: Papankuppam

**Environmental Condition** 

: Temperature (°C): 22.0 | Humidity (%): 45.0

Sampling Method & Plan

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
Į	Moisture	%	8.71	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Infiltration Rate	-	0.3	Inhouse method
3	Iron	mg/kg	9.30	Inhouse method
1	Manganese	mg/kg	117.14	HECS-G/INS/SOP/ 042

Note:- mg/kg: milligram 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\_C/O/EMT/40 HECS-G/O/FMT/49

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.



Address of the Client

#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016102F

Report No.

: HECS/AP/067/050325

Sample ID No

: 050325093

Sampling Date

: 27/02/2025 To 28/02/2025

Group

: Manalur

: M/s. SIPCOT

: Atmospheric Pollution

Received Date

: 05/03/2025

Sample Name

: Noise Levels (Excluding vibration)

Commenced Date: 05/03/2025

Sample Mark

Completed On : 03/04/2025

Sample Reference

: Ambient Noise

Report Date

: 03/04/2025

Sample Drawn By

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

Sample quantity: NA

Sample Location

Environmental Condition Sampling Method & Plan

: IS 9989:1981

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

S.No	Sampling Location	Day Noise level in dB (A)	Night Noise level in dB (A)
1	Project Site	49.4	44.6
2	Soorapundi	47.6	40.5
3	Roshan Nagaram	45.9	41.7
4	Madharpakkam	52.1	43.9
5	Papankuppam	52.7	44.1

#### Noise Standards - CPCB:

iv.

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

: Day Time-50 dB (A);

Note:

1. Day Time shall mean from 6.00 am to 10.00 pm.

Silence Zone

2. Night Time shall mean from 10.00 pm to 6.00 am. \*\*\*End of Report\*\*\*



D.Anusuya Lab Manager Authorized Signatory

Night Time-40 dB (A).

<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

EXTRACT OF MINUTES OF THE 491<sup>st</sup> BOARD MEETING OF SIPCOT HELD AT 4.00 P.M. ON FRIDAY, THE 29<sup>TH</sup> MAY, 2020 AT THE CONFERENCE HALL, INDUSTRIES DEPARTMENT, SECRETARIAT, CHENNAI-9

DIRECTORS PRESENT (IN PERSON)	<ol> <li>Thiru N. Muruganandam, IAS, Principal Secretary/Chairman</li> <li>Thiru J. Kumaragurubaran, IAS, Managing Director</li> <li>Thiru. S. Krishnan, IAS, Director</li> <li>Tmt. Kakarla Usha, IAS, Director</li> <li>Tmt. Anu George, IAS, Director</li> <li>Tmt. R. Gajalakshmi, IAS, Director</li> <li>Dr. K.P. Karthikeyan, IAS, Director</li> </ol>
DIRECTORS PRESENT (ONLINE)*	<ol> <li>Dr. M. Aarthi, IAS, Director</li> <li>Tmt. M.A. Helen, Director</li> <li>Thiru. S. Kumararajan, Independent Director</li> <li>Dr. A. Jebamalar, Independent Director</li> <li>Thiru S.V. Arumugam, Independent Director</li> <li>Dr.N.Sundaradevan, IAS (Retd.),</li> <li>Independent Director</li> </ol>
IN ATTENDANCE:	Thiru. SP. Meyyappan, Consultant (Operations) Tmt. S. Shoba, GM(F) /CFO Tmt. H. Prabhavathy, GM(P-II) i/c Thiru A.R. Chandramohan, GM(P-III) i/c Tmt. M.G. Shanthi, Company Secretary

<sup>\*</sup> Ministry of Corporate Affairs in its circular dated 19.3.2020 and 5.5.2020 relaxed the requirement of holding Board Meetings with physical presence of Directors for approval and also encouraged Companies to hold meetings through Video Conferencing or through audiovisual means.

\*\*\*\*

# 9. SIPCOT INDUSTRIAL COMPLEXES/PARKS/GROWTH CENTRES - DRAFT ENVIRONMENT POLICY - APPROVAL - REG.

Board deliberated the draft environment policy as annexed in the Board note and passed the following:

"RESOLVED to approve the Environmental Policy of SIPCOT as annexed in the Board note and authorize Managing Director to implement the same."

//TRUE COPY//

COMPANY SECRETARY

#### **ENVIRONMENTAL MANAGEMENT CELL**

#### 1. INTRODUCTION:

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

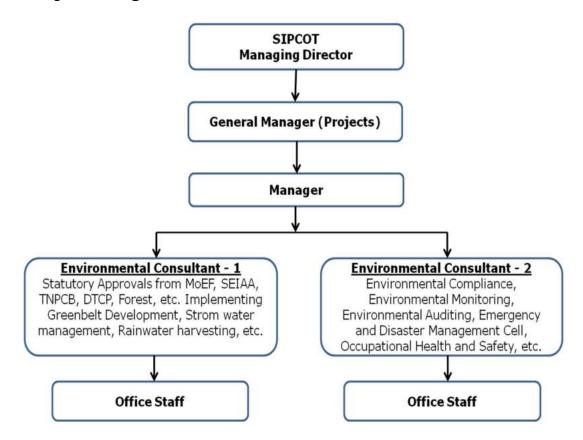


Figure - 1 Organogram for Environmental Management Cell

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

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

Table – 1: Roles and responsibilities of EMC

S.No.	Designation	Responsibilities
1	Managing Director  GM - Projects	> Responsible for overall environmental management.
		Regularly conduct meeting with EMC and take feedback regarding all the activities performed under
		Environmental Management and give directions to
		succeeding component.
		<ul> <li>Approval of funds for carrying out environmental</li> </ul>
		management activities.
		Keep aware about all the activities performed under
		EMC in the industrial parks.
		<ul> <li>Issuing direction to Project officers for implementing</li> </ul>
2		Greenbelt development, Storm water management, rain
		water harvesting, etc.
		> To deal with legal entity pertaining to environmental
		issues.
3	Manager	> To prepare and allocate budget for Environment
		Management Plan.
		> Ensuring compliance to the conditions prescribed by
		statutory authority.
		Mandating member industries to comply with the
		conditions stipulated in the statutory approvals and
		non-compliance if any shall be reported to GM and
		immediately required action will be taken.
	Environmental Consultants (Two)	Obtaining Statutory Approvals from MoEF&CC / SEIAA / TABLES
		TNPCB, etc.
		Addressing the various queries received from statutory
4		<ul><li>authorities on environmental front.</li><li>Submitting Environmental compliance report and</li></ul>
4		coordinating with project officers for Environmental
		monitoring, audit, etc.
		<ul><li>Compliance with the environmental laws and</li></ul>
		implications which dynamically changes from time to
		time due to the emerging challenges.



# தமிழ்நாடு தொழில் முன்னேற்ற நிறுவனம்

சிப்காட் தொழிற் பூங்கா – மாநல்லூர், கும்மிடிப்பூண்டி தாலுகா. திருவள்ளூர் மாவட்டம்.

#### சுற்றுச்சூழல் இசைவாணை

மத்திய சுற்றுச்சூழல் வனத்துறை மற்றும் பருவநிலை மாற்ற அமைச்சகம் F.No:21-59/2015-IA.III தேதி 10.11.2020 மூலம் மாநல்லூர் மற்றும் சூரபூண்டி கிராமம், கும்மிடிப்பூண்டி தாலுகா, திருவள்ளூர் மாவட்டத்தில் அமையவுள்ள தொழிற் பூங்காவிற்கு சுற்றுச்சூழல் இசைவாணை வழங்கியுள்ளது.

இசைவாணையின் முழுவிவரங்களை சிப்காட் இணையதளமான www.sipcot.tn.gov.in மற்றும் மத்திய சுற்றுச்சூழல் வனத்துறை மற்றும் பருவநிலை மாற்ற அமைச்சகத்தின் இணையதளமான www.environmentclearance.nic.in ஆகியவற்றில் பதிவிறக்கம் செய்து கொள்ளலாம். மேலும் இவ்விசைவாணையின் நகலினை இவ்வலுவலகத்திலும் பெற்றுக்கொள்ளலாம்.

மேலாண்மை இயக்குநர், சிப்காட், 19–அ, ருக்மணி இலட்சுமிபதி சாலை, எழும்பூர், சென்னை–600 008.

செ.ம.தொ. இ/1102/வரைகலை/2020



# STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED SIPCOT INDUSTRIAL PARK - MANALLUR

SIPCOT INDUSTRIAL PARK - MANALLUR
GUMMIDIPOONDI TALUK, THIRUVALLUR DISTRICT

#### **ENVIRONMENTAL CLEARANCE**

Environmental Clearance has been obtained for the Development of SIPCOT Industrial Park at Manallur and Soorapoondi Villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu from Ministry of Environment Forest and Climate Change (MoEF&CC), New Delhi vide File.No.: 21-59/2015-IA.III Dated 10.11.2020.

The contents of the Environmental Clearance can be downloaded from SIPCOT website <a href="www.sipcot.tn.gov.in">www.sipcot.tn.gov.in</a> and also in the MoEF&CC website <a href="www.environmentclearance.nic.in">www.environmentclearance.nic.in</a>. Further the copies of the Environmental Clearance could be obtained from the Head Office of SIPCOT.

MANAGING DIRECTOR,

SIPCOT, 19A, RUKMANI LAKSHMIPATHY ROAD, EGMORE, CHENNAI-8.

DIPR/ 1102 / Display/2020

#### Newspaper advertisement

#### **EC** Amendment



சென்னை, மறர் 22 கட்ட பெண்டை மறர் 22 கட்ட பெண்டை மறர் 22 கட்ட பெண்டை திறைக்கு நடிக்க விறுத்தில் பெண்டி திறைக்கு விறுத்தில் பென்ற திறிய மும்பு தரிக்க விறுக்கு விறுக்க



CHENNAI: The body of a 19-yearold law student with several cut
injuries was found in a forested
area near Thinuvalangadu in the
Trivvallur district on Friday. With
the help of the Aadhaar card in
his pocket, police identified him
as 5 Lokesh of Poondi village. He
was pursuing law through
distance education mode and was
nurdered while he had come to
his grandmother's house. ENS

mual increase in property tax, as mandated by the Central Finance Commission (CPC), a key constitution for availing central grants. "However despite adhering to CPC and MDMK causedlory Or Girdination for availing central grants." CPM concillors from VCK, CPL and MDMK causedlory Or Girdination for availing central grants. "CPM concillors from VCK, CPL and MDMK causedlory Or Girdination for availing central grants. "CPM concillors from VCK, CPL and MDMK causedlory or Girdination for availing central finance metals and the Kodungaiyur dump yard. The proposed establishment of a wasto-to-energy (WTF) plant at the Kodungaiyur dump yard. CPI concillor M Renuka questioned bear he budget of significance of the state's ministers and MPs. Over the proposed establishment of a wasto-to-energy (WTF) plant at the Kodungaiyur dump yard. CPI concillor M Renuka questioned with the state's ministers and MPs. Over the proposed establishment of a wasto-to-energy (WTF) plant at the Kodungaiyur dump yard. CPI concillor M Renuka questioned with the state's ministers and MPs. Over the proposed establishment of a wasto-to-energy (WTF) plant at the Kodungaiyur dump yard. CPI concillor M Renuka questioned with the state's ministers and MPs. Over the proposed constructions would soon be appointed on deputation-basis.

# SELECTION OF VICE-CHANCELLOR OF

invitation of Application for the Post of Vice-Chancellor, Bangalore City University, Bangalore as per Section 14(5) and 14(6) of Kamataka State University Act, 2000.

The Higher Education Department, Government of Kamataka invites Applications for the Post of Vice-Chancellor, Bangalore City University, Bangalore. The application should be submitted within Thirty Days (30) from the date of this Notification. The detailed application form and the further details are available on Higher Education Department website https://hed.kamataka.gov.in

Principal Secretary to Government, Higher Education Department

#### PUBLIC CAUTION NOTICE

General Public is hereby informed that, we "ZEE LEARN LIMITED" ("Company") having registered office at Continental Building 135, Dr. Annie Besant Road, Worll, Mumbai-400018 is the registered proprietor of the Trademark/Brand name "MOUNT LITERA ZEE SCHOOL" and have the Copyright in the design and logo of "MOUNT LITERA ZEE SCHOOL", the know-how and copyrights in the standards, Publicity material, packaging, drawing and the like.

Vide the Academic Alliance Agreement ("Agreen Vide the Academic Allance Agreement ("Agreement") dated 2J/31/2015 escourde between S.K. EDUCATIONAL SOCIETY and the Company, the Company had granted a non-exclusive, revocable, limited right and permission to S.K. EDUCATIONAL SOCIETY to use the Company's brand name "Mount Litera Zee School" ("Trade Mark") for running Mount Litera Zee School ("School") Cuddalore, Tamil Nadu, under MLZS Program.

# STATE INDUSTRIES PRUMUTION CORPORATION OF TAMIL NADU LIMITED 19-A. RUKMANI LAKSHMIPATHY ROAD, SIPCOT INDUSTRIAL PARK

ENVIRONMENTAL CLEARANCE
Amendment in Environmental Clearance has been obtained for the proposed Development of Industrial Park in the area of 279.995 Ha. (691.587 Acres) at Manallur and Socrapoondi Villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu from the Ministry of Environment, Forest and Climate Change (MoEF&CC) vide EC (dentification No. EC24A3101TNS73599) and File No. 21-59/2015-IA.III detect 17.8.3259 dated 17.03.2025.

dated 17.03.2025.

The Amendment in Environmental Clearance (EC) is available in the website of the Ministry of Environment, Forest and Climate Change (MoEF&CC). The clearance copy can also be downloaded from the SIPCOT website at www.sipcot.tn.gov.in.

DIPR/1129/TENDER/2025

MANAGING DIRECTOR

# TAMILNADU POLLUTION CONTROL BOARD The AS Periods The AS





(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

Date: 18.11.2020

The Member Secretary, State Level Environmental Impact Assessment Authority, /RPAD/ 3rd Floor, Panagal Maligai, No.1. Jeenis Road, Saidapet, Chennai - 600 015.

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

\*\*\*\*\*\*\*

We wish to inform that, SIPCOT has obtained Environmental Clearance (EC) for development of New Industrial Park at Manallur and Soorapoondi Villages of Gummidipoondi Taluk, Thiruvallur District from the Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India vide reference cited. A copy of the same is enclosed. Further, as per the EC Condition (Part B - Standard Conditions, Section XI: Miscellaneous) we request you to display the same for 30 days from the date of receipt of this letter.

Yours faithfully,

GENERAL MANAGER (P-II)i/c

Encl.: as above

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



(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

Date: 18.11.2020

The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road,

/RPAD/

Nungambakkam, Chennai - 600 034.

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

\*\*\*\*\*\*

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



(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

Date: 18.11.2020

The President, Soorapoondi Village Panchayat, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu.

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

\*\*\*\*\*\*

We wish to inform that, SIPCOT has obtained Environmental Clearance for development of New Industrial Park at Manallur and Soorapoondi Villages of Gummidipoondi Taluk, Thiruvallur District from the Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India vide reference cited. A copy of the same is enclosed.

Yours faithfully,

GENERAL MANAGER (P-II)i/c

Encl.: as above

Copy to:

The Project Officer, SIPCOT Industrial Complex, Gummidipoondi.

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



(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

The President, Soorapoondi Village Panchayat, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu.

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

\*\*\*\*\*\*

We wish to inform that, SIPCOT has obtained Environmental Clearance for development of New Industrial Park at Manallur and Soorapoondi Villages of Gummidipoondi Taluk, Thiruvallur District from the Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India vide reference cited. A copy of the same is enclosed.

Yours faithfully,

Date: 18.11.2020

GENERAL MANAGER (P-II)i/c

Encl.: as above

Copy to:

The Project Officer, SIPCOT Industrial Complex, Gummidipoondi.

To hand over a copy of the Environmental Clearance to the Soorapoondi Panchayat with due acknowledgement and send a report to the H.O.

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



(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

The President,
Manallur Village Panchayat,
Gummidipoondi Taluk,
Thiruvallur District,
Tamil Nadu.

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

\*\*\*\*\*\*

We wish to inform that, SIPCOT has obtained Environmental Clearance for development of New Industrial Park at Manallur and Soorapoondi Villages of Gummidipoondi Taluk, Thiruvallur District from the Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India vide reference cited. A copy of the same is enclosed.

Yours faithfully,

Date: 18.11.2020

GENERAL MANAGER (P-II)i/c

Encl.: as above

Copy to:

The Project Officer, SIPCOT Industrial Complex, Gummidipoondi

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



(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

Date: 18.11.2020

The President,
Manallur Village Panchayat,
Gummidipoondi Taluk,
Thiruvallur District,
Tamil Nadu.

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

\*\*\*\*\*\*

We wish to inform that, SIPCOT has obtained Environmental Clearance for development of New Industrial Park at Manallur and Soorapoondi Villages of Gummidipoondi Taluk, Thiruvallur District from the Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India vide reference cited. A copy of the same is enclosed.

Yours faithfully,

GENERAL MANAGER (P-II)i/c

Encl.: as above

Copy to:

The Project Officer, SIPCOT Industrial Complex, Gummidipoondi To hand over a copy of the Environmental Clearance to the Manallur Panchayat with due acknowledgement and send a report to the H.O.

Phone: 45261777, Fax: 45261796, Website: www.sipcot.tn.gov.in

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



(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

The Block Development Officer, Manallur & Soorapoondi Villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu.

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

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Yours faithfully,

Date: 18.11.2020

GENERAL MANAGER (P-II)i/c

Encl.: as above

Copy to:

The Project Officer, SIPCOT Industrial Complex, Gummidipoondi

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

Phone: 45261777, Fax: 45261796, Website: www.sipcot.tn.gov.in



(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

The Block Development Officer, Manallur & Soorapoondi Villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu.

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

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We wish to inform that, SIPCOT has obtained Environmental Clearance for development of New Industrial Park at Manallur and Soorapoondi Villages of Gummidipoondi Taluk, Thiruvallur District from the Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India vide reference cited. A copy of the same is enclosed.

Yours faithfully,

Date: 18.11.2020

GENERAL MANAGER (P-II)i/c

Encl.: as above

Copy to:

The Project Officer, SIPCOT Industrial Complex, Gummidipoondi To hand over a copy of the Environmental Clearance to the BDO with due acknowledgement and send a report to the H.O.

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



(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

Projects/EIA/Manallur/2020

Date: 18.11.2020

The Chairman, Tamil Nadu Pollution Control Board, No. 76, Mount Road, Guindy, Chennai – 600 032.

/RPAD/

Sir,

Sub: SIPCOT - Development of Manallur Industrial Park - Copy of the

Environmental Clearance issued by MoEF&CC - Forwarded - Reg.

Ref: EC File No.: 21-59/2015-IA.III dated 10.11.2020.

\*\*\*\*\*

We wish to inform that, SIPCOT has obtained Environmental Clearance for development of New Industrial Park at Manallur and Soorapoondi Villages of Gummidipoondi Taluk, Thiruvallur District from the Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India vide reference cited. A copy of the same is enclosed. Further, as per the EC Condition (Part B - Standard Conditions, Section XI: Miscellaneous) we request you to display the same for 30 days from the date of receipt of this letter.

Yours faithfully,

GENERAL MANAGER (P-II)i/c

Encl.: as above

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



#### STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED

(A Government of Tamil Nadu under Taking)

PROJECT OFFICE: STPCOT INDUSTRIAL PARK, MANALLUR

Gummidipoondi Taluk, Thiruvallur District- 601 201 CIN:U74999TN1971SGC005967 Email: pomnl@sipcot.in

Regd.office: 19-A, Rukmani Lakshmipathy Road, Post Box No: 7223, Egmore, Chennai-600 008. Phone: 28554787, Fax: 044-28513978, Website: www.sipcot.tn.gov.in

கடித ந.க.எண்.தி.அ/சிப்காட்/மா.நெ/சுற்றுச்சூழல்/2025 நாள்: 21.03.2025

பெறுநர்:

ஊராட்சி மன்ற செயலாளர், சூரப்பூண்டி ஊராட்சி மன்றம், கும்மிடிப்பூண்டி வட்டம், திருவள்ளூர் மாவட்டம்.

ஐயா,

பொருள்:

சிப்காட் - திருவள்ளூர் மாவட்டம், கும்மிடிப்பூண்டி தாலுகா, மாநல்லூர் மற்றும் சூரப்பூண்டி ஆகிய கிராமங்களில் 279.995 ஹெக்டேர் (691.587 ஏக்கர்) பரப்பளவில், சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகத்திடம் திருத்திய சுற்றுச்சூழல் இசைவாணை பெறப்பட்டது சமர்ப்பித்தல் தொடர்பாக.

குறிப்பு:

சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகத்தின் கிருக்கிய சுற்றுச்சூழல் அனுமதி அடையாள नळंग EC24A3101TN5735699N நாள் 17.03.2025.

சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகம், அடையாள எண்: EC24A3101TN5735699N மற்றும் கோப்பு எண்: 21-59/2015-IA.III தேதி: 17.03.2025 மூலம் திருவள்ளூர் மாவட்டம், கும்மிடிப்பூண்டி தாலுகா, மாநல்லூர் மற்றும் சூரப்பூண்டி ஆகிய கிராமங்களில் 279.995 ஹெக்டேர் (691.587 ஏக்கர்) பரப்பளவில் சிப்காட் தொழிற்பூங்கா அமைப்பதற்கான திருத்திய சுற்றுச்சூழல் இசைவாணை வழங்கியுள்ளது.

திருத்திய சுற்றுச்சூழல் அனுமதியில் குறிப்பிடப்பட்டுள்ள நிபந்தனைகளுக்கு இணங்க, திட்ட முன்மொழிபவர் சுற்றுச்சூழல் அனுமதியின் ம்றியம் நகராட்சி உள்ளாட்சி அமைப்புகள், பஞ்சாயத்து வேண்டும். தலைவர்களிடம் சமர்ப்பிக்க அமைப்புகளின் மேற்குறிப்பிட்ட அமைப்புகள் 30 நாட்களுக்கு சுற்றுச்சூழல் அனுமதியை பொதுமக்களுக்கு காட்சிப்படுத்த வேண்டும்.

இது சம்பந்தமாக, திருத்திய சுற்றுச்சூழல் அனுமதியின் நகலை உங்கள்

பார்வைக்காக இணைத்துள்ளோம்.

சிப்காட் தொழிற்பூங்கா, மாநல்லூர்

இணைப்பு: மேலே குறிப்பிடப்பட்டுள்ளபடி.



# STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED

(A Government of Tamil Nadu under Taking)

(A GOVE: SIPCOT INDUSTRIAL PARK, MANALLUR Gummidipoondi Taluk, Thiruvallur District- 601 201

Email: pomni@sipcot.in

CIN:U74999TN1971SGC005967

Regd.office:19-A, Rukmani Lakshmipathy Road, Post Box No: 7223, Egmore, Chennai-600 008. Phone: 28554787, Fax: 044-28513978, Website: www.sipcot.tn.gov.in

கடித ந.க.எண்.தி.அ/சிப்காட்/மா.நெ/சுற்றுச்சூழல்/2025

நாள்: 21.03.2025

பெறுநர்:

ஊராட்சி மன்ற செயலாளர், மாநெல்லூர் ஊராட்சி மன்றம், கும்மிடிப்பூண்டி வட்டம், திருவள்ளூர் மாவட்டம்.

ஐயா,

பொருள்:

சிப்காட் - திருவள்ளூர் <mark>மாவட்டம், கும்மிடிப்பூண்டி தா</mark>லுகா, மாநல்லூர் மற்றும் சூரப்பூண்டி ஆகிய கிராமங்களில் 279.995 ஹெக்டேர் (691.587 ஏக்கர்) பரப்பளவில், சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அ<mark>மைச்சகத்திடம் திருத்திய சுற்றுச்சூழல்</mark> இசைவாணை பெறப்பட்டது சமர்ப்பித்தல் தொடர்பாக.

. சூறிப்பு:

சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகத்தின் சுற்றுச்சூழல் அனுமகி नळंग அடையாள திருத்திய EC24A3101TN5735699N நாள் 17.03.2025.

சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகம், அடையாள எண்: EC24A3101TN5735699N மற்றும் கோப்பு எண்: 21-59/2015-IA.III தேதி: 17.03.2025 மூலம் திருவள்ளூர் மாவட்டம், கும்மிடிப்பூண்டி தாலுகா, மாநல்லூர் மற்றும் சூரப்பூண்டி ஆகிய கிராமங்களில் 279.995 ஹெக்டேர் (691.587 ஏக்கர்) பரப்பளவில் சிப்காட் தொழிற்பூங்கா அமைப்பதற்கான திருத்திய சுற்றுச்சூழல் இசைவாணை வழங்கியுள்ளது.

சுற்றுச்சூழல் அனுமதியில் குறிப்பிடப்பட்டுள்ள திருத்திய நிபந்தனைகளுக்கு இணங்க, திட்ட முன்மொழிபவர் சுற்றுச்சூழல் அனுமதியின் அமைப்புகள், பஞ்சாயத்து மற்றும் நகராட்சி உள்ளாட்சி நகலை தலைவர்களிடம் சமர்ப்பிக்க வேண்டும். அமைப்புகளின் மேற்குறிப்பிட்ட அமைப்புகள் 30 நாட்களுக்கு சுற்றுச்சூழல் அனுமதியை பொதுமக்களுக்கு காட்சிப்படுத்த வேண்டும்.

இது சம்பந்தமாக, திருத்திய சுற்றுச்சூழல் அனுமதியின் நதலை உங்கள்

பார்வைக்காக இணைத்துள்ளோம்.

சிப்காட் தொழிற்பூங்கா, மாநல்லார்

இணைப்பு: மேலே குறிப்பிடப்பட்டுள்ளபடி.

M. Solvey Learly peralugh



# STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED

(A Government of Tamil Nadu under Taking)

PROJECT OFFICE: SIPCOT INDUSTRIAL PARK, MANALLUR

Gummidipoondi Taluk, Thiruvallur District- 601 201 Email: pomnl@sipcot.in CIN:U74999TN1971SGC005967

Regd.office: 19-A, Rukmani Lakshmipathy Road, Post Box No: 7223, Egmore, Chennai-600 008. Phone: 28554787, Fax: 044-28513978, Website: www.sipcot.tn.gov.in

கடித ந.க.எண்.தி.அ/சிப்காட்/மா.நெ/சுற்றுச்சூழல்/2025 நாள் : 21.03.2025

பெறுநர்:

வட்டார வளர்ச்சி அலுவலர், கும்மிடிப்பூண்டி ஊராட்சி ஒன்றியம், கும்மிடிப்பூண்டி வட்டம், திருவள்ளூர் மாவட்டம்.

ஐயா,

பொருள்: சிப்காட் - <u>திருவள்ளூர் மாவட்டம்,</u> கும்மிடிப்பூண்டி தாலுகா,

மாநல்லார் மற்றும் சூரப்பூண்டி ஆகிய கிராமங்களில் 279.995 ஹெக்டேர் (691.587 ஏக்கர்) பரப்பளவில், சுற்றுச்சூமல் வனம் மற்றும் காலநிலை மாற்றம் அழைச்சகத்திடம் திருத்திய சுற்றுச்சூழல்

இசைவாணை பெறப்பட்டத<mark>ு சமர்ப்பித்தல் தொடர்பாக.</mark>

குறிப்பு: சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகத்தின்

> கிருத்திய சுற்றுச்சூழல் அனுமதி அடையாள नळंग

EC24A3101TN5735699N நாள் 17.03.2025.

சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகம், அடையாள எண்: EC24A3101TN5735699N மற்றும் கோப்பு எண்: 21-59/2015-IA.III தேதி: 17.03.2025 மூலம் திருவள்ளூர் மாவட்டம், கும்மிடிப்பூண்டி தாலுகா, மாநல்லூர் மற்றும் சூரப்பூண்டி ஆகிய கிராமங்களில் 279.995 ஹெக்டேர் (691.587 ஏக்கர்) பரப்பளவில் சிப்காட் தொழிற்பூங்கா அமைப்பதற்கான திருத்திய சுற்றுச்சூழல் இசைவாணை வழங்கியுள்ளது.

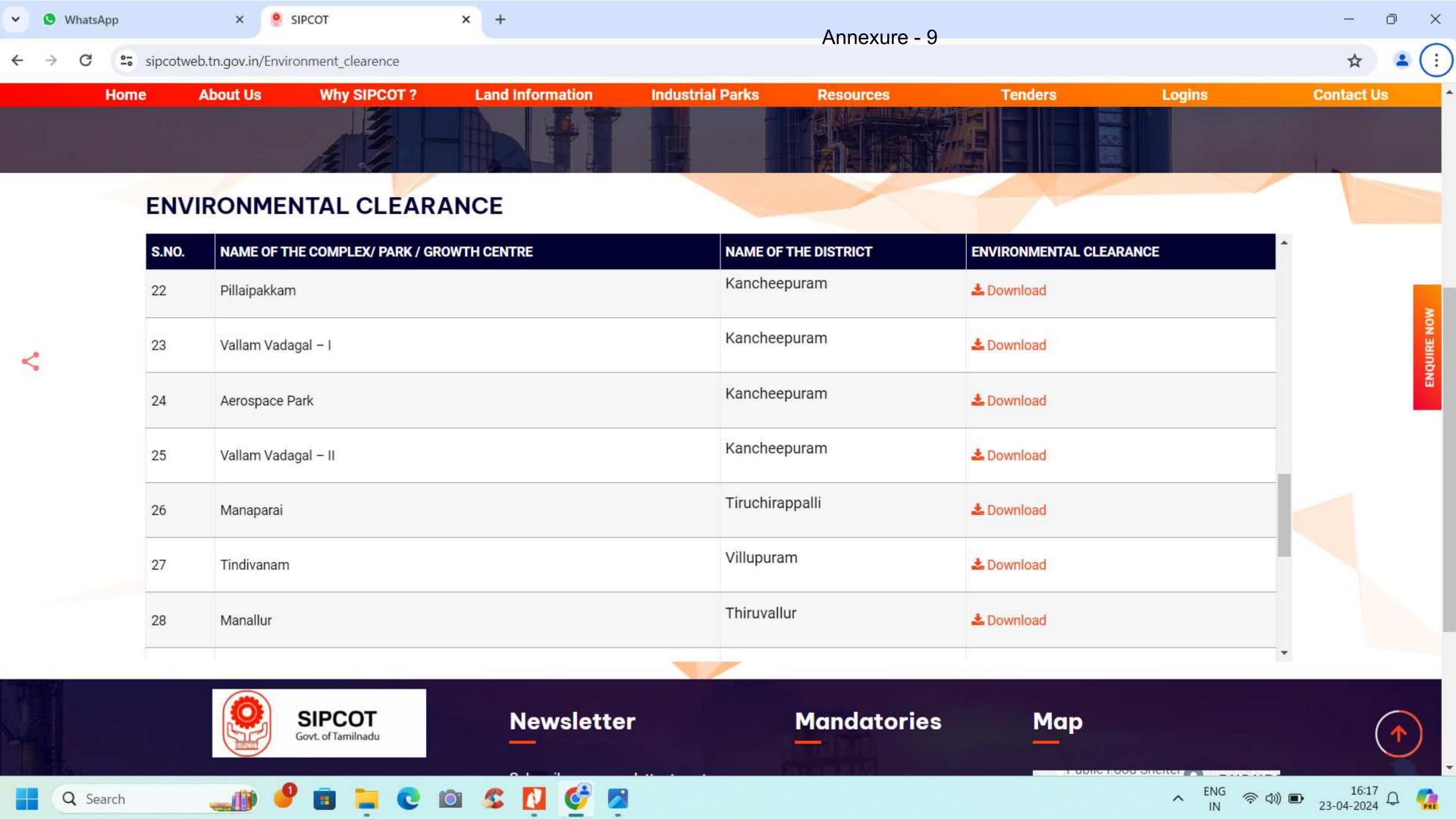
திருத்திய சுற்றுச்சூழல் அனுமதியில் குறிப்பிடப்பட்டுள்ள நிபந்தனைகளுக்கு இணங்க, திட்ட முன்மொழிபவர் சுற்றுச்சூழல் அனுமதியின் உள்ளாட்சி அமைப்புகள், பஞ்சாயத்து வ்ழுற்வ நகலை நகராட்சி சமர்ப்பிக்க வேண்டும். அமைப்புகளின் தலைவர்களிடம் மேலும், மேற்குறிப்பிட்ட அமைப்புகள் 30 நாட்களுக்கு சுற்றுச்சூழல் அனுமதியை பொதுமக்களுக்கு காட்சிப்படுத்த வேண்டும்.

இது சம்பந்தமாக, திருத்திய சுற்றுச்சூழல் அனுமதியின் நகலை உங்கள்

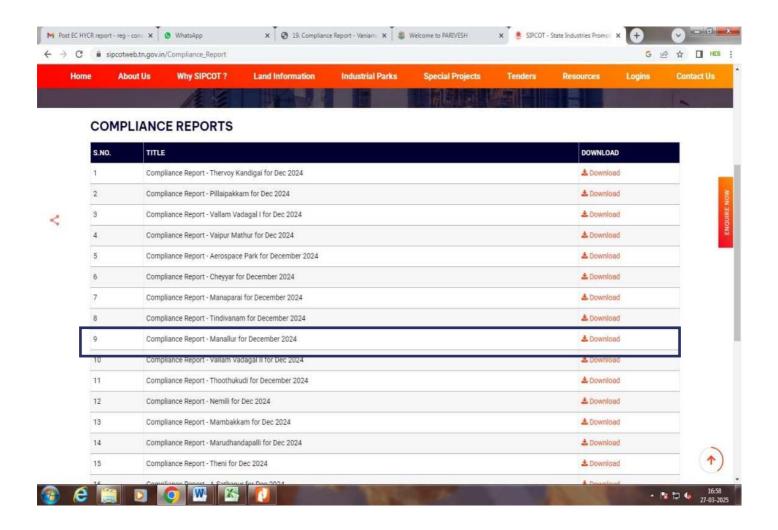
பார்வைக்காக இணைத்துள்ளோம்.

சிப்காட் தொழிற்பூங்கா, மாநல்லூர்





#### Annexure - 10







1/176375/2024

Date: 03-10-2024

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

Sir,

Sub: SIPCOT Industrial Park, Manallur - Environmental Statement for the Financial

Year ending 31st March 2024 - Submitted - Reg.

Ref: MoEF&CC File No. 21-59/2015-IA.III dated 10.11.2020.

\*\*\*\*\*\*

With reference to the above, we hereby submit the Environmental Statement in Form-V as prescribed under the Environmental (Protection) Rules, 1986 and its subsequent amendment in respect of SIPCOT Industrial Park at Manallur and Sooraipoondi Villages of Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu for the Financial Year ending 31<sup>st</sup> March 2024.

Yours faithfully, Sd/-MANAGING DIRECTOR

Encl: As above.

/Forwarded by Order/

GENERAL MANAGER (P-I)

# <u>SIPCOT – MANALLUR MONITORING PHOTOGRAPHS</u> <u>AMBIENT AIR QUALITY MONITORING PHOTOGRAPHS:</u>

#### **PROJECT SITE:**



#### **SOORAPUNDI:**



#### **ROSHAN NAGARAM:**



# Paparkuppam, Tamil Nadu, India 119, Ph Rd, Padhirivedu, Tamil Nadu e01202, India Lat 13.4458° Long 80.00362° 27/02/2025 04:56 PM GMT +05:30 PAPANKUPPAM: Paparkuppam, Tamil Nadu, India Cose-tepfs, Paparkuppam, Tamil Nadu, India Lat 13.42718° Long 80.0098757° Lat 13.42718° Long

#### **GROUND WATER SAMPLING PHOTOGRAPHS**



# SOORAPOONDI Soorapundi, Tamil Nadu, India P22v+41, Soorapundi, Tamil Nadu 801202, India Lat 13.4512632 Long 80.0475022

#### **NOISE MONITORING PHOTOGRAPHS**



#### **PAPANKUPPAM:**



#### **SOIL SAMPLING PHOTOGRAPHS**







**SOORAPUNDI:** 



MADHARPAKKAM:



#### **PAPPANKUPPAM:**



#### **SURFACE WATER SAMPLING PHOTOGRAPHS**

#### LAKE NEAR PALAVAKKAM



#### LAKE NEAR THERVOYKANDIGA



# EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### **FOR**

Development of Industrial Park at Manallur and Soorapoondi villages Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu-Land area 279.995Ha. (691.587Acres)

BY



#### STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED

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

#### At

Villages: Manallur and Soorapoondi

**Taluk: Gummidipoondi** 

**District: Thiruvallur** 

State: Tamil Nadu

Prepared by



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

**APRIL 2023** 



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EMERGENCY EVACUATION AND DISASTER
MANAGEMENT PLAN

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#### 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.

#### 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



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## EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

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

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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## EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### 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 24 Industrial Complexes in 15 districts and 6 Sector Specific Special Economic Zones (SEZs) 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.

Now, SIPCOT propose to develop an Industrial Park over an extent of 279.995Ha. (691.587Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu.

The Industrial Park is planned with only 10% plotted area for non- pharma 5(f) category industries like Synthetic Acrylic polymers and resins, water proofing compounds synthetic adhesives etc. and balance 90% for non-EC category industries like E vehicle and its components manufacturing, Automobile and automobile accessories manufacturing, Engineering and fabrication, etc., falling under Red, Orange, Green and White category industries.

SIPCOT will develop the physical infrastructure such as road, water, 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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EMERGENCY EVACUATION AND DISASTER
MANAGEMENT PLAN

#### 1.7 PROJECT LOCATION

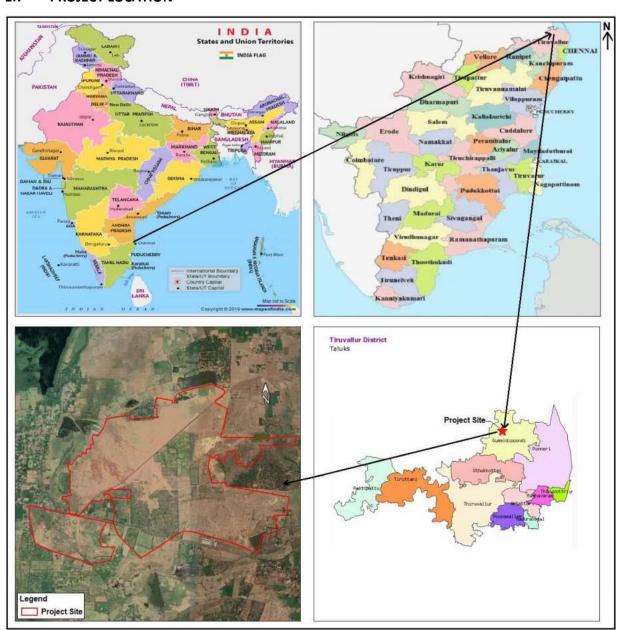


Figure 1.1: Project Location



EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

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1.8 PROJECT LAYOUT & ZONATION MAP

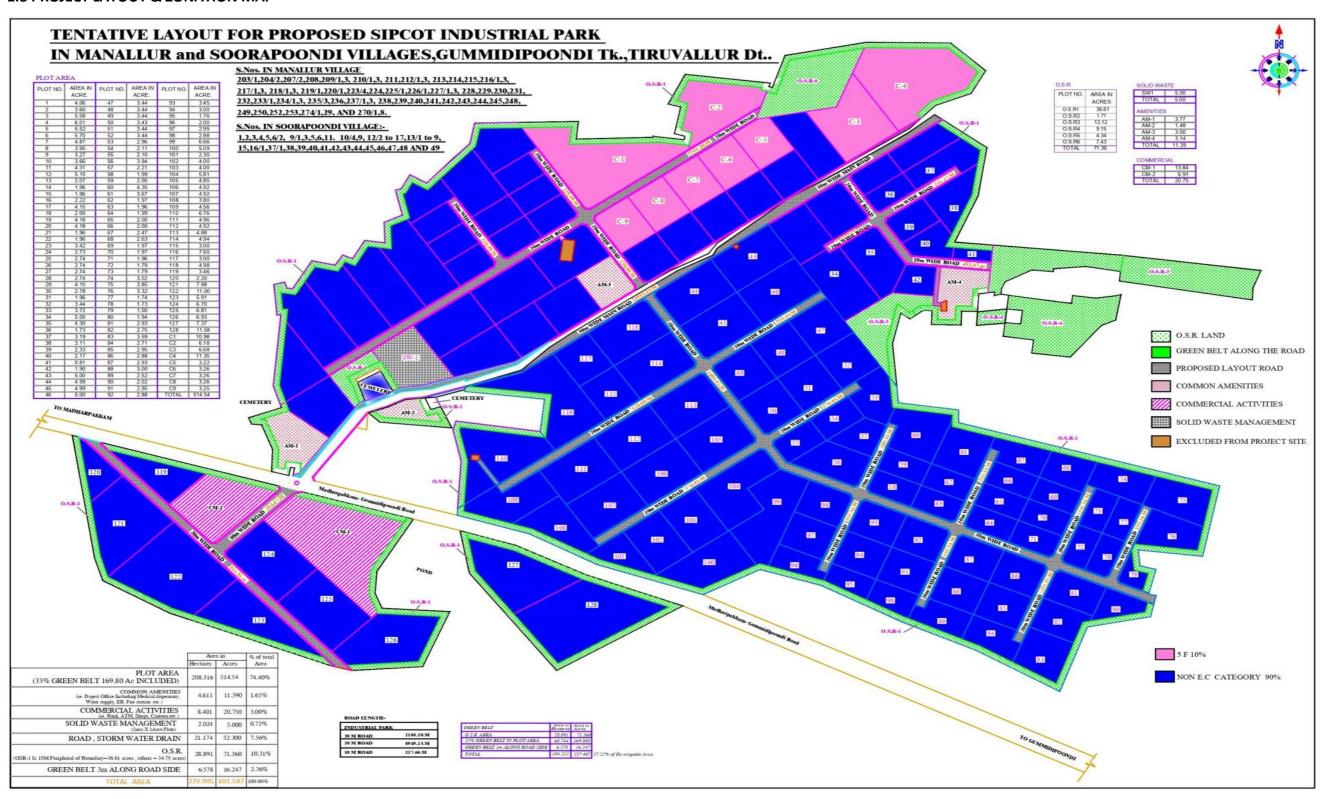


Figure 1.2: Project Layout and Zonation Map



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EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### 1.9 PROJECT DETAILS AND EMERGENCY CONTACTS

The table below shows the types of industries proposed in the park. The Non-pharma 5(f) Industries may store, transport and process the flammable materials like solvents and other chemicals, whereas the Non-EC Industries like Automobile, Engg and Fabrication units will have hot works viz., gas cutting, welding etc.

**Table 1.1: Types of Industries Proposed** 

S. No	Industry Type	Plotted area (Ha)	% of plotted area
1	5(f) Non pharma industries such as Synthetic Acrylic polymers and resins, water proofing compounds synthetic adhesives etc.,	20.826	10
2	Non EC Category industries such as E vehicle and its components manufacturing, Automobile and accessories manufacturing, Engineering and fabrication, Plastics manufacturing etc.,	187.490	90
Total		208.316	100

The table 1.2 shows the emergency contact details and other basic details of the proposed project.

**Table 2.2: PROJECT DETAILS & EMERGENCY CONRTACTS** 

FACILITY NAME	Development of Industrial Park at Manallur
LOCATION	Soorapoondi villages Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu.
EMERGENCY COORDINATOR	To be identified
Phone:	To be identified
ALTERNATE EMERGENCY COORDINATOR	To be identified



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# EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

Phone: To be identified  Opening Hours  Average No. of Manpower in the park  No. of staff occupying the facility  Employee population after the Office hours  Locations, where the evacuation plan drawings are pasted  Assembly Points  Assembly Points  Emergency Telephone Numbers  To be identified  To be identified  Will be identified after the occupancy of all the plots.  1. Entrance of the industrial Park 2. Key Locations, within the park 3. At the gates of Individual Industry 4. SIPCOT office buildings 5. Utility Area 6. Commercial and Common Amenities Areas 7. Parking  Nearby the main gates.  Each individual Industry will identify their own assembly point within their premises  To be identified  Nearest Hospitals:  • Madharpakkam medical centre • Government hospital, Madharpakkam  Other Emergency Contact  Numbers			
Average No. of Manpower in the park  No. of staff occupying the facility  Employee population after the Office hours  Locations, where the evacuation plan drawings are pasted  Assembly Points  Assembly Points  Dear Telephone Numbers  Nearest Hospitals:  Average No. of Manpower in the park  Will be identified after the occupancy of all the plots.  Will be identified after the occupancy of all the plots.  Septembly Points  1. Entrance of the industrial Park  2. Key Locations, within the park  3. At the gates of Individual Industry  4. SIPCOT office buildings  5. Utility Area  6. Commercial and Common Amenities Areas  7. Parking  Nearby the main gates.  Each individual Industry will identify their own assembly point within their premises  To be identified  Nearest Hospitals:  Madharpakkam medical centre  Government hospital, Madharpakkam  Other Emergency Contact  - To be identified	Phone:	To be identified	
No. of staff occupying the facility  Employee population after the Office hours  Locations, where the evacuation plan drawings are pasted  Signature 1. Entrance of the industrial Park 2. Key Locations, within the park 3. At the gates of Individual Industry 4. SIPCOT office buildings 5. Utility Area 6. Commercial and Common Amenities Areas 7. Parking  Assembly Points  Nearby the main gates.  Each individual Industry will identify their own assembly point within their premises  Emergency Telephone Numbers  To be identified  Nearest Hospitals:  • Madharpakkam medical centre • Government hospital, Madharpakkam  Other Emergency Contact  - To be identified	Opening Hours		
No. of staff occupying the facility  Employee population after the Office hours  Locations, where the evacuation plan drawings are pasted  1. Entrance of the industrial Park 2. Key Locations, within the park 3. At the gates of Individual Industry 4. SIPCOT office buildings 5. Utility Area 6. Commercial and Common Amenities Areas 7. Parking  Assembly Points  Nearby the main gates.  Each individual Industry will identify their own assembly point within their premises  To be identified  Nearest Hospitals:  • Madharpakkam medical centre • Government hospital, Madharpakkam  Other Emergency Contact  - To be identified	Average No. of Manpower in the		
Employee population after the Office hours  Locations, where the evacuation plan drawings are pasted  Assembly Points  Emergency Telephone Numbers  Nearest Hospitals:  Will be identified after the occupancy of all the plots.  By Locations, within the park and the park are pasted  1. Entrance of the industrial Park and the park are pasted and the park are park are park and the park are park are park are park and the park are park	park		
Description of the industrial Park   2. Key Locations, within the park   3. At the gates of Individual Industry   4. SIPCOT office buildings   5. Utility Area   6. Commercial and Common Amenities Areas   7. Parking	No. of staff occupying the facility		
Locations, where the evacuation plan drawings are pasted  1. Entrance of the industrial Park 2. Key Locations, within the park 3. At the gates of Individual Industry 4. SIPCOT office buildings 5. Utility Area 6. Commercial and Common Amenities Areas 7. Parking  Assembly Points  Nearby the main gates.  Each individual Industry will identify their own assembly point within their premises  Emergency Telephone Numbers  To be identified  Nearest Hospitals:  • Madharpakkam medical centre • Government hospital, Madharpakkam  Other Emergency Contact  - To be identified	Employee population after the	will be identified after the occupancy of all the plots.	
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3. At the gates of Individual Industry 4. SIPCOT office buildings 5. Utility Area 6. Commercial and Common Amenities Areas 7. Parking  Assembly Points  Nearby the main gates.  Each individual Industry will identify their own assembly point within their premises  Emergency Telephone Numbers  To be identified  Nearest Hospitals:  • Madharpakkam medical centre • Government hospital, Madharpakkam  Other Emergency Contact  - To be identified	Locations, where the evacuation	Entrance of the industrial Park	
3. At the gates of Individual Industry 4. SIPCOT office buildings 5. Utility Area 6. Commercial and Common Amenities Areas 7. Parking  Assembly Points  Nearby the main gates.  Each individual Industry will identify their own assembly point within their premises  Emergency Telephone Numbers  To be identified  Nearest Hospitals:  • Madharpakkam medical centre • Government hospital, Madharpakkam  Other Emergency Contact  - To be identified	plan drawings are pasted	2. Key Locations, within the park	
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6. Commercial and Common Amenities Areas 7. Parking  Nearby the main gates.  Each individual Industry will identify their own assembly point within their premises  Emergency Telephone Numbers  To be identified  Nearest Hospitals:  • Madharpakkam medical centre • Government hospital, Madharpakkam  Other Emergency Contact  - To be identified			
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Nearest Hospitals:  • Madharpakkam medical centre  • Government hospital, Madharpakkam  Other Emergency Contact - To be identified		point within their premises	
Government hospital, Madharpakkam  Other Emergency Contact - To be identified	<b>Emergency Telephone Numbers</b>	To be identified	
Other Emergency Contact - To be identified	Nearest Hospitals:	Madharpakkam medical centre	
		Government hospital, Madharpakkam	
Numbers	Other Emergency Contact	- To be identified	
	Numbers		

#### 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.



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# EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### 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

#### **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.



MANAGEMENT PLAN

EMERGENCY EVACUATION AND DISASTER

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#### 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

#### 2.1 Guidelines applied to this EEP

- 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 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.



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- 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.
- 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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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

SECTION

3

#### 3. DUTIES AND RESPONSIBILITIES

#### 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.
- 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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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### 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

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

1. 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.



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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

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

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.



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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### 4.1. 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 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.

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 office.)	
Emergency	Vehicle/Ambulance
Driver Contact Details	



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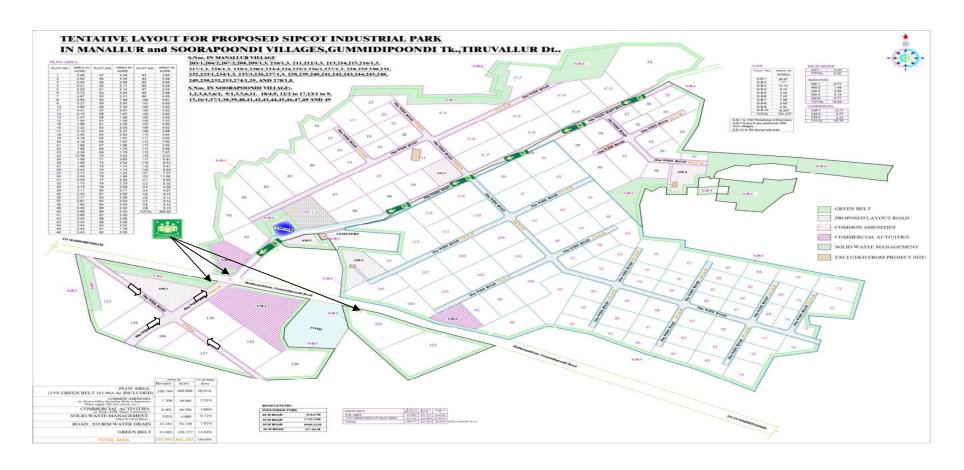
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#### 4.1.1. The Evacuation Route





# EMERGENCY EVACUATION AND D MANAGEMENT PLAN

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#### 4.2. 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.



Α

- 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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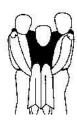
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**PARK** 

- 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).



#### 4.3. 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,



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evacuation is the appropriate action. Following is information to summon emergency personnel and/or evacuate the building:

- 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
  - 2. 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.
  - 5. 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



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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

#### 4.4. 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.



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- Access areas to fire extinguishers will be kept clear.
- Emergency telephone numbers will be posted on all telephones.
- 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.

#### 4.5 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

#### 4.6 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 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 unexpected severe situation may be too great for the normal workforce of SIPCOT as well as Individual Industries in the park.

i. The possible emergencies are as follows



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- Fire.
- ➤ Electrical fire/short circuiting.
- Natural calamities-earthquake, flood, cyclone.
- ➤ Structural collapse.
- ➤ Medical Emergency.

#### **5.1.1.1.** 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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#### **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.

#### b) 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.

#### ii) 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.

#### iii) 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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#### iv) 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.

#### v) 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 center.

#### 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.



### DEVELOPMENT OF INDUSTRIAL PARK

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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, 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.



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

#### 5.2.4.1. 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.



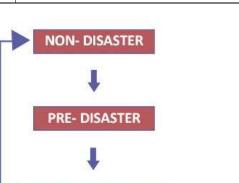
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**DURING-DISASTER** 

**POST- DISASTER** 

**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.

**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.



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#### 5.2.4.2. 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 neighbors. 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.

#### 5.2.4.3. 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 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.



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- Identifythe 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 drillsduring 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.

#### 5.2.4.4. 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 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.

#### 5.2.4.5 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:



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- 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.

#### 5.2.4.6. 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;



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- > 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.

#### 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.



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- 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.

#### **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



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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 the constitution of a National Disaster Response Force (NDRF). In Tamil Nadu, the NDRF is located at Arakonam, 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)



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- Coast Guard
- Nehru Yuva Kendra Sangathan (NYKS)
- ➤ Indian Red Cross Society
- Industrial Associations
- Airport Authority of India (AAI)

National Service Scheme ( NSS)

- > 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.

Natural Calamities like cyclones, Flood, Tsunami, Earthquake and man made 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.



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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	

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:



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S.No.	Emergency Response Activities	Responsible Agency
131	Activation of Trigger mechanism	SDMA, DDMA
2	Risk Communication	RADM&M dept., SECC., DEOC, DIPR, Media and tele communication networks
3	Evacuation of People	RADM&M, Urban and local bodies, Police, Home Guards, Fire and Rescue services, SDRF, NDRF, 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
0	Cordoning off the disaster affected areas	SDRF , NDRF, Police , Home Guards and Volunteers
-7	Law and Order maintenance	Police and Home Guards
00	Search and Rescue operation	Fire and Rescue Services, SDRF, NDRF, Police etc.,
9	Provision of First Aid / Trauma Management	Health department, Local bodies and RED 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 bodies
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	SDRF, F&RS, PWD, Highways Department and local bodies
19	Restoration of Communication & Road networks	PWD, High ways, Urban / Rural Local hodies, RD&PR, TANGEDCO
20	Provision of Water	TWAD,CMWSSB and local bodies
23	Restoration of Electricity	TANGEDCO
22	Resumption of Transportation	Road Transport and High ways
2:1	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, RADMEM and local bodies
26	Exacuation and shelter arrangement for cattle/Livestock	Animal Husbandry Department, Blue Cross, Local bodies and Volunteers
27	Carcass disposal	Animal Husbandry
28	Back to normalcy	RADM&M, all line departments



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SECTION 6

#### **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; <u>do not run</u>, 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.
  - As soon as you reach your designated assembly area report to the person (Office coordinator) taking the Head count



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- 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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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### **APPENDIX B**

#### **EMERGENCY ORGANISATION**

**Emergency Organization** 

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

#### **Map: Emergency Organization**

EMERGENCY	ORGANISATION O	CHART		
Designation	Name	Phone (O)	Phone (R)	Phone (M)
EMERGENCY CONT	TROL CENTRE (EC	C) SITE MAIN	CONTROLLE	ER
Emergency				
Coordinator				
OTHER KEY PERSO	NNEL (OKP)	1		
Alternate				
Emergency				
Coordinator				
Safety Person in				
Charge				
INCIDENT CONTR	OLLERS (IC)			
Visiting Hours				
DEPUTY INCIDENT	CONTROLLERS (D	Dy. IC)		
Visiting Hours				
Communications				
Transport &				
Logistics				



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EMERGENCY ORGANISATION CHART					
Designation	Name	Phone (O)	Phone (R)	Phone (M)	
EXTERNAL AGENC	CIES	I			
Near-by Hospital					
News paper					



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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### 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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#### **EMERGENCY EVACUATION AND DISASTER** MANAGEMENT PLAN

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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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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

#### LINE DEPARTMENTS

Designation	Office	Mobile	Fax	E.Mail ID
Corporation of Chennal Principal Secretary/ Communicationer of Corporation	25619200/ 25381330	9840111106/ 9445419966	25383962	commissioner@ cherinalcorporation.gov.in
Home Guards IGP and Director of Civil Defence & Dy.Cmt. Gen. Home Guards	25441617	9443312255	28443498	bkravi@hotmail.com
Fire and Rescue Service Additional Director General of Police Fire and Rescue Service	28294129	944000755		firesers@tn.nic.in rckudawła@reddfmail.com
Control Roam	28554176/ 309 /11/13/16		28550931	Fire_camp@gmail.com
Public Works Department EIC (WRO)	28525351	9444031951	28594148	eicwrotn@yahoo.co.in
CE (Chennal 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@nk.in



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Fisheries Department Director of Fisheries	24320791	9444212223	24335585	tnfisheries@tn.nic.in
Rurali Development and Pt. Raji Department Commr. of Rurali Devlip and Pt.Raji	24323794/ 24338690	9788395555	24343205	drdchamber@gmail.com
Agriculture Department Director of Agriculture	28524894	9751534567	28551763	diragriculture@tn.nc.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	tnema@nic.in
Director of Town Panchayat	25340352	9003090099	25358742	dtp@tn.nic.in
Registrar Department Registrar of Cooperative Societies	28364848	9445434556	28364867	res優tn.nic.in



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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

Director of Handlooms and Textiles	25341204	9578605888	25341084	dirhandlooms@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	sndceoffice@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	044-22341645			
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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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

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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

#### **IMPORTANT CONTACT DETAILS- TIRUVALLUR DIST**

#### **BLOCK DEVELOPMENT OFFICE**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	NO LANDLINE
Block Development Officer(block panchayat), Gummidipoondi	gpdbdo.tntlr@nic.in	7402606149	
Block Development Officer(village panchayat),	gpdbdo.tntlr@nic.in	7402606150	



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### EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

	Gummidipoondi		
L			

#### **CIVIL SUPPLY**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLIN E NO
Taluk Supply Officer, Tiruvallur	tso.tvl.tiruvallur@tn.gov.in	944500017 7	044- 27662400
Taluk Supply Officer, Gummidipoond i	tso.tvl.gummidipoondi@tn.gov.i n	944500017	044- 27922251
District Supply Officer	Dso.tvl@tn.gov.in	944500017 6	044- 27662400

#### **DISTRICT COLLECTRATE**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
District Collector	collrtlr@nic.in		044- 27661600
District Revenue Officer	drotlr@nic.in	9445000902	044- 27662222
Addl. Collector / PD (DRDA)	drdatlr@nic.in	7373704202	044- 27662501
District Supply Officer	adsurvpm@nic.in	9842071537	
District Tourism Officer	To.thiruvallur@gmail.com	7397715675	044- 27666077



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#### **EDUCATION**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Chief Education Officer	ceotlr@nic.in	9384034214	044-27662599
District Education Officer,	deotlr@nic.in	7373002993	
Tiruvallur			

#### **EMPLOYMENT**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
District	Deo.tlr@gmail.com		044-27660250
Employment			
Officer			

#### **FOREST**

DESIGNA	TION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
District	Forest			044-24831135
Officer				

#### **HEALTH DEPARTMENT**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Joint Director (Health)	jdhstlr@gmail.com		044-27622260
Dy. Director (Health), Tiruvallur	dphtlr@nic.in		044-27666273



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#### **POLICE DEPARTMENT**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO	FAX NO
Superintendent of Police	sptvlr@gmail.com		044- 27666555	044- 27665522

#### **HIGHWAYS DEPARTMENT**

DESIGNATION	EMAIL ADDRESS	MOBILE	LANDLINE
		NO	NO
Divisional	tndehtiruvallur@gmail.com		044-
Engineer,			27661605
Tiruvallur			
Assistant	tnadehtiruvallur@gmail.com		044-
Divisional			27664760
Engineer,			
Tiruvallur			
Assistant	tnadehgpoondi@gmail.com		044-
Divisional			27928345
Engineer,			
Gummidipoondi			

#### **MUNICIPALITY**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Commissioner,	Commr.tiruvallur@tn.gov.in		044-
Tiruvallur			27660226



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#### **RI OFFICE**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Gummidipoondi		9384094952	
Taluk-RI,			
Gummidipoondi			
Firka			

#### **REGISTRATION OFFICE**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
District			044-
Registrar	drkpm502@gmail.com		27222674
Sub Registrar,	srothiruvallur@tnreginet.net		044-
Tiruvallur			27666994
Sub Registrar,	srogummidipoondi@tnreginet.net		044-
Gummidipoondi			27928475

#### **REVENUE DIVISIONAL OFFICE**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Tiruvallur Division	tlrrdo.tntlr@nic.in	9445000412	044-27660248
Ponneri Division	pnirdo.tntlr@nic.in	9445000410	044-27974073

#### **SPECIAL TAHSILDARS**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Tiruvallur Taluk -		9384094881	



# DEVELOPMENT OF INDUSTRIAL PARK AT MANALLUR EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN VER REV DATE 0 0 06-04-23



Special Tahsildar		
(SSS)		
Ponneri Taluk -	9384094888	
Special Tahsildar		
(SSS)		
Gummidipoondi	9384094889	
Taluk - Special		
Tahsildar (SSS)		

#### **TALUK OFFICE**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Tiruvallur	Tlrtlk.tntlr@nic.in	9445000494	044-27660254
Tahsildar			
Gummidipoondi	Gpdtlk.tntlr@nic.in	9445000491	044-27921491
Tahsildar			
Ponneri Tahsildar	Pnitlk.tntlr@nic.in	9445000490	044-27972252

#### **TOWN PANCHAYAT**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE
			NO
Assistant	adtptlr2014@gmail.com	7824058058	044-
Director (TP)			27665953
Executive	tlrgummidipoondi@gmail.com	7824058002	044-
Officer,			27928137
Gummidipoondi			
Executive	tlrponneri@gmail.com	7824058006	044-
Officer, Ponneri			27974007



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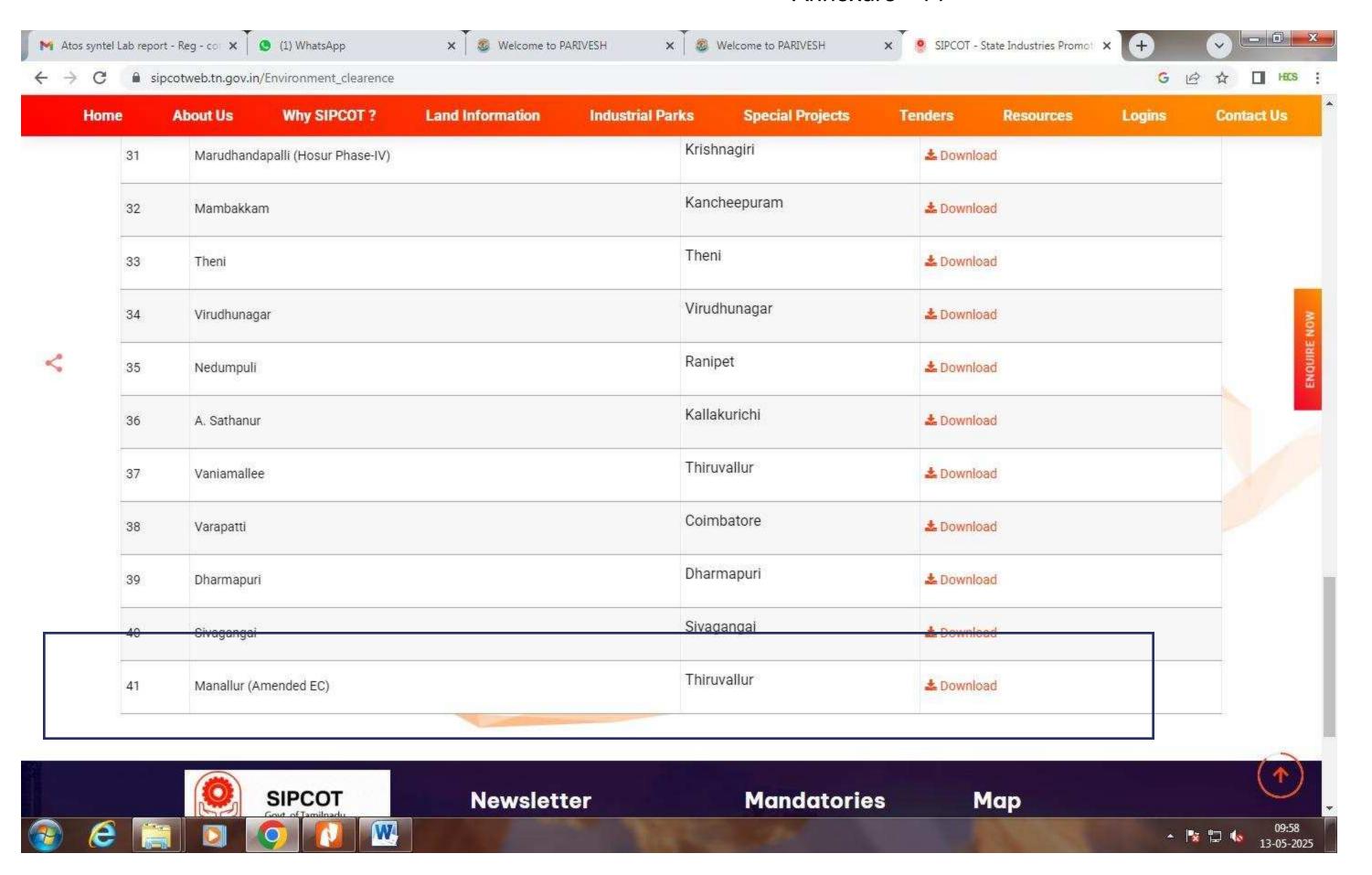
#### **VILLAGE ADMINISTRATIVE OFFICE**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Gummidipoondi		7825805397	
Taluk - VAO,			
Manellore			
Gummidipoondi		7825805402	
Taluk - VAO,			
Madharpakkam			

#### **ZONAL DEPUTY TAHSILDARS**

DESIGNATION	EMAIL ADDRESS	MOBILE NO	LANDLINE NO
Tiruvallur Taluk -		9384094892	
ZDT, Tiruvallur			
Zone			
Gummidipoondi		9384094906	
Taluk - ZDT,			
Gummidipoondi			
Zone			

### Annexure - 14



HOTNFD/305/2024-WLA-JA L/81601/2024

#### Enclosure-15

By E-mail only

Ref No. O/o. Principal Chief Conservator Forests

WL5/HOTNFD/305/2024 (HoFF),

State Forest Headquarters, Guindy-Velachery Main Road,

Chennai - 600 032 Dated: 21-09-2024

Sub: Forests - Wildlife - SIPCOT - Revised Conservation Plan for the proposed "Development of Industrial Park at Manallur and Soorapoondi Villages, Gummidipoondi Taluk, Tiruvallur prepared by SACON - Approval requested - Regrading.

Ref: Managing Director, SIPCOT, Chennai Ref. No. P-

III\_B/EC/Manallur/SACON/2024 dated 29-08-2024.

\* \* \* \*

With reference to the above, it is informed that the conservation plan prepared by SACON and submitted the same vide reference cited for the proposed "Development of Industrial Park at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District over an extent of 279.995 Ha (691.587 Acres) is hereby recommend without any other additional conditions.

The conservation plan is to be implemented along with Wildlife Warden, Chennai.

Principal Chief Conservator of Forests and Chief Wildlife Warden

To

The Managing Director, SIPCOT, 19-A, Rukmani Lakshmipathy Road, Egmore, Chennai.

Copy to the Additional Principal Chief Conservator of Forests and Director, Arignar Anna Zoological Park, Vandalur, Chennai for information.

Copy to the Wildlife Warden, Chennai for information.