SIPCOT

EC/Varapatti/HYC/June/2025 Date: 30.05.2025

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

Sir,

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

Ref: EC Identification No.: EC24B3813TN5290279N dt.01.10.2024

*****

We hereby submit the Half Yearly Compliance Report for the Development of Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu for June 2025 (for the period from October 2024 to March 2025) along with the supporting documents for your perusal.

Thanking you

Yours faithfully,

CONSULTANT (PROJECT MANAGEMENT)

Encl: As above.

Copy to:

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

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

P.T.O.

State Industries Promotion Corporation of Tamil Nadu Limited
(A Government of Tamil Nadu Undertaking)
CIN I U74999TN1971SGC005967
Regd. Office : 19-A, Rukmani Lakshmipathy Road, Post Box No. 7223, Egmore, Chennai - 600 008.
Phone : 4526 1777, Fax : 4526 1796 Website : www.sipcot.tn.gov.in

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

4. The Project Officer
   SIPCOT Industrial Park,
   Perundurai.

HALF YEARLY ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

For the Period of October 2024 – March 2025

For

"Establishment of SIPCOT Industrial Park"

At

Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu

EC Identification no : EC24B3813TN5290279N dt.01.10.2024

Submitted by

M/s STATE INDUSTRIES CORPORATION OF TAMILNADU LIMITED

19/A,Rukmanilakshmipathy road,

Egmore, Chennai – 600008

Prepared by

HUBERT ENVIROCARE SYSTEMS (P) LTD

CHENNAI

(ENVIRONMENTAL CONSULTANT)

MAY 2025

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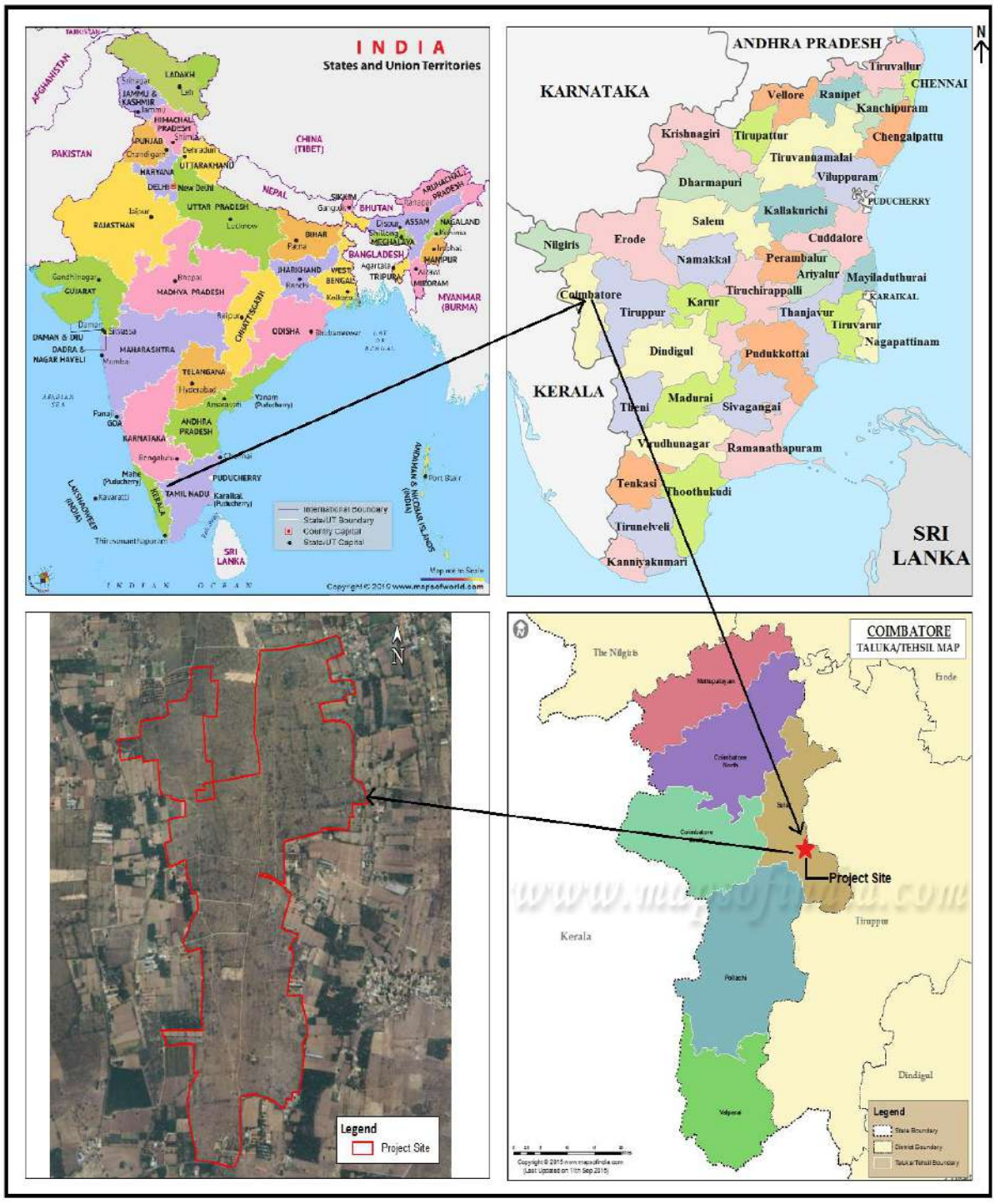
1. PROJECT DETAILS

Name of the Project	Development of SIPCOT Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu
Name of the Proponent	M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT)
Location	Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu
EC. No.	**EC24B3813TN5290279N dated: 01.10.2024** (Enclosed as **Annexure -1**)
Area Details	150.036 Ha
Water Requirement	• Total water requirement -5073 KLD • Treated water requirement-2312 KLD • Fresh water requirement-2761 KLD . Source from New Tirupur Area Development Corporation Limited (NTADCL)
Project Cost	Rs. 259.70 crores

2. SITE LOCATION MAP



3. SITE PHOTOGRAPH


GPS Map Camera
Varapatti, Tamil Nadu, India
W54v+7mf, Panapatti Rd, Varapatti, Tamil Nadu 641669, India
Lat 10.90561° Long 77.194756°
27/03/2025 08:12 AM GMT +05:30
Google


GPS Map Camera
Varapatti, Tamil Nadu, India
W54v+7mf, Panapatti Rd, Varapatti, Tamil Nadu 641669, India
Lat 10.905966° Long 77.193623°
27/03/2025 07:20 AM GMT +05:30
Google


GPS Map Camera
Varapatti, Tamil Nadu, India
W54v+7mf, Panapatti Rd, Varapatti, Tamil Nadu 641669, India
Lat 10.905971° Long 77.19348°
27/03/2025 07:19 AM GMT +05:30
Google


GPS Map Camera
Varapatti, Tamil Nadu, India
W54v+7mf, Panapatti Rd, Varapatti, Tamil Nadu 641669, India
Lat 10.90598° Long 77.193446°
27/03/2025 07:19 AM GMT +05:30
Google

4. SIX MONTHLY ENVIRONMENTAL CLEARANCE COMPLIANCE STATEMENT

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

1. Seiaa Specific Conditions			
S.NO		**EC Conditions**	**Status of Compliance**
1.1	1.	The project proponent shall in-house only non - EIA attracting industries alone (Aerospace and Defence Components manufacturing and other non-EC category industries) as per EIA notification as amended.	**Condition noted.**
	2.	If any Category A or B type of industry as notified in the EIA Notification 2006, as amended is proposed in the SIPCOT, the concerned Industry/Proponent shall apply for Environmental Clearance as per EIA Notification 2006, as amended.	**Condition noted.**
	3.	The project proponent shall start establishment only after complete alienation of Patta lands, Govt. Poramboke lands & water bodies within the proposed site in concurrence with the competent authority before obtaining consent from TNPCB.	**Condition noted.**
	4.	The project proponent shall obtain necessary permission for water bodies within/around the proposed site from the Competent Authority before obtaining CTE from TNPCB.	**Condition noted** As per Revenue record there is no waterbodies within the project site.
	5.	The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall treat the effluent generated by providing adequate individual ZLD followed by reject management system and shall reuse the treated effluent for the process activity.	**Condition noted.** All member units will be mandated to provide ZLD based treatment system. Treated effluent will be reused in the process/utilities
	6.	The project proponent shall ensure that non - EIA	**Condition noted.**

		attracting Industries to be in-housed shall treat the Sewage generated by providing adequate individual STP and shall reuse the treated sewage for the toilet flushing & green belt/gardening as committed.	All member units will be mandated to provide STP. Treated sewage will be reused in the green belt.
	7.	The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.	**Condition noted.** All member units will be mandated to comply all applicable rules and guidelines.
	8.	The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall provide elevated STP/ETP of adequate capacity & its utilities above the ground level with adequate height considering highest rainfall & flood level /inundation point of view as recommended by the competent authority for the proposed project site.	**Condition noted.** All member units will be mandated to comply with.
	9.	The project proponent shall ensure that the industries to be in-housed shall adhere that no treated or untreated trade effluent/sewage is discharged outside the premises under any circumstances.	**Condition noted.** All member units will be mandated to comply with
	10.	The project proponent and the non - EIA attracting Industries to be in-housed shall provide	**Condition noted.** Fresh Water requirement will be sourced

		& ensure that the utilities/ arrangements for fresh water supply, Storm/rain water management, and for reuse of treated sewage/effluent as proposed.	from New Tirupur Area Development Corporation Limited (NTADCL). Water approval letter is enclosed as **Annexure- 3.** Individual industries will provide the details while obtaining their CTE from TNPCB.
	11.	The project proponent shall provide & maintain adequate storm water management & rain water harvesting structures as committed for the project site.	**Condition will be complied.** SIPCOT will mandate all the member units to provide and maintain adequate storm water management and rain water harvesting structures.
	12.	The project proponent shall obtain necessary permission for disposal of excess storm water from the competent authority before obtaining CTO.	**Condition Noted.**
	13.	The project proponent shall ensure that industries to be in-housed shall operate and maintain the proposed STP / ETP efficiently and continuously to bring the quality of treated sewage/effluent to satisfy the discharge standards prescribed by the CPCB at all times.	**Condition will be complied.** SIPCOT will mandate all the member units to operate and maintain the proposed STP/ ETP as per the CPCB / TNPCB norms.
	14.	The proponent & the Industries to be in-housed shall periodically conduct and submit fire safety study, emergency evacuation plan, risk assessment study, occupational health safety study for the worst case scenario in regard to existing safety measures/standard operating procedures adopted for the process/ equipment/utilities for operation & maintenance and the storage areas of products, raw materials, solvent, fuel, etc. in the different operating zones of the plant at least once in a year to regularly identify safety fragile areas within the plant which requires regular monitoring and the proponent shall submit the same along with timeline for implementation of the said	**Condition noted** Emergency evacuation plan, risk assessment study is enclosed as **Annexure – 11 & 11a**

		recommendations to the concerned departments.	
	15.	The project proponent & the industries to be in-housed shall ensure buildings constructed are energy efficient and conform to the green building norms.	**Condition noted.**
	16.	The project proponent shall ensure Industries to be in-housed shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan as committed.	Condition will be complied with. SIPCOT will develop a designated truck parking facility within the industrial park. In addition, individual industries will provide adequate parking spaces within their premises to accommodate visitors. Traffic layout is enclosed as **Annexure - 12**
	17.	The proponent & the industries to be in-housed shall strictly adhere to all biosafety standards, hygienic standards and safety norms of working staff and patients to be strictly from time to time as guidance of competent authority.	**Condition noted.**
	18.	The proponent & the Industries to be in-housed shall strictly adhere to the disaster management and disaster mitigation measures/standards to avoid any calamities.	**Condition noted.** Disaster management plan is enclosed as **annexure - 11**
	19.	The activities should in no way cause emission and build-up Green House Gases. All actions to be eco friendly and support sustainable management of the natural resources within and outside the campus premises.	It is an infrastructure development project involving the construction of roads, storm water drains, street lighting, greenbelt development, and related works.
	20.	The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.	**Condition noted and will be complied**.
	21.	The proponent & the industries to be in housed shall ensure almost safety for the existing	**Condition noted.**

		biodiversity, trees, flora & fauna shall not disturb under any circumstances.	
	22.	The proponent & the industries to be in-housed shall ensure to provide adequate capacity of DG set (standby) for the proposed STP so as ensure continues and efficient operation.	Not applicable. SIPCOT has not proposed a common Sewage Treatment Plant (STP) for the industrial park. Each individual industry is responsible for establishing its own STP and will provide an adequately sized standby DG set to ensure uninterrupted and efficient operation of the treatment facility.
	23.	The plantation of saplings shall be carried out in the earmarked greenbelt area as a part of the tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (https://merilife.nic.in).	Condition will be complied. Greenbelt layout is enclosed as A**nnexure - 7.**
2. Seiaa Standard Conditions			
	Climate Change		
2.1	1.	The proponent shall adopt strategies to decarbonize the building, reduce carbon footprints and develop strategies for climate proofing and mitigation.	Condition noted.
	2.	The proponent shall adopt strategies to reduce carbon & GHG emissions during operation (operational phase and building materials).	Condition noted.
	3.	The proponent shall adopt methodology to control thermal environment and other shocks in the building.	Condition noted.
	4.	The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands.	Condition noted.
	5.	The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues.	Condition noted.
	6.	The activities should in no way cause emission	Condition noted.

		and build-up Green House Gases. All actions to be eco-friendly and support sustainable management of the natural resources within and outside the campus premises.	
	7.	The proponent shall ensure that the buildings does not cause any damage to water environment, air quality and should be carbon neutral building.	Condition noted.
	Health		
	8.	The proponent shall adopt strategies to maintain the health of the inhabitants within and in the vicinity.	Condition noted.
	Energy		
	9.	The proponent shall adopt strategies to reduce electricity demand and consumption.	Condition noted.
	10.	The proponent shall provide provisions for automated energy efficiency.	Condition noted.
	11.	The proponent shall provide provisions for controlled ventilation and lighting systems.	Condition will be complied.
	12.	The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation.	Not applicable. SIPCOT has not proposed a common Sewage Treatment Plant (STP) for the industrial park. Each individual industry is responsible for establishing its own STP and will provide an adequately sized standby DG set to ensure uninterrupted and efficient operation of the treatment facility.
	Regulatory Frameworks		
	13.	The proponent shall effectively implement and strictly adhere to the Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Trans boundary Movement)	Condition noted. All the member units will be mandated to follow all applicable rules and guidelines.

		Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.	
	14.	The proponent shall provide elevator as per rules CMDA/DTCP.	Not applicable. It is an infrastructure development project that includes the construction of roads, storm water drainage systems, street lighting, water supply systems, development of green spaces, etc.
	Database maintenance & audits		
	15.	The database record of environmental conditions of all the events from pre-construction, construction and post-construction should be maintained in digitized format.	**Condition will be complied.**
	16.	The proponent should maintain environmental audits to measure and mitigate environmental concerns.	**Condition will be complied.**
	Biodiversity		
	17.	The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.	**Condition noted**
	18.	The proponent shall adopt sustainability criteria to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements.	Not applicable. It is an infrastructure development project involving the construction of roads, storm water drains, street lighting, greenbelt development, and related works.
	19.	The proponent shall ensure utmost safety for the existing biodiversity, trees, flora & fauna and the critically endangered species & endangered species shall not disturb under any circumstances.	**Condition will be complied.**
	20.	The proponent shall develop building-friendly pest control strategies by using non chemical measures so as to control the pest population	**Condition Noted.**

		thereby not losing beneficial organisms.	
	21.	The proponent shall adopt strategies to prevent birds getting hit by the high buildings.	Not applicable. It is an infrastructure development project involving the construction of roads, storm water drains, street lighting, greenbelt development, and related works.
	Safety measures		
	22.	The proponent should develop an emergency response plan & safety evacuation plan (including disabled people) in addition to the disaster management plan.	**Condition noted.** All member units will have their own onsite emergency Plan
	23.	All bio-safety standards, hygienic standards and safety norms of working staff to be strictly followed as stipulated in EIA/EMP.	Condition will be complied.
	24.	The disaster management/disaster mitigation standards& fire safety standards as prescribed by competent authorities.	Condition will be complied.
	25	The proponent shall provide the emergency exit in the buildings.	Not applicable. It is an infrastructure development project involving the construction of roads, storm water drains, street lighting, greenbelt development, and related works. Emergency evacuation plan is enclosed as **Annexure - 11**
	Water/Sewage		
	26.	The proponent shall ensure that no untreated sewage is let outside the project site under any circumstances. Further, the treated water shall not be disposed off through any other means other than the permitted mode of disposal.	SIPCOT has not proposed a common Sewage Treatment Plant (STP) within the industrial park. Each individual industry is responsible for establishing and operating its own STP to treat sewage generated within its premises, in compliance with TNPCB norms and permitted disposal methods.
	27.	The proponent shall provide STP of adequate	Not applicable. SIPCOT has not proposed

		capacity as committed and shall continuously & efficiently operate STP so as to satisfy the treated sewage discharge standards prescribed by the TNPCB time to time.	a common STP within the industrial park. Instead, individual industries are responsible for providing STPs of adequate capacity within their respective premises. These STPs are operated continuously and efficiently to ensure that the treated sewage meets the discharge standards prescribed by the TNPCB from time to time.
	28.	The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB & IRO of MoEF&CC.	Not applicable. SIPCOT has not proposed a common STP within the industrial park.
	29.	The proponent shall ensure that provision should be given for proper utilization of recycled water.	Not applicable. SIPCOT has not proposed a common STP within the industrial park. Instead, individual industries are responsible for providing STPs of adequate capacity within their respective premises. These STPs are operated continuously and efficiently to ensure that the treated sewage meets the discharge standards prescribed by the TNPCB from time to time.
	30.	The project proponent shall adhere to storm water management plan as committed.	**Condition will be complied.**
	Parking		
	31.	The project proponent shall provide adequate parking space for visitors of all inmates including clean traffic plan as committed.	Condition will be complied with. SIPCOT will develop a designated truck parking facility within the industrial park. In addition, individual industries will provide adequate parking spaces within their premises to accommodate visitors. Traffic layout is enclosed as **Annexure - 12**

	Solid waste Management		
	32.	The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.	**Condition noted**. All the member units will be mandated to follow all applicable rules and guidelines.
	33.	The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.	**Condition noted**. All the member units will be mandated to follow all applicable rules and guidelines.
	EMP		
	34	The proponent shall strictly adhere to the EIA/EMP report.	**Condition noted.**
	35.	The proponent shall ensure that the green belt plan is implemented as indicated in EMP. Also, the proponent shall explore possibilities to provide sufficient grass lawns.	**Condition will be complied.**
	Others		
	36.	As per the 'Polluter Pay Principle', the proponent will be held responsible for any environmental damage caused due to the proposed activity including withdrawal of EC and stoppage of work.	**Condition noted.**
	37.	The project proponent shall adhere to height of the buildings as committed.	Not applicable. It is an infrastructure development project involving the construction of roads, storm water drains, street lighting, greenbelt development, and related works.
3. SEAC Conditions - Site Specific			
	1.	The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.	**Condition noted.**
3.1	2.	The project proponent shall in-house only non - EIA attracting industries alone (Aerospace and Defence Components manufacturing and other	**Condition will be complied.**

		non EC category industries) as per EIA notification as amended.	
	3.	If any Category A or B type of industry as notified in the EIA Notification 2006, as amended is proposed in the SIPCOT, the concerned Industry/Proponent shall apply for Environmental Clearance as per EIA Notification 2006, as amended.	**Condition will be complied.**
	4.	The project proponent shall start establishment only after complete alienation of Patta lands, Govt. Poramboke lands & water bodies within the proposed site in concurrence with the competent authority.	**Condition will be complied.**
	5.	The project proponent shall obtain necessary permission if any water bodies within/around the proposed site from the Competent Authority.	**Condition noted** As per Revenue record there is no water bodies within the project site.
	6.	The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall treat the effluent generated by providing adequate individual ZLD followed by reject management system and shall reuse the treated effluent for the process activity	**Condition noted.** All member units will be mandated to provide ZLD based treatment system. Treated effluent will be reused in their process/utilities
	7.	The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall treat the Sewage generated by providing adequate individual STP and shall reuse the treated sewage for the toilet flushing & green belt/gardening as committed.	**Condition noted.** All member units will be mandated to provide STP. Treated sewage will be reused in the green belt.
	8.	The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules,	**Condition noted.** All member units will be instructed to comply all applicable rules and guidelines.

		2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001	
	9.	The project proponent shall provide & maintain adequate storm water management & rain water harvesting structures as committed for the project site.	**Condition will be complied.**
	10.	The proponent & the Industries to be in-housed shall periodically conduct and submit fire safety study, emergency evacuation plan, risk assessment study, occupational health safety study for the worst case scenario in regard to existing safety measures/standard operating procedures adopted for the process/ equipment/utilities for operation & maintenance and the storage areas of products, raw materials, solvent, fuel, etc. in the different operating zones of the plant at least once in a year to regularly identify safety fragile areas within the plant which requires regular monitoring and the proponent shall submit the same along with timeline for implementation of the said recommendations to the concerned departments.	**Condition noted.** All member units will comply with
	11.	The proponent & the Industries to be in-housed shall ensure to provide adequate capacity of DG set (standby) for the proposed STP so as ensure continues and efficient operation.	Not applicable. SIPCOT has not proposed a common Sewage Treatment Plant (STP) for the industrial park. Each individual industry is responsible for establishing its own STP and will provide an adequately sized standby DG set to ensure uninterrupted and efficient operation of the

			treatment facility.
	13.	STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.	Not applicable. SIPCOT has not proposed any common Sewage Treatment Plant (STP) for the industrial park.
	14.	The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.	**Condition noted**
	15.	Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.	Condition will be complied.
	16.	Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).	Condition noted. All the member units will be mandated to follow all applicable rules and guidelines
	17.	The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.	Condition noted.
	18.	The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms.	**Condition will be complied.** Green belt layout is enclosed as **Annexure- 7**

	19.	Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.	**Condition will be complied.**
	20.	Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF&CC / Director of Environment and other concerning authority regularly.	**Condition noted**. There is no previous EC obtained for this project. Compliance report of present EC will be submitted to IRO, MoEF & CC Director of Environment and other concerning authority regularly.
	21.	Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.	**Condition noted.** All member units will comply with
	22.	The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water.	**Condition will be complied.**
	23.	The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use	Not applicable. SIPCOT has not proposed a common Sewage Treatment Plant (STP) for the industrial park.
Standard EC Conditions for (Townships/ Area Development Projects / Rehabilitation Centres **1. Statutory Compliance**			
1.1	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.		**Condition noted**. Construction shall be done in accordance with the layout approval obtained from the town planning authority
1.2	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection		**Condition noted.** All the member units will be mandated to follow applicable rules and guidelines

	measures from lightening etc.	
1.3	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.	There is no diversion of forest land involved in the project
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	**Condition noted.** The project is not located within Eco Sensitive Zone of any protected area. So, NBWL is not applicable for the project
1.5	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	**Condition complied.** We SIPCOT obtained CTE from TNPCB and the same is enclosed as **annexure 2**
1.6	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.	**Condition noted.**
1.7	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.	**Condition noted.**
1.8	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.	**Condition noted.** All the member units will be mandated to follow applicable rules and guidelines.
1.9	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.	**Condition noted.**
2. Air Quality Monitoring And Preservation		
2.1	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring	**Condition noted**. All the member units will be mandated to comply with

	Environmental Clearance shall be complied with.	
2.2	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.	**Condition noted**
2.3	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.	**Condition is being complied.** Ambient Air Monitoring Reports are enclosed as **Annexure – 8.**
2.4	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.	Not applicable. SIPCOT has not proposed any DG set.
2.5	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.	Condition noted. All the member units will comply with
2.6	Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.	Condition will be complied.
2.7	Wet jet shall be provided for grinding and stone cutting.	Condition will be complied.
2.8	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	Condition will be complied.
2.9	All construction and demolition debris shall be stored at	Condition noted.

	the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.	All the member units will be mandated to follow applicable rules and guidelines.
2.10	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.	**Condition noted**
2.11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.	**Not applicable.** SIPCOT have not proposed any DG Set.
2.12	For indoor air quality the ventilation provisions as per National Building Code of India.	**Condition noted**
3. Water Quality Monitoring And Preservation		
3.1	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.	**Condition noted** As per revenue record, there is no water bodies within the site
3.2	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.	**Condition noted**
3.3	Total fresh water use shall not exceed the proposed requirement as provided in the project details.	**Condition noted.** Fresh water will be sourced from New Tripur Area Development Corporation Limited (NTADCL). Water supply letter is enclosed as **Annexure – 3.**

3.4	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.	**Condition noted**. The Industrial Park is in pre-construction phase
3.5	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available.	**Condition noted.** Fresh water will be sourced from New Tripur Area Development Corporation Limited (NTADCL). Water supply letter is enclosed as **Annexure-3.**
3.6	At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as Pervious surface.	**Not applicable**
3.7	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.	**Condition noted.** All member units will comply with
3.8	Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.	**Condition noted.** All member units will comply with
3.9	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.	**Condition noted**
3.10	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	**Condition noted.** All member units will comply with
3.11	The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not	**Condition noted.**

	available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.	
3.12	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse.	**Condition noted.**
3.13	All recharge should be limited to shallow aquifer.	**Condition noted**
3.14	No ground water shall be used during construction phase of the project.	**Condition will be complied.**
3.15	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**
3.16	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.	**Condition noted.** All the member industries will be mandated to provide STP to reuse the treated sewage for green belt development
3.17	No sewage or untreated effluent water would be discharged through storm water drains.	All the member industries will be mandated to adopt Zero Liquid Discharge system
3.18	Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be	**Condition noted.** All the member industries will be mandated to provide STP to reuse the treated sewage for green belt development

	submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.	
3.19	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.	**Condition noted.** All the member units will be mandated to comply with
3.20	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.	**Condition noted.** All the member units will be mandated to comply with
4. Noise Monitoring And Prevention		
4.1	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.	**Condition noted.** Ambient air and noise level will be monitored periodically during construction phase. Air and Noise quality monitoring report is enclosed as **Annexure - 8**
4.2	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	**Condition noted.** Noise level survey Being carried as per the prescribed guidelines and report in this regard will be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report. Noise quality Condition noted. Noise quality monitoring report is enclosed as

		Annexure – 8.
4.3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.	**Condition noted.** All the member units will be instructed to follow applicable rules and guidelines
5. Energy Conservation Measures		
5.1	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.	**Condition noted.** All member units shall comply with.
5.2	Outdoor and common area lighting shall be LED.	**Condition noted.** All member units shall comply with.
5.3	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.	**Condition noted.** All member units shall comply with.
5.4	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.	**Condition noted.** All member units shall comply with.
6. Waste Management		
6.1	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.	**Condition noted.** The Industrial Park is in Pre construction phase.
6.2	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	**Condition noted.** All member units will comply with.

6.3	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.	**Condition noted.** All member units will comply with
6.4	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.	**Condition will be complied.** Individual industries will segregate the waste and Organic wastes will be composted in OWC and manure will be used for greenbelt development
6.5	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.	**Condition noted.** All member units will comply with
6.6	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	**Condition noted.** All member units will comply with.
6.7	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.	**Condition noted.** All member units will comply with.
6.8	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.	**Condition will be complied.**
6.9	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.	**Condition noted.** All member units will be mandated to follow all applicable rules and guidelines.
6.10	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid	**Condition noted.** All member units will comply with

	mercury contamination.	
7. Green Cover		
7.1	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).	**Condition noted**
7.2	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.	**Condition noted**
7.3	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.	**Condition noted**
7.4	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.	**Condition will be complied.**
8. Transport		
8.1	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due	**Condition noted** Traffic layout is enclosed as **Annexure - 12**

	consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.	
8.2	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.	**Condition will be complied.** Air and noise quality monitoring report is enclosed as **Annexure – 8.**
9.1	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that thecurrent 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 oth er agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.	**Condition noted** Traffic layout is enclosed as **Annexure - 12**
10. Human Health Issues		
10.1	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.	**Condition noted.** All member units will comply with.
10.2	For indoor air quality the ventilation provisions as per National Building Code of India.	**Condition noted.** All member units will comply with.

10.3	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	**Condition noted.** Risk assessment report and disaster management plan is enclosed as **annexure 11 & 11a**
10.4	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	**Condition accepted and noted.** Local labours will be employed for the project. There will not be any housing for labour.
10.5	Occupational health surveillance of the workers shall be done on a regular basis.	**Condition noted**
10.6	A First Aid Room shall be provided in the project both during construction and operations of the project.	**Condition noted.** All member units will have their own Occupational Health Centre
11. Miscellaneous		
11.1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.	**Condition complied.** SIPCOT have advertised in two local newspapers in Tamil and English. News paper advertisement is enclosed as **Annexure - 4**
11.2	ii. environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	**Condition complied.** A copy of the environmental clearance has been submitted to the Heads of local bodies , Same is enclosed as **Annexure - 5**
11.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	**Condition will be complied.**
11.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated	**Condition will be complied.**

	environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	
11.5	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	**Condition complied.** SIPCOT environmental policy is enclosed as **Annexure - 10**
11.6	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.	**Condition complied.** Separate environmental management cell has been assigned and will report to the General Manager, SIPCOT who will report directly to the Head of the Organization for implementation monitoring and compliance of the environmental safeguards. Details of Environmental Management Cell with Roles and Responsibilities are enclosed as **Annexure-6.**
11.7	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of	**Condition noted**

	action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report	
11.8	The project proponent shall submit the environmental statement for each financial year in Form- V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	**Condition will be complied.**
11.9	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	**Condition noted.**
11.10	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	**Condition noted.** All the member units will be instructed to follow the applicable rules and guidelines.
11.11	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the State Expert Appraisal Committee.	**Condition noted.**
11.12	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC)/SEIAA-TN.	**Condition noted.**
11.13	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	**Condition noted.**
11.14	The Ministry/SEIAA-TN may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	**Condition noted.**
11.15	The Ministry/SEIAA-TN reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these	**Condition noted.**

	conditions.	
11.16	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	**Condition will be complied.**
11.17	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	**Condition noted.**
11.18	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	**Condition noted.** There is no any appeal against this EC
12. Specific Conditions		
12.1	The project proponent shall develop R& D facilities to develop their own technologies for propylene and polypropylene processing.	**Condition will be complied.**

Additional EC Conditions

Standard Conditions **Part - A – Common conditions applicable for Pre-construction, Construction and Operational Phases:**		
1	Any appeal against this Environmental Clearance shall lie with the Hon’ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	**Condition noted.** There is no any appeal against this environmental clearance.
2	The construction of STP, ETP, Solid Waste Management facility, E-waste management	**Condition Noted.** All member units will comply with.

	facility, DG sets, etc., should be made in the earmarked area only. In any case, the location of these utilities should not be changed later on.	Site layout is enclosed as **annexure - 9**
3	The Environmental safeguards contained in the application of the proponent /mentioned during the presentation before the State Level Environment Impact Assessment Authority / State Level Expert Appraisal Committee should be implemented in the letter and spirit.	**Condition noted.**
4	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire and Rescue Services Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wild Life (Protection) Act, 1972, State / Central Ground Water Authority, Coastal Regulatory Zone Authority, other statutory and other authorities as applicable to the project shall be obtained by project proponent from the concerned competent authorities.	**Condition noted.** All the member industries will be instructed to obtain all necessary statutory clearances and approvals
5	The SEIAA reserves the right to add additional safeguard measures subsequently, if non-compliance of any of the EC conditions is found and to take action, including revoking of this Environmental Clearance as the case may be.	Condition noted.
6	A proper record showing compliance of all the conditions of Environmental Clearance shall be maintained and made available at all the times.	Condition noted
7	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company. The status	Condition will be complied.

	of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Chennai by e-mail.	
8	The Regional Office of the Ministry located at Chennai shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	**Condition will be complied.**
9	"Consent for Establishment" shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be submitted to the SEIAA, Tamil Nadu.	**Condition complied.** CTE copy is enclosed as **annexure -2**
10	In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.	**Condition Noted.** There is no change in the scope of the project.
11	The conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, along with their amendments ,draft Minor Mineral Conservation & Development Rules , 2010 framed under MMDR Act 1957,National Commission for protection of Child Right Rules ,2006 and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/Hon'ble High Court of Madras and any other Courts of Law, including the Hon'ble National Green Tribunal relating to the subject matter.	**Condition noted**
12	The Environmental Clearance shall not be cited for relaxing the other applicable rules to this project.	**Condition noted.**

13	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	**Condition noted.** SIPCOT shall comply with all applicable conditions specified in the EC
14	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, Chennai, the respective Zonal Office of CPCB, Bengaluru and the TNPCB. The criteria pollutant levels namely; PM10, PM2.5, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored.	**Condition will be complied.** Air quality monitoring report is enclosed as **Annexure – 8.**
15	The SEIAA, TN may cancel the Environmental Clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the Environmental Clearance.	**Condition noted.**
16	The Environmental Clearance does not imply that the other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would be considering the project on merits and be taking decisions independently of the Environmental Clearance.	**Condition noted.** All the member units will be instructed to obtain all necessary statutory clearances and approvals.
17	The SEIAA, TN may alter/modify the above conditions or stipulate any further condition in the interest of environment protection, even during the	**Condition noted.**

	subsequent period.	
18	The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.	**Condition noted.**
19	Where the trees need to be cut, compensation plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree that is cut) should be done with the obligation to continue maintenance.	**Condition noted.**
20	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive who will report directly to the Head of the Organization and the shortfall shall be strictly reviewed and addressed.	**Condition complied.** Separate environmental management cell has been assigned and will report to the General Manager, SIPCOT who will report directly to the Head of the Organization for implementation monitoring and compliance of the environmental safeguards. Details of Environmental Management Cell with Roles and Responsibilities are enclosed as **Annexure -6.**
21	The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually.	**Condition will be complied.**
22	The Project Proponent has to provide adequate rain water harvesting pits as committed to recover and reuse the rain water during normal rains as reported.	**Condition noted.**
23	The project activity should not cause any disturbance & deterioration of the local bio diversity.	**Condition noted.**
24	The project activity should not impact the water bodies. A detailed inventory of the water bodies and forest should be evaluated and fact reported to	**Condition will be complied.**

	the Forest Department & PWD for monitoring.	
25	All the assessed flora & fauna should be conserved and protected.	**Condition noted.**
26	The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.	**Condition will be complied.** All the member units will be mandated to follow all applicable rules and guidelines.
27	Necessary permission shall be obtained from the competent authority for the drawl / outsourcing of fresh water before obtaining consent from TNPCB.	**Condition noted.** Fresh Water requirement will be sourced from New Tirupur Area Development Corporation Limited (NTADCL). Water approval letter is enclosed as **Annexure -3**
28	The proponent shall appoint an Environmental Engineer with necessary qualification for the operation and maintenance of STP (Sewage Treatment Plant) and GWTP (grey water Treatment Plant)	**Condition noted.** All member units will comply with
29	The Proponent shall provide the dispenser for the disposal of Sanitary Napkins.	**Condition noted.**
30	All the mitigation measures committed by the proponent for the flood management, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.	**Condition noted.**
31	No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.	**Condition noted.**
32	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.	**Condition noted.**
33	The safety measures proposed in the report should be strictly followed.	**Condition noted.**

Part - B – Specific Conditions – Pre construction phase:		
1	The project authorities should advertise with basic details at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of clearance. The press releases also mention that a copy of the clearance letter is available with the State Pollution Control Board and also at website of SEIAA, TN. The copy of the press release should be forwarded to the Regional Office of the Ministry of Environment and Forests located at Chennai and SEIAA-TN.	**Condition will be Complied.** SIPCOT have advertised in two local newspapers in Tamil and English. News paper advertisement is enclosed as **Annexure – 4**
2	In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.	**Condition noted.** There is no change in the scope of the project.
3	A copy of the clearance letter shall be sent by the proponent to the Local Body. The clearance letter shall also be put on the website of the Proponent.	**Condition complied.** Acknowledgement copy from local bodies and government office for submission of clearance letter is enclosed as **Annexure – 5**
4	The approval of the competent authority shall be obtained for structural safety of the buildings during earthquake, adequacy of firefighting equipments, etc. as per National Building Code including protection measures from lightning etc. before commencement of the work.	Not applicable. It is an infrastructure development project involving the construction of roads, storm water drains, street lighting, greenbelt development, and related works.
5	All required sanitary and hygienic measures for the workers should be in place before starting construction activities and they have to be maintained throughout the construction phase.	Condition noted
6	Design of buildings should be in conformity with the Seismic Zone Classifications.	Condition noted
7	The Construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration.	Condition will be complied. All the member units will comply with

8	No construction activity of any kind shall be taken up in the OSR area	Condition noted.
9	Consent of the local body concerned should be obtained for using the treated sewage in the OSR area for gardening purpose. The quality of treated sewage shall satisfy the bathing quality prescribed by the CPCB	STP is not proposed by SIPCOT. Individual industries will be instructed to have their own STP as per their requirement and to reuse the treated wastewater as per norms.
10	The height and coverage of the constructions shall be in accordance with the existing FSI/FAR norms as per Coastal Regulation Zone Notification, 2011.	Not applicable. It is an infrastructure development project involving the construction of roads, storm water drains, street lighting, greenbelt development, and related works.
11	The Project Proponent shall provide car parking exclusively for the visiting guest in the proposed residential apartments as per CMDA norms.	Not applicable. It is an infrastructure development project involving the construction of roads, storm water drains, street lighting, greenbelt development, and related works.
12	The project proponent shall ensure the entry of basement shall be above maximum flood level.	**Condition noted**
13	The proponent shall prepare completion plans showing Separate pipelines marked with different colours with the following details i. Location of STP, compost system, underground sewer line. ii. Pipe Line conveying the treated effluent for green belt development. iii. Pipe Line conveying the treated effluent for toilet flushing iv. Water supply pipeline v. Gas supply pipe line, if proposed vi. Telephone cable vii. Power cable viii. Strom water drains, and ix. Rain water harvesting system, etc. and it shall be made available to the owners	**Condition applicable will be complied.**
14	A First Aid Room shall be provided in the project	**Condition noted.**

	site during the entire construction and operation phases of the project.	All member units will have their own Occupational Health Centre as per norms. Apart from this SIPCOT propose to provide a First Aid Centre
15	The present land use surrounding the project site shall not be disturbed at any point of time.	**Condition noted.**
16	The green belt area shall be planted with indigenous native trees.	**Condition noted.** Green belt area will be planted with indigenous native trees.
17	Natural vegetation listed particularly the trees shall not be removed during the construction/operation phase. In case any trees are likely to be disturbed, shall be replanted.	**Condition noted.**
18	During the construction and operation phase, there should be no disturbance to the aquatic eco-system within and outside the area.	**Condition noted.**
19	The Provisions of Forest conservation Act 1980, Wild Life Protection Act 1972 & Bio diversity Act 2002 should not be violated.	**Condition noted.**
20	There should be Firefighting plan and all required safety plan.	**Condition noted.** All member units will have their own firefighting plan
Part - C - Specific Conditions – Construction phase:		
1. Construction Schedule:		
i)	The Project proponent shall have to furnish the probable date of commissioning of the project supported with necessary bar charts to SEIAA-TN.	**Condition will be complied.**
2. Labour Welfare:		
i)	All the laborers to be engaged for construction should be screened for health and adequately treated before and during their employment on the work at the site.	**Condition will be complied.**
ii)	Personnel working in dusty areas should wear protective respiratory devices and they should also	**Condition will be complied.**

	be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contradictions due to exposure to dust and take corrective measures, if needed.	
ii)	Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. The workers shall be provided with personnel protective measures such as masks, gloves, boots etc.	**Condition will be complied.**
3. Water Supply:		
)	The entire water requirement during construction phase may be met from private tankers	**Condition will be complied.**
i)	Provision shall be made for the housing labour within the site with all necessary infrastructures and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	**Condition noted**
ii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The treatment and disposal of waste water shall be through dispersion trench after treatment through septic tank. The MSW generated shall be disposed through Local Body and the identified dumpsite only.	**Condition noted**
v)	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices prevalent.	**Condition noted**
v)	Fixtures for showers, toilet flushing and drinking	**Condition noted.**

	water should be of low flow type by adopting the use of aerators / pressure reducing devises / sensor based control.	All the member units will comply with
4. Solid Waste Management:		
)	In the solid waste management plan, the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be co-composted with biodegradables.	**Condition noted.**
i)	Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules	**Condition noted**. All member units will be mandated to follow all applicable rules and guidelines.
ii)	Domestic solid wastes to be regularly collected in bins or waste handling receptacles and disposed as per the solid waste management rules 2016.	**Condition noted.** All member units will be mandated to follow all applicable rules and guidelines.
v)	No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.	**Condition noted.**
v)	E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016 and subsequent amendment.	**Condition noted.** All member units will be mandated to follow all applicable rules and guidelines.
5. Top Soil Management:		
)	All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.	**Condition will be complied.** Top soil excavated during construction activities will be used for greenbelt development.
6. Construction Debris disposal:		
i)	Disposal of construction debris during construction phase should not create any adverse effect on the neighboring communities and be disposed off only in approved sites, with the approval of Competent Authority with necessary precautions for general safety and health aspects of the people. The construction and demolition waste shall be	**Condition noted.** All member units will be mandated to follow all applicable rules and guidelines.

	managed as per Construction & Demolition Waste Management Rules, 2016.	
i)	Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourses. The dump sites for such materials must be secured so that they should not leach into the adjacent land/ lake/ stream etc	**Condition noted**
7. Diesel Generator sets:		
)	Low Sulphur Diesel shall be used for operating diesel generator sets to be used during construction phase. The air and noise emission shall conform to the standards prescribed in the Rules under the Environment (Protection) Act, 1986, and the Rules framed thereon.	**Condition noted** Air and noise monitoring report is enclosed as **Annexure- 8.**
i)	The diesel required for operating stand by DG sets shall be stored in barrels fulfilling the safety norms and if required, clearance from Chief Controller of Explosives shall be taken.	Not applicable. SIPCOT have not proposed any DG set.
ii)	The acoustic enclosures shall be installed at all noise generating equipments such as DG sets, air conditioning systems, cooling water tower etc.	**Condition noted** The acoustic enclosures will be installed at all noise generating equipment's Noise quality monitoring report is enclosed as **Annexure – 8.**
8. Air & Noise Pollution Control:		
i)	Vehicles hired for bringing construction materials to the site should be in good condition and should conform to air and noise emission standards, prescribed by TNPCB/CPCB. The vehicles should be operated only during non-peak hours.	**Condition will be complied.**
ii)	Ambient air and noise levels should conform to residential standards prescribed by the TNPCB, both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during the construction phase.	**Condition being Complied.** Environmental quality monitoring report is enclosed as **Annexure- 8.**

	The pollution abatement measures shall be strictly implemented.	
iii)	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site shall be avoided. Parking shall be fully internalized and no public space should be utilized. Parking plan to be as per CMDA norms. The traffic department shall be consulted and any cost effective traffic regulative facility shall be met before commissioning.	Condition will be complied with. SIPCOT will develop a designated truck parking facility within the industrial park. In addition, individual industries will provide adequate parking spaces within their premises to accommodate visitors. Traffic study is enclosed as **Annexure - 12**
iv)	The buildings should have adequate distance between them to allow free movement of fresh air and passage of natural light, air and ventilation.	**Condition noted.**
v)	The project proponent should ensure that adequate Air Pollution Control measures shall be provided from buses and other vehicles, which will be entering the bus terminal. Further, water sprinkling system shall be provided and same shall be used at regular interval to control the dust emission within the project site.	**Condition will be complied.**
9. Building material:		
i)	Fly-ash blocks should be used as building material in the construction as per the provision of Fly ash Notification of September, 1999 and amended as on 27th August, 2003 and Notification No. S.O. 2807 (E) dated: 03.11.2009.	**Condition noted.**
ii)	Ready-mix concrete shall alone be used in building construction and necessary cube-tests should be conducted to ascertain their quality	**Condition will be complied.**
iii)	Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, high quality double glass with special reflecting coating shall be used in windows.	**Condition noted.**

10. Storm Water Drainage:		
i)	Storm water management around the site and on site shall be established by following the guidelines laid down by the storm water manual.	**Condition will be complied.** Storm water will be provided all along the internal road. All the member industries will be instructed to follow applicable rules and guidelines
ii)	Storm water management plan shall be obtained by engaging the services of Anna University/IIT.	**Condition will be complied.**
11. Energy Conservation Measures:		
i)	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material, to fulfill the requirement.	All the member units will comply with.
ii)	Opaque wall should meet prescribed requirement as per Energy Conservation Building Code which is mandatory for all air conditioned spaces by use of appropriate thermal insulation material to fulfill the requirement.	**Condition noted.** All the member units will comply with.
iii)	All norms of Energy Conservation Building Code (ECBC) and National Building Code, 2005 as energy conservation have to be adopted Solar lights shall be provided for illumination of common areas.	**Condition noted.**
iv)	Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting. A hybrids system or fully solar system for a portion of the apartments shall be provided.	**Condition noted.** All the member units will be instructed to comply with.
v)	A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc and submitted to the SEIAA in three months' time.	**Condition will be complied.**

vi)	Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.	**Condition will be complied.**
12. Fire Safety:		
i)	Adequate fire protection equipments and rescue arrangements should be made as per the prescribed standards.	**Condition will be complied.**
ii)	Proper and free approach road for fire-fighting vehicles upto the buildings and for rescue operations in the event of emergency shall be made.	**Condition will be complied.**
13. Green Belt Development:		
i)	The Project Proponent shall plant tree species with large potential for carbon capture in the proposed green belt area based on the recommendation of the Forest department well before the project is completed.	**Condition will be complied.**
ii)	The proponent has to earmark the greenbelt area with dimension and GPS coordinates for the green belt area all along the boundary of the project site with at least 3 meter wide and the same shall be included in the layout out plan to be submitted for CMDA/DTCP approval.	**Condition will be complied.** Greenbelt will be developed as per the layout plan. Green belt layout is enclosed as **Annexure - 7.**
iii)	The proponent shall develop the green belt as per the plan furnished and area earmarked for the greenbelt shall not be alter at any point of time for any other purpose.	**Condition will be complied.** Green belt layout is enclosed as **Annexure - 7.**
14. Sewage Treatment Plant:		
i)	The Sewage Treatment Plant (STP) installed should be certified by an independent expert/ reputed Academic institutions for its adequacy and a report in this regard should be submitted to the SEIAA, TN before the project is commissioned for	Not applicable. SIPCOT has not proposed a common Sewage Treatment Plant (STP) for the industrial park. Each individual industry is responsible for establishing its own STP.

	operation. Explore the less power consuming systems viz baffle reactor, etc., for the treatment of sewage.	
ii)	The Proponent shall install STP as furnished. Any alteration to satisfy the bathing quality shall be informed to SEIAATN.	Not applicable. SIPCOT has not proposed a common Sewage Treatment Plant (STP) for the industrial park. Each individual industry is responsible for establishing its own STP
iii)	The project proponent shall operate and maintain the Sewage treatment Plant and Effluent treatment plant effectively to meet out the standards prescribed by the CPCB.	Not applicable. SIPCOT has not proposed a common Sewage Treatment Plant (STP) for the industrial park. Each individual industry is responsible for establishing its own STP
iv)	The project proponent shall continuously operate and maintain the Sewage treatment plant and Effluent treatment plant to achieve the standards prescribed by the CPCB.	Not applicable. SIPCOT has not proposed a common STP / ETP for the industrial park. Each individual industry is responsible for establishing its own STP / ETP.
v)	The project proponent has to ensure the complete recycling of treated Sewage &Effluent water after achieving the standards prescribed by the CPCB.	Not applicable. SIPCOT has not proposed a common STP / ETP for the industrial park.
vi)	The project proponent has to provide separate standby D.G set for the STP/GWTP for the continuous operation of the STP/GWTP in case of power failure.	Not applicable. SIPCOT has not proposed a common Sewage Treatment Plant (STP) for the industrial park. Each individual industry is responsible for establishing its own STP and will provide an adequately sized standby DG set to ensure uninterrupted and efficient operation of the treatment facility.
15. Rain Water Harvesting:		
i)	The proponent shall ensure that roof rain water collected from the covered roof of the buildings, etc shall be harvested so as to ensure the maximum beneficiation of rain water harvesting by constructing adequate sumps so that 100% of the harvested water shall be reused.	**Condition Noted**
ii)	Rain water harvesting for surface run-off, as per plan submitted should be implemented. Before	**Condition Noted**

	recharging the surface run off, pre-treatment with screens, settlers etc. must be done to remove suspended matter, oil and grease, etc.	
iii)	The Project Proponent has to provide adequate rain water harvesting pits as committed to recover and reuse the rain water during normal rains as reported.	**Condition Noted**
i)	The project activity should not cause any disturbance & deterioration of the local bio diversity.	**Condition Noted.**
16. Building Safety:		
	Lightning arrester shall be properly designed and installed at top of the building and where ever is necessary.	Not applicable. No high rise buildings has been proposed by SIPCOT.

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

Not Applicable – Since the project is under construction phase.

5.ENVIRONMENTAL MONITORING DETAILS

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

5.1 Ambient Air Quality monitoring

The ambient air quality parameters such as suspended Particulate matter (PM10), Respirable Particulate matter (PM 2.5), Sulphur dioxide, Oxides of Nitrogen (NOx), Ammonia, Ozone and Carbon monoxide were monitored. The test report of ambient air quality for the period of October 2024 – March 2025 is enclosed as **Annexure - 8.**

5.2 Ambient Noise level monitoring

Ambient noise levels were monitored and the test report of ambient noise recorded during the period of October 2024 – March 2025 is enclosed as **Annexure 8.**

5.3 Soil quality monitoring

Soil samples were collected and analyzed for nutrients and heavy metals. The test report of soil samples collected and analyzed during the period of October 2024 – March 2025 is enclosed as **Annexure - 8**

5.4 Ground water quality monitoring

Ground water was tested for various water quality parameters during the period of October 2024 – March 2025.The test report of bore well water collected and analyzed is enclosed as **Annexure - 8.**

5.5 Surface water quality monitoring

The surface water was collected and tested for various water quality parameters during the period of October 2024 – March 2025. The test report of surface water collected and analyzed is enclosed as **Annexure-8**.

Environmental Monitoring Photographs are enclosed as **Annexure-13**

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 complied/ will be complied.

Name: Dr. Rajkumar Samuel

Designation: Director Technical

Company Name: Hubert Enviro Care Systems Private Limited

सत्यमेव जयते

File No: 11191
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), TAMIL NADU)
****

Date **01/10/2024**

To,

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

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

Sir/Madam,

SEIAA, TN - Environmental Clearance - Proposed Development Industrial Park over an extent of 150.036 Ha at S.F.No: 9/1A part, 10/1A1, 10/1A2, 10/1B, 10/2A, 10/2B, 11/2, 11/3A, 11/3B, 11/4, 12/2, 12/3A part, 13/2A1, 13/3, 13/4A1, 14/3B, 14/4A, 14/4B, 131/2L2, 131/3A2, 152/6, 153, 154, 155/1, 155/2, 156/1B, 156/2, 156/3, 157/1B, 157/3, 157/4, 157/5, 157/6, 157/7, 157/8, 158/1A, 158/1B, 158/1C, 158/2A2, 160/1, 160/2, 160/3, 160/4, 160/5, 161/1A, 161/1B1, 161/3, 162/1A, 165/1, 165/2, 165/3, 165/4, 166, 168, 169/1, 169/2, 169/3, 170/1, 170/2, 171/1, 171/2, 171/3, 171/4, 178/1A, 178/1B, 178/2A, 179/1A, 179/1B, 179/2, 179/3A, 236/1, 236/2, 236/3A, 236/4, 237/1, 237/2, 237/3A, 237/4, 238/1, 238/2, 249/1, 249/2, 250, 252, 253/1, 253/2, 253/4A, 256/1, 256/2, 256/3, 257/1, 257/2, 257/3, 258/1A, 258/1B, 258/1C2, 258/1C3, 258/1D, 258/2B, 258/3A1, 258/3A2, 259/1B, 259/2, 260/1B, 260/2, 262/2B, 263/1, 263/2, 264/1B2, 264/1C2, 264/2A, 264/2B, 264/3, 265/1B, 450/1, 450/2, 450/3, 451/1A part, 451/1B, 451/2, 451/3, 262/1, 258/3B, 236/3B, 11/1, 163, 164, 233, 234, 235, 251, 255 of Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu by M/s. State Industries Promotion Corporation of Tamil Nadu Limited - For Environmental Clearance. under Category “B1” and Schedule Sl. No. 8(b) – Township and Area Development Projects – Issued – Regarding.

Ref:

1. ToR issued by SEIAA-TN vide ToR identification No. TO24B3813TN5391958N dated:22.04.2024
2. Online Proposal No. SIA/TN/INFRA2/493094/2024 dated: 18/08/2024
3. Your application for Environmental Clearance dated: 19.08.2024
4. Minutes of the 495th Meeting of SEAC held on 06.09.2024
5. Minutes of the 758th authority meeting held on 25.09.2024

2. The particulars of the proposal are as below :

(i) EC Identification No. EC24B3813TN5290279N

(ii) File No.	11191
(iii) Clearance Type	Fresh EC
(iv) Category	B1
(v) Project/Activity Included Schedule No.	8(b) Townships/ Area Development Projects / Rehabilitation Centres
(vii) Name of Project	DEVELOPMENT OF INDUSTRIAL PARK AT VARAPATTI VILLAGE, SULUR TALUK, COIMBATORE DISTRICT, TAMIL NADU
(viii) Name of Company/Organization	STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED
(ix) Location of Project (District, State)	COIMBATORE, TAMIL NADU
(x) Issuing Authority	SEIAA
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-2(Part A, B & EMP Reports were submitted to the SEIAA for under the provision of EIA notification 2006 and its subsequent amendments.
4. The above-mentioned proposal has been considered by SEIAA in the meeting held on 18/04/2024. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above
5. The SEIAA, in its meeting held on 25.09.2024, based on information submitted viz: Form 2 (Part A, B EMP report etc & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and compliance thereto furnished by the Project Proponent, recommended the proposal for grant of Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof subject to compliance of Specific and Standard EC conditions as given in this letter.
6. The SEIAA has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the Appraisal Committee hereby accords Environment Clearance to the instant proposal of M/s. State Industries Promotion Corporation of Tamil Nadu Limited under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of the Specific and Standard EC conditions as given in Annexure (1)
7. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.
8. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
9. The Project Proponent is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.
10. Validity of EC is for a period of 7 years from the date of issue of EC. In case the project proponent fails to complete the construction/proposed activities within the EC validity date, application for EC validity extension shall be submitted to the regulatory authority as per the provision contained in the Para 9.0 of EIA notification, 2006 and its amendment.
11. **The salient features of the project are as follows:**
12.

S. No	Description	Details
1.	Name of the Project	Proposed “Development of Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu” over an Extent of 150.036 Ha (370.59 Acres) by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).
2.	Location	S.F.No: 9/1A part, 10/1A1, 10/1A2, 10/1B, 10/2A, 10/2B, 11/2, 11/3A, 11/3B, 11/4, 12/2, 12/3A part, 13/2A1, 13/3, 13/4A1, 14/3B, 14/4A, 14/4B, 131/2L2, 131/3A2, 152/6, 153, 154, 155/1, 155/2, 156/1B, 156/2, 156/3, 157/1B, 157/3, 157/4, 157/5, 157/6, 157/7, 157/8, 158/1A, 158/1B, 158/1C, 158/2A2, 160/1, 160/2, 160/3, 160/4, 160/5, 161/1A, 161/1B1, 161/3,

		162/1A, 165/1, 165/2, 165/3, 165/4, 166, 168, 169/1, 169/2, 169/3, 170/1, 170/2, 171/1, 171/2, 171/3, 171/4, 178/1A, 178/1B, 178/2A, 179/1A, 179/1B, 179/2, 179/3A, 236/1, 236/2, 236/3A, 236/4, 237/1, 237/2, 237/3A, 237/4, 238/1, 238/2, 249/1, 249/2, 250, 252, 253/1, 253/2, 253/4A, 256/1, 256/2, 256/3, 257/1, 257/2, 257/3, 258/1A, 258/1B, 258/1C2, 258/1C3, 258/1D, 258/2B, 258/3A1, 258/3A2, 259/1B, 259/2, 260/1B, 260/2, 262/2B, 263/1, 263/2, 264/1B2, 264/1C2, 264/2A, 264/2B, 264/3, 265/1B, 450/1, 450/2, 450/3, 451/1A part, 451/1B, 451/2, 451/3, 262/1, 258/3B, 236/3B, 11/1, 163, 164, 233, 234, 235, 251, 255 of Varapatti Village, Sulur Taluk, Coimbatore District
3.	Type of Project	B1 Schedule – 8(b)
4.	Latitude & Longitude	

S. No	Latitude(N)	Longitude(E)	S.No	Latitude(N)	Longitude(E)
1	10° 55' 23.661"	77° 11' 54.737"	36	10° 54' 24.654"	77° 11' 22.385"
2	10° 55' 20.95"	77° 11' 56.151"	37	10° 54' 24.641"	77° 11' 29.985"
3	10° 55' 16.671"	77° 11' 53.821"	38	10° 54' 32.478"	77° 11' 29.926"
4	10° 55' 16.33"	77° 11' 58.1"	39	10° 54' 36.83"	77° 11' 29.555"
5	10° 55' 14.001"	77° 11' 56.496"	40	10° 54' 36.347"	77° 11' 27.108"
6	10° 55' 13.293"	77° 11' 51.552"	41	10° 54' 37.715"	77° 11' 26.251"
7	10° 55' 10.747"	77° 11' 52.395"	42	10° 54' 42.558"	77° 11' 29.038"
8	10° 55' 8.264"	77° 11' 57.943"	43	10° 54' 45.197"	77° 11' 28.811"
9	10° 55' 2.324"	77° 11' 57.744"	44	10° 54' 50.033"	77° 11' 26.729"
10	10° 54' 58.563"	77° 12' 0.735"	45	10° 54' 48.968"	77° 11' 23.645"
11	10° 54' 54.611"	77° 11' 57.119"	46	10° 54' 52.859"	77° 11' 23.935"
12	10° 54' 54.296"	77° 11' 52.064"	47	10° 54' 56.585"	77° 11' 26.694"
13	10° 54' 52.763"	77° 11' 44.964"	48	10° 54' 59.806"	77° 11' 21.948"
14	10° 54' 46.396"	77° 11' 45.178"	49	10° 55' 5.033"	77° 11' 21.457"
15	10° 54' 47.74"	77° 11' 40.354"	50	10° 55' 5.533"	77° 11' 18.599"
16	10° 54' 45.092"	77° 11' 46.397"	51	10° 55' 4.923"	77° 11' 14.613"
17	10° 54' 39.846"	77° 11' 44.554"	52	10° 55' 7.981"	77° 11' 14.219"
18	10° 54' 38.922"	77° 11' 47.703"	53	10° 55' 8.487"	77° 11' 18.282"
19	10° 54' 36.737"	77° 11' 46.019"	54	10° 55' 10.779"	77° 11' 18.348"
20	10° 54' 29.763"	77° 11' 45.684"	55	10° 55' 11.808"	77° 11' 23.45"
21	10° 54' 29.848"	77° 11' 48.509"	56	10° 55' 13.567"	77° 11' 23.152"
22	10° 54' 23.938"	77° 11' 49.448"	57	10° 55' 14.103"	77° 11' 26.809"
23	10° 54' 21.507"	77° 11' 48.814"	58	10° 55' 18.685"	77° 11' 27.711"
24	10° 54' 15.351"	77° 11' 47.726"	59	10° 55' 18.996"	77° 11' 31.398"
25	10° 54' 13.087"	77° 11' 45.317"	60	10° 55' 16.846"	77° 11' 32.75"
26	10° 54' 15.034"	77° 11' 39.881"	61	10° 55' 11.412"	77° 11' 32.491"
27	10° 54' 14.661"	77° 11' 36.998"	62	10° 55' 11.604"	77° 11' 29.915"
28	10° 54' 6.961"	77° 11' 37.032"	63	10° 55' 4.78"	77° 11' 30.499"
29	10° 54' 4.1"	77° 11' 35.471"	64	10° 55' 1.628"	77° 11' 31.785"
30	10° 54' 5.128"	77° 11' 28.604"	65	10° 54' 58.838"	77° 11' 28.854"
31	10° 54' 14.436"	77° 11' 26.989"	66	10° 55' 2.964"	77° 11' 40.47"
32	10° 54' 16.49"	77° 11' 27.421"	67	10° 55' 8.957"	77° 11' 39.435"
33	10° 54' 18.393"	77° 11' 29.081"	68	10° 55' 18.649"	77° 11' 40.11"
34	10° 54' 22.541"	77° 11' 28.172"	69	10° 55' 21.416"	77° 11' 40.532"
35	10° 54' 22.317"	77° 11' 23.058"	70	10° 55' 22.104"	77° 11' 47.928"

5.	Total Plot Area (in sq. m)	150.036 Ha (370.59 Acres)
6.	Brief description of the project	The Environmental Clearance is sought for Proposed “Development of Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu” over an Extent of 150.036 Ha (370.59 Acres) by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).
7.	Built up area	Not applicable – It is infrastructure development project

	details	
8.	Maximum height of the project	18.3m (based on industrial units)
9.	Maximum number of floors	Industrial Park - based on industrial units
10.	No. of blocks	Industrial Park - based on industrial units
11.	Permissible FSI area	-
12.	Proposed FSI area	-
13.	Cost of Project	INR. 259.70 crores
14.	No. of Saleable Units	Not applicable Total developable area is 370.59 Acres (150.036 Ha) which includes industrial plots (45units), Other Common facilities, Commercial activities, Greenbelt, Road, Storm Water Drain, OSR and such other infrastructure facilities
15.	Expected Population	**Construction phase** - 100 Nos. **Operation phase** - 9378 Nos.
16.	a) Water requirement (in KLD)	Total water requirement -5073 KLD Fresh water requirement-2761 KLD Treated water requirement-2312 KLD
17.	b) Source	Fresh water will be sourced from New Tirupur Area Development Corporation Limited (NTADCL) from Overhead reservoir at Iduvanmpalayam which is 30km from site
18.	Details of Sewage generation and Treatment	Total Sewage generation: 338 KLD STP-350 KLD **Treatment Method:** • Sewage from Industries - Will be treated by individual industries and used for green belt development within the IP.
19.	Details of greywater / Effluent generation and Treatment	Total Effluent Generation: 1984 KLD ETP-2000 KLD **Treatment Method:** Effluent from Industries -Will be treated by individual industries and reused for process and utilities. ZLD will be maintained by individual industries.
20.	Mode of Disposal of treated sewage / effluent	Treated effluent will be used by individual units for their Process & Utilities Treated sewage will be used by individual units for greenbelt.
21.	Quantity of Solid Waste generation, Mode of treatment and Disposal	Total Solid Waste Generation: 4.220 TPD Organic waste: 2.532 TPD Mode of Treatment & Disposal: Individual industries will segregate the waste and organic waste will be composted and used as manure for green belt development within their premises of SIPCOT - Inorganic wastes will be sold to TNPCB authorized recyclers by Individual industries.
22.	Quantity of E-Waste generation, Mode of treatment and Disposal	E-waste such used PC, equipment, sensor, controller, etc) will be generated from the proposed units in IP. The same will be disposed through TNPCB Authorized E-waste Vendor by Individual units as per E-waste Management Rules 2022 and its amendments thereof

23.	Quantity of Biomedical Waste generation, Mode of treatment and Disposal	Biomedical waste generated from the Individual Industries will be collected and disposed through TNPCB Authorized common biomedical waste Management Facility for Incineration / sterilization / shredding /disinfection & recycling disposal by Individual units as per Biomedical Waste Management Rules 2016 and its amendments thereof
24.	Quantity of Hazardous Waste generation, Mode of treatment and Disposal	Hazardous wastes generated from the allotted industries will be managed by them and it will be stored in designated areas within their premises and disposed as per Hazardous waste (Management and Transboundary) Rules 2016 and its amendments thereof.
25.	Power requirement	33 MVA (Source: TANGEDCO)
26.	Details of solar energy	50 % of total roof area
27.	Details of D.G. set with Capacity	Individual industries will have their own power back up:
28.	Details of Green Belt Area i) Total area of green belt ii) No. of trees existing within the project site iii) No. of trees proposed to be planted iv) No. of trees to be transplanted / cut	I. Overall Greenbelt Area – 52.321 Ha (34.87%) II. Existing Tree - 46 Nos. III. Tree proposed to be cut - 25 Nos. IV. Tree proposed to be planted - 98252 Nos.
29.	Details of OSR Area	14.835 Ha (36.64 acres)
30.	Details of Parking Area	Will be provided by individual units within the plots as per norms
31.	Provision for rain water harvesting	
32.	EMP Cost (Rs.)	Capital Cost-16.10 Crores Recurring Cost-36.5 Lakhs
33.	CER Cost	**CER Cost- Rs. 250 Lakhs** **Details of CER** Massive afforestation in Sulur Taluk, covering all Government owned premises like schools, hospitals, offices, road avenues etc. **Action Plan**: will be implemented within 1 year from the date of issue of EC.

13. **General Instructions:**

14. (a) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of

which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.

(b) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

(c) The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.

(d) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during perational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

(e) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

(f) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

(g) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

Copy To

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

Annexure 1

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

1. Seiaa Specific Conditions

S. No	EC Conditions
1.1	The authority noted that the proposal was placed for appraisal in the 495th Meeting of SEAC held on 06.09.2024. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the conditions stated therein. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Environmental Clearance subject to the conditions as recommended by SEAC & normal conditions

S. No	EC Conditions
	and conditions in Annexure 'C' of this minutes in addition to the following conditions. 1. The project proponent shall in-house only non - EIA attracting industries alone (Aerospace and Defence Components manufacturing and other non EC category industries) as per EIA notification as amended. 2. If any Category A or B type of industry as notified in the EIA Notification 2006, as amended is proposed in the SIPCOT, the concerned Industry/Proponent shall apply for Environmental Clearance as per EIA Notification 2006, as amended. 3. The project proponent shall start establishment only after complete alienation of Patta lands, Govt. Poramboke lands & water bodies within the proposed site in concurrence with the competent authority before obtaining consent from TNPCB. 4. The project proponent shall obtain necessary permission for water bodies within/around the proposed site from the Competent Authority before obtaining CTE from TNPCB. 5. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall treat the effluent generated by providing adequate individual ZLD followed by reject management system and shall reuse the treated effluent for the process activity. 6. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall treat the Sewage generated by providing adequate individual STP and shall reuse the treated sewage for the toilet flushing & green belt/gardening as committed. 7. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001. 8. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall provide elevated STP/ETP of adequate capacity & its utilities above the ground level with adequate height considering highest rainfall & flood level /inundation point of view as recommended by the competent authority for the proposed project site. 9. The project proponent shall ensure that the industries to be in-housed shall adhere that no treated or untreated trade effluent/sewage is discharged outside the premises under any circumstances. 10. The project proponent and the non - EIA attracting Industries to be in-housed shall provide & ensure that the utilities/ arrangements for fresh water supply, Storm/rain water management, and for reuse of treated sewage/effluent as proposed. 11. The project proponent shall provide & maintain adequate storm water management & rain water harvesting structures as committed for the project site. 12. The project proponent shall obtain necessary permission for disposal of excess storm water from the competent authority before obtaining CTO. 13. The project proponent shall ensure that industries to be in-housed shall operate and maintain the proposed STP / ETP efficiently and continuously to bring the quality of treated sewage/effluent to satisfy the discharge standards prescribed by the CPCB at all times. 14. The proponent & the Industries to be in-housed shall periodically conduct and submit fire safety study, emergency evacuation plan, risk assessment study, occupational health safety study for the worst case scenario in regard to existing safety measures/standard operating procedures adopted for the process/ equipment/utilities for operation & maintenance and the storage areas of products, raw materials, solvent, fuel, etc. in the different operating zones of the plant at least once in a year to regularly identify safety fragile areas within the plant which requires regular monitoring and the proponent shall submit the same along with timeline for implementation of the said recommendations to the concerned departments. 15. The project proponent & the Industries to be in-housed shall ensure buildings constructed are energy efficient and conform to the green building norms. 16. The project proponent shall ensure Industries to be in-housed shall adhere to provide adequate

S. No	EC Conditions
	parking space for visitors of all inmates including clean traffic plan as committed. 17. The proponent & the Industries to be in-housed shall strictly adhere to all biosafety standards, hygienic standards and safety norms of working staff and patients to be strictly from time to time as guidance of competent authority. 18. The proponent & the Industries to be in-housed shall strictly adhere to the disaster management and disaster mitigation measures/standards to avoid any calamities. 19. The activities should in no way cause emission and build-up Green House Gases. All actions to be eco friendly and support sustainable management of the natural resources within and outside the campus premises. 20. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986. 21. The proponent & the Industries to be in-housed shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances. 22. The proponent & the Industries to be in-housed shall ensure to provide adequate capacity of DG set (standby) for the proposed STP so as ensure continues and efficient operation. 23. The plantation of saplings shall be carried out in the earmarked greenbelt area as a part of the tree plantation campaign “Ek Ped Ma Ke Naam” and the details of the same shall be uploaded in the MeriLiFE Portal (https://merilife.nic.in).

2. Seiaa Standard Conditions

S. No	EC Conditions
2.1	**Climate Change** 1. The proponent shall adopt strategies to decarbonize the building, reduce carbon footprints and develop strategies for climate proofing and mitigation. 2. The proponent shall adopt strategies to reduce carbon & GHG emissions during operation (operational phase and building materials). 3. The proponent shall adopt methodology to control thermal environment and other shocks in the building. 4. The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands. 5. The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues. 6. The activities should in no way cause emission and build-up Green House Gases. All actions to be eco-friendly and support sustainable management of the natural resources within and outside the campus premises. 7. The proponent shall ensure that the buildings does not cause any damage to water environment, air quality and should be carbon neutral building. **Health** 8. The proponent shall adopt strategies to maintain the health of the inhabitants within and in the vicinity. **Energy** 9. The proponent shall adopt strategies to reduce electricity demand and consumption. 10. The proponent shall provide provisions for automated energy efficiency. 11. The proponent shall provide provisions for controlled ventilation and lighting systems. 12. The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation. **Regulatory Frameworks** 13. The proponent shall effectively implement and strictly adhere to the Solid Waste Management

S. No	EC Conditions
	Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001. 14. The proponent shall provide elevator as per rules CMDA/DTCP. **Database maintenance & audits** 15. The database record of environmental conditions of all the events from pre-construction, construction and post-construction should be maintained in digitized format. 16. The proponent should maintain environmental audits to measure and mitigate environmental concerns. **Biodiversity** 17. The proponent shall ensure that the proposed activities in no way result in the spread of invasive species. 18. The proponent shall adopt sustainability criteria to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements. 19. The proponent shall ensure utmost safety for the existing biodiversity, trees, flora & fauna and the critically endangered species & endangered species shall not disturb under any circumstances. 20. The proponent shall develop building-friendly pest control strategies by using non chemical measures so as to control the pest population thereby not losing beneficial organisms. 21. The proponent shall adopt strategies to prevent birds getting hit by the high buildings. **Safety measures** 22. The proponent should develop an emergency response plan & safety evacuation plan (including disabled people) in addition to the disaster management plan. 23. All bio-safety standards, hygienic standards and safety norms of working staff to be strictly followed as stipulated in EIA/EMP. 24. The disaster management/disaster mitigation standards& fire safety standards as prescribed by competent authorities. 25. The proponent shall provide the emergency exit in the buildings. **Water/Sewage** 26. The proponent shall ensure that no untreated sewage is let outside the project site under any circumstances. Further, the treated water shall not be disposed off through any other means other than the permitted mode of disposal. 27. The proponent shall provide STP of adequate capacity as committed and shall continuously & efficiently operate STP so as to satisfy the treated sewage discharge standards prescribed by the TNPCB time to time. 28. The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB & IRO of MoEF&CC. 29. The proponent shall ensure that provision should be given for proper utilization of recycled water. 30. The project proponent shall adhere to storm water management plan as committed. **Parking** 31. The project proponent shall provide adequate parking space for visitors of all inmates including clean traffic plan as committed. **Solid waste Management** 32. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time. 33. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986. **EMP** 34. The proponent shall strictly adhere to the EIA/EMP report. 35. The proponent shall ensure that the green belt plan is implemented as indicated in EMP. Also,

S. No	EC Conditions
	the proponent shall explore possibilities to provide sufficient grass lawns. **Others** 36. As per the 'Polluter Pay Principle', the proponent will be held responsible for any environmental damage caused due to the proposed activity including withdrawal of EC and stoppage of work. 37. The project proponent shall adhere to height of the buildings as committed.

3. Seac Conditions - Site Specific

S. No	EC Conditions
3.1	1. The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating. 2. The project proponent shall in-house only non - EIA attracting industries alone (Aerospace and Defence Components manufacturing and other non EC category industries) as per EIA notification as amended. 3. If any Category A or B type of industry as notified in the EIA Notification 2006, as amended is proposed in the SIPCOT, the concerned Industry/Proponent shall apply for Environmental Clearance as per EIA Notification 2006, as amended. 4. The project proponent shall start establishment only after complete alienation of Patta lands, Govt. Poramboke lands & water bodies within the proposed site in concurrence with the competent authority. 5. The project proponent shall obtain necessary permission if any water bodies within/around the proposed site from the Competent Authority. 6. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall treat the effluent generated by providing adequate individual ZLD followed by reject management system and shall reuse the treated effluent for the process activity. 7. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall treat the Sewage generated by providing adequate individual STP and shall reuse the treated sewage for the toilet flushing & green belt/gardening as committed. 8. The project proponent shall ensure that non - EIA attracting Industries to be in-housed shall provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001. 9. The project proponent shall provide & maintain adequate storm water management & rain water harvesting structures as committed for the project site. 10. The proponent & the Industries to be in-housed shall periodically conduct and submit fire safety study, emergency evacuation plan, risk assessment study, occupational health safety study for the worst case scenario in regard to existing safety measures/standard operating procedures adopted for the process/ equipment/utilities for operation & maintenance and the storage areas of products, raw materials, solvent, fuel, etc. in the different operating zones of the plant at least once in a year to regularly identify safety fragile areas within the plant which requires regular monitoring and the proponent shall submit the same along with timeline for implementation of the said recommendations to the concerned departments. 11. The proponent & the Industries to be in-housed shall ensure to provide adequate capacity of DG set (standby) for the proposed STP so as ensure continues and efficient operation. 13. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.

S. No	EC Conditions
	14. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system. 15. Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading. 16. Project proponent should ensure that there will be no use of “Single use of Plastic” (SUP). 17. The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same. 18. The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms. 19. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment. 20. Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF Lko/Director of Environment and other concerning authority regularly. 21. Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority. 22. The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water. 23. The proponent should provide the MoU with STPs’ owner/concerned department for getting the STPs treated water for construction use.

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

1. Statutory Compliance

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

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

2. Air Quality Monitoring And Preservation

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

S. No	EC Conditions
	open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
2.10	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
2.11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
2.12	For indoor air quality the ventilation provisions as per National Building Code of India.

3. Water Quality Monitoring And Preservation

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

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

4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental

S. No	EC Conditions
	pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
4.2	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
4.3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

5. Energy Conservation Measures

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

6. Waste Management

S. No	EC Conditions
6.1	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
6.2	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
6.3	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
6.4	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
6.5	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up

S. No	EC Conditions
	must be done with the authorized recyclers.
6.6	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
6.7	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
6.8	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
6.9	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
6.10	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

7. Green Cover

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

8. Transport

S. No	EC Conditions
8.1	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be

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

9.

S. No	EC Conditions
9.1	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

10. Human Health Issues

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

11. Miscellaneous

S. No	EC Conditions
11.1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
11.2	ii. environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
11.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
11.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
11.5	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
11.6	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
11.7	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report
11.8	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
11.9	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
11.10	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11.11	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the State Expert Appraisal Committee.

S. No	EC Conditions
11.12	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC)/SEIAA-TN.
11.13	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11.14	The Ministry/SEIAA-TN may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11.15	The Ministry/SEIAA-TN reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
11.16	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
11.17	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
11.18	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

12. Specific Conditions

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

Additional EC Conditions

STANDARD CONDITIONS

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

1. Any appeal against this Environmental Clearance shall lie with the Hon’ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
2. The construction of STP, ETP, Solid Waste Management facility, E-waste management facility, DG sets, etc., should be made in the earmarked area only. In any case, the location of these utilities should not be changed later on.
3. The Environmental safeguards contained in the application of the proponent /mentioned during the presentation before the State Level Environment Impact Assessment Authority / State Level Expert Appraisal Committee should be implemented in the letter and spirit.
4. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire and Rescue Services Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wild Life (Protection) Act, 1972, State / Central Ground Water Authority, Coastal Regulatory Zone Authority, other statutory and other authorities as applicable to the project shall be obtained by project proponent from the concerned competent authorities.
5. The SEIAA reserves the right to add additional safeguard measures subsequently, if non-compliance of any of the EC conditions is found and to take action, including revoking of this Environmental Clearance as the case may be.

6. A proper record showing compliance of all the conditions of Environmental Clearance shall be maintained and made available at all the times.
7. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company. The status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Chennai by e-mail.
8. The Regional Office of the Ministry located at Chennai shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
9. “Consent for Establishment” shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be submitted to the SEIAA, Tamil Nadu.
10. In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.
11. The conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, along with their amendments ,draft Minor Mineral Conservation & Development Rules , 2010 framed under MMDR Act 1957,National Commission for protection of Child Right Rules ,2006 and rules made there under and also any other orders passed by the Hon’ble Supreme Court of India/Hon’ble High Court of Madras and any other Courts of Law, including the Hon’ble National Green Tribunal relating to the subject matter.
12. The Environmental Clearance shall not be cited for relaxing the other applicable rules to this project.
13. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
14. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, Chennai, the respective Zonal Office of CPCB, Bengaluru and the TNPCB. The criteria pollutant levels namely; PM10, PM2.5, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored.
15. The SEIAA, TN may cancel the Environmental Clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the Environmental Clearance.
16. The Environmental Clearance does not imply that the other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would be considering the project on merits and be taking decisions independently of the Environmental Clearance.
17. The SEIAA, TN may alter/modify the above conditions or stipulate any further condition in the interest of environment protection, even during the subsequent period.
18. The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.
19. Where the trees need to be cut, compensation plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree that is cut) should be done with the obligation to continue maintenance.
20. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive who will report directly to the Head of the Organization and the shortfall shall be strictly reviewed and addressed.
21. The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually.
22. The Project Proponent has to provide adequate rain water harvesting pits as committed s to recover and reuse the rain water during normal rains as reported.
23. The project activity should not cause any disturbance & deterioration of the local bio diversity.
24. The project activity should not impact the water bodies. A detailed inventory of the water bodies and forest should be evaluated and fact reported to the Forest Department & PWD for monitoring.
25. All the assessed flora & fauna should be conserved and protected.
26. The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.

27. Necessary permission shall be obtained from the competent authority for the drawl / outsourcing of fresh water before obtaining consent from TNPCB.
28. The proponent shall appoint an Environmental Engineer with necessary qualification for the operation and maintenance of STP (Sewage Treatment Plant) and GWTP (grey water Treatment Plant)
29. The Proponent shall provide the dispenser for the disposal of Sanitary Napkins.
30. All the mitigation measures committed by the proponent for the flood management, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.
31. No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.
32. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.
33. The safety measures proposed in the report should be strictly followed.
Part - B – Specific Conditions – Pre construction phase:
1. The project authorities should advertise with basic details at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of clearance. The press releases also mention that a copy of the clearance letter is available with the State Pollution Control Board and also at website of SEIAA, TN. The copy of the press release should be forwarded to the Regional Office of the Ministry of Environment and Forests located at Chennai and SEIAA-TN.
2. In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.
3. A copy of the clearance letter shall be sent by the proponent to the Local Body. The clearance letter shall also be put on the website of the Proponent.
4. The approval of the competent authority shall be obtained for structural safety of the buildings during earthquake, adequacy of firefighting equipments, etc. as per National Building Code including protection measures from lightning etc. before commencement of the work.
5. All required sanitary and hygienic measures for the workers should be in place before starting construction activities and they have to be maintained throughout the construction phase.
6. Design of buildings should be in conformity with the Seismic Zone Classifications.
7. The Construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration.
8. No construction activity of any kind shall be taken up in the OSR area.
9. Consent of the local body concerned should be obtained for using the treated sewage in the OSR area for gardening purpose. The quality of treated sewage shall satisfy the bathing quality prescribed by the CPCB.
10. The height and coverage of the constructions shall be in accordance with the existing FSI/FAR norms as per Coastal Regulation Zone Notification, 2011.
11. The Project Proponent shall provide car parking exclusively for the visiting guest in the proposed residential apartments as per CMDA norms.
12. The project proponent shall ensure the entry of basement shall be above maximum flood level.
13. The proponent shall prepare completion plans showing Separate pipelines marked with different colours with the following details
i. Location of STP, compost system, underground sewer line.
ii. Pipe Line conveying the treated effluent for green belt development.
iii. Pipe Line conveying the treated effluent for toilet flushing
iv. Water supply pipeline
v. Gas supply pipe line, if proposed
vi. Telephone cable
vii. Power cable
viii. Strom water drains, and
ix. Rain water harvesting system, etc. and it shall be made available to the owners
14. A First Aid Room shall be provided in the project site during the entire construction and operation phases of the project.
15. The present land use surrounding the project site shall not be disturbed at any point of time.
16. The green belt area shall be planted with indigenous native trees.
17. Natural vegetation listed particularly the trees shall not be removed during the construction/operation phase. In case any trees are likely to be disturbed, shall be replanted.
18. During the construction and operation phase, there should be no disturbance to the aquatic eco-system within and outside the area.

19. The Provisions of Forest conservation Act 1980, Wild Life Protection Act 1972 & Bio diversity Act 2002 should not be violated.
20. There should be Firefighting plan and all required safety plan.
21. Regular fire drills should be held to create awareness among owners/ residents.
Part - C - Specific Conditions – Construction phase:
1. Construction Schedule:
i) The Project proponent shall have to furnish the probable date of commissioning of the project supported with necessary bar charts to SEIAA-TN.
2. Labour Welfare:
i) All the laborers to be engaged for construction should be screened for health and adequately treated before and during their employment on the work at the site.
ii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contradictions due to exposure to dust and take corrective measures, if needed.
iii) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. The workers shall be provided with personnel protective measures such as masks, gloves, boots etc.
3. Water Supply:
i) The entire water requirement during construction phase may be met from private tankers
ii) Provision shall be made for the housing labour within the site with all necessary infrastructures and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
iii) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The treatment and disposal of waste water shall be through dispersion trench after treatment through septic tank. The MSW generated shall be disposed through Local Body and the identified dumpsite only.
iv) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices prevalent.
v) Fixtures for showers, toilet flushing and drinking water should be of low flow type by adopting the use of aerators / pressure reducing devises / sensor based control.
4. Solid Waste Management:
i) In the solid waste management plan, the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be co-composted with biodegradables.
ii) Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.
iii) Domestic solid wastes to be regularly collected in bins or waste handling receptacles and disposed as per the solid waste management rules 2016.
iv) No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.
v) E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016 and subsequent amendment.
5. Top Soil Management:
i) All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.
6. Construction Debris disposal:
i) Disposal of construction debris during construction phase should not create any adverse effect on the neighboring communities and be disposed off only in approved sites, with the approval of Competent Authority with necessary precautions for general safety and health aspects of the people. The construction and demolition waste shall be managed as per Construction & Demolition Waste Management Rules, 2016.
ii) Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourses. The dump sites for such materials must be secured so that they should not leach into the adjacent land/ lake/ stream etc.
7. Diesel Generator sets:
i) Low Sulphur Diesel shall be used for operating diesel generator sets to be used during construction phase. The air and noise emission shall conform to the standards prescribed in the Rules under the Environment (Protection) Act, 1986, and the Rules framed thereon.

ii) The diesel required for operating stand by DG sets shall be stored in barrels fulfilling the safety norms and if required, clearance from Chief Controller of Explosives shall be taken.
iii) The acoustic enclosures shall be installed at all noise generating equipments such as DG sets, air conditioning systems, cooling water tower etc.
8. Air & Noise Pollution Control:
i) Vehicles hired for bringing construction materials to the site should be in good condition and should conform to air and noise emission standards, prescribed by TNPCB/CPCB. The vehicles should be operated only during non-peak hours.
ii) Ambient air and noise levels should conform to residential standards prescribed by the TNPCB, both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during the construction phase. The pollution abatement measures shall be strictly implemented.
iii) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site shall be avoided. Parking shall be fully internalized and no public space should be utilized. Parking plan to be as per CMDA norms. The traffic department shall be consulted and any cost effective traffic regulative facility shall be met before commissioning.
iv) The buildings should have adequate distance between them to allow free movement of fresh air and passage of natural light, air and ventilation.
v) The project proponent should ensure that adequate Air Pollution Control measures shall be provided from buses and other vehicles, which will be entering the bus terminal. Further, water sprinkling system shall be provided and same shall be used at regular interval to control the dust emission within the project site.
9. Building material:
i) Fly-ash blocks should be used as building material in the construction as per the provision of Fly ash Notification of September, 1999 and amended as on 27th August, 2003 and Notification No. S.O. 2807 (E) dated: 03.11.2009.
ii) Ready-mix concrete shall alone be used in building construction and necessary cube-tests should be conducted to ascertain their quality.
iii) Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, high quality double glass with special reflecting coating shall be used in windows.
10. Storm Water Drainage:
i) Storm water management around the site and on site shall be established by following the guidelines laid down by the storm water manual.
ii) Storm water management plan shall be obtained by engaging the services of Anna University/IIT.
11. Energy Conservation Measures:
i) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material, to fulfill the requirement.
ii) Opaque wall should meet prescribed requirement as per Energy Conservation Building Code which is mandatory for all air conditioned spaces by use of appropriate thermal insulation material to fulfill the requirement.
iii) All norms of Energy Conservation Building Code (ECBC) and National Building Code, 2005 as energy conservation have to be adopted Solar lights shall be provided for illumination of common areas.
iv) Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting. A hybrids system or fully solar system for a portion of the apartments shall be provided.
v) A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc and submitted to the SEIAA in three month’s time.
vi) Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.
12. Fire Safety:
i) Adequate fire protection equipments and rescue arrangements should be made as per the prescribed standards.
ii) Proper and free approach road for fire-fighting vehicles upto the buildings and for rescue operations in the event of emergency shall be made.
13. Green Belt Development:
i) The Project Proponent shall plant tree species with large potential for carbon capture in the proposed green belt area based on the recommendation of the Forest department well before the project is completed.
ii) The proponent has to earmark the greenbelt area with dimension and GPS coordinates for the green belt area all along the boundary of the project site with at least 3 meter wide and the same shall be included in the layout out plan to be submitted for CMDA/DTCP approval.
iii) The proponent shall develop the green belt as per the plan furnished and area earmarked for the greenbelt shall not be alter at any point of time for any other purpose.

14. Sewage Treatment Plant:

i) The Sewage Treatment Plant (STP) installed should be certified by an independent expert/ reputed Academic institutions for its adequacy and a report in this regard should be submitted to the SEIAA, TN before the project is commissioned for operation. Explore the less power consuming systems viz baffle reactor, etc., for the treatment of sewage.

ii) The Proponent shall install STP as furnished. Any alteration to satisfy the bathing quality shall be informed to SEIAA-TN.

iii) The project proponent shall operate and maintain the Sewage treatment Plant and Effluent treatment plant effectively to meet out the standards prescribed by the CPCB.

iv) The project proponent shall continuously operate and maintain the Sewage treatment plant and Effluent treatment plant to achieve the standards prescribed by the CPCB.

v) The project proponent has to ensure the complete recycling of treated Sewage &Effluent water after achieving the standards prescribed by the CPCB.

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

15. Rain Water Harvesting:

i) The proponent shall ensure that roof rain water collected from the covered roof of the buildings, etc shall be harvested so as to ensure the maximum beneficiation of rain water harvesting by constructing adequate sumps so that 100% of the harvested water shall be reused.

ii) Rain water harvesting for surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment with screens, settlers etc. must be done to remove suspended matter, oil and grease, etc.

iii) The Project Proponent has to provide adequate rain water harvesting pits as committed to recover and reuse the rain water during normal rains as reported.

i) The project activity should not cause any disturbance & deterioration of the local bio diversity.

16. Building Safety:

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

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

1. There should be Firefighting plan and all required safety plan.
2. Regular fire drills should be held to create awareness among owners/ residents.
3. Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.
4. The building should not spoil the green views and aesthetics of surroundings and should provide enough clean air space.
5. Solar energy saving shall be increased to atleast10% of total energy utilization.
6. The Project proponent has to spend the CER as committed in the affidavit. The above activity shall be carried out before obtaining CTO from TNPCB.
7. The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually
8. The EMP cost shall be printed in the Brochure / Pamphlet for the preparation of the sale of the property and should also mention the component involved.
9. The Project proponent shall get due permission from the wetland Authority before the commencement of the work, if applicable.
10. The Project proponent should discuss with the wet land Authority, Tamil Nadu Forest Department, PWD and support lake restoration cum improvement, awareness and conservation programs.
11. The project activities should in no way disturb the manmade structures.
12. The Proponent shall do afforestation/ restoration programme contemplated to strengthen the open spaces shall preferably include native species along with the financial forecast for planting and maintenance for 5 years.
13. “Consent to Operate” should be obtained from the Tamil Nadu pollution Control Board before the start of the operation of the project and copy shall be submitted to the SEIAA-TN.
14. Raw water quality to be checked for portability and if necessary RO plant shall be provided.
15. The Proponent should be responsible for the maintenance of common facilities including greening, rain water harvesting, sewage treatment and disposal, solid waste disposal and environmental monitoring including terrace gardening for a period of 3 years. Within one year after handing over the flats to all allottees a viable society or an association among the allottees shall be formed to take responsibility of continuous maintenance of all facilities with required agreements for compliance of all conditions furnished in Environment Clearance (EC) order issued by the SEIAA-TN or the Proponent

himself shall maintain all the above facilities for the entire period. The copy of MOU between the buyers Association and proponent shall be communicated to SEIAA-TN.
16. The ground water level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.
17. Treated effluent emanating from STP shall be recycled / reused to the maximum extent possible. The treated sewage shall conform to the norms and standards for bathing quality laid down by CPCB irrespective of any use. Necessary measures should be made to mitigate the odour and mosquito problem from STP.
18. The Proponent shall operate STP continuously by providing stand by DG set in case of power failure.
19. It is the sole responsibility of the proponent that the treated sewage water disposed for green belt development/ avenue plantation should not pollute the soil/ ground water/ adjacent canals/ lakes/ ponds, etc
20. Adequate measures should be taken to prevent odour emanating from solid waste processing plant and STP.
21. The e - waste generated should be collected and disposed to a nearby authorized e-waste centre as per E- waste (Management & Handling), Rules 2016 as amended.
22. Diesel power generating sets proposed as source of back-up power during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets.
23. The noise level shall be maintained as per MoEF/CPCB/TNPCB guidelines/norms both during day and night time.
24. Spent oil from D.G sets should be stored in HDPE drums in an isolated covered facility and disposed as per the Hazardous & other Wastes (Management & Transboundary Movement) Rules 2016. Spent oil from D.G sets should be disposed off through registered recyclers.
25. The proponent is required to provide a house hold hazardous waste / E-waste collection and disposal mechanism.
26. The proponent shall ensure that storm water drain provided at the project site shall be maintained without choking or without causing stagnation and should also ensure that the storm water shall be properly disposed off in the natural drainage / channels without disrupting the adjacent public. Adequate harvesting of the storm water should also be ensured.
27. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
28. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
29. The Environmental Clearance is issued based on the documents furnished by the project proponent. In case any documents found to be incorrect/not in order at a later date the Environmental Clearance issued to the project will be deemed to be revoked/ cancelled.

Affidavit furnished by the proponent:

I, Dr. K. Senthil Raj, I.A.S., Managing Director, Authorized Signatory, representing M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) having registered office at 19-A, Rukmani Lakshmipathy Road, Egmore, Chennai – 600008, for the Proposed "Development of Industrial Park" over an extent of 150.036 Ha (370.59 Acres) at Varapatti Village S.F.No: 9/1A part, 10/1A1, 10/1A2, 10/1B, 10/2A, 10/2B, 11/2, 11/3A, 11/3B, 11/4, 12/2, 12/3A part, 13/2A1, 13/3, 13/4A1, 14/3B, 14/4A, 14/4B, 131/2L2, 131/3A2, 152/6, 153, 154, 155/1, 155/2, 156/1B, 156/2, 156/3, 157/1B, 157/3, 157/4, 157/5, 157/6, 157/7, 157/8, 158/1A, 158/1B, 158/1C, 158/2A2, 160/1, 160/2, 160/3, 160/4, 160/5, 161/1A, 161/1B1, 161/3, 162/1A, 165/1, 165/2, 165/3, 165/4, 166, 168, 169/1, 169/2, 169/3, 170/1, 170/2, 171/1, 171/2, 171/3, 171/4, 178/1A, 178/1B, 178/2A, 179/1A, 179/1B, 179/2, 179/3A, 236/1, 236/2, 236/3A, 236/4, 237/1, 237/2, 237/3A, 237/4, 238/1, 238/2, 249/1, 249/2, 250, 252, 253/1, 253/2, 253/4A, 256/1, 256/2, 256/3, 257/1, 257/2, 257/3, 258/1A, 258/1B, s258/1C2, 258/1C3, 258/1D, 258/2B, 258/3A1, 258/3A2, 259/1B, 259/2, 260/1B, 260/2, 262/2B, 263/1, 263/2, 264/1B2, 264/1C2, 264/2A, 264/2B, 264/3, 265/1B, 450/1, 450/2, 450/3, 451/1A part, 451/1B, 451/2, 451/3, 262/1, 258/3B, 236/3B, 11/1, 163, 164, 233, 234, 235, 251, 255 of Sulur Taluk, Coimbatore District, Tamil Nadu, hereby take oath and state as under in this affidavit:

I. The total water requirement of the park is estimated at 5073 KLD (Fresh water: 2761 KLD and Recycled water: 2312 KLD). Fresh water Requirement of 2761 KLD will be sourced from New Tirupur Area Development Corporation Limited (NTADCL).
II. Power Supply (33 MVA) will be ensured from Tamil Nadu Generation and Distribution Co. Ltd. (TANGEDCO) Facility as a common supply system by SIPCOT to all member industries. Individual industries will have their own power back up. SIPCOT will not propose any power back up for other common facilities.
III. Storm water drainage system will be provided along the road ensuring proper rain water harvesting. All member industries will be instructed to provide rain water harvesting structures as per norms.

IV. Individual industries will have their own Solid Waste and Hazardous Waste Storage Facility. Inorganic wastes will be sold to TNPCB authorized recyclers/local vendors by Individual Industries. Upon allotment of all the industries within Industrial Park, '1-2' Acres of land within Common amenities area will be allotted for the establishment of Solid Waste management facility including Shed for E-Waste Management and developed under PPP mode, as per the requirement. The compost will be used as manure for green belt development and Inorganic waste will be sold to TNPCB authorized recyclers/local vendors.

V. Individual industries will dispose the E-waste through TNPCB Authorized E-waste Vendor as per E-waste Management Rules 2022 and its amendments thereof.

VI. Hazardous wastes generated by the allotted industries will be managed by them and it will be stored in designated areas within their premises and disposed as per Hazardous waste (Management and Transboundary) Rules 2016 and its amendments thereof.

VII. Individual industries will have their own Sewage Treatment Plants/ Effluent Treatment Plants. Treated sewage will be recycled for green belt development. Individual industries will be mandated to adopt Zero Liquid Discharge system. Treated effluent will be recycled for their process and utilities.

VIII. Overall Greenbelt area of the Industrial Park would be 52.321 Ha (i.e. 34.87% of developable area i.e., 150.036 Ha).

IX. Tentative EMP cost of the park is INR 16.10 Crores. Details are given below:

S.No	Project Components	Tentative Capital Cost (INR Crores)
1.	Solid Waste Management Facility	2.00
2.	Greenbelt development	0.50
3.	Rain water harvesting pits and Storm water drains	13.60
4.	Total EMP Cost	16.10

X. As per the MoEF&CC Office Memorandum No. 22-65/2017-IA.III, dated 25.02.2021, SIPCOT will allocate INR 16.10 Crores towards Environment Management Plan (EMP) instead of allocation of funds under Corporate Environment Responsibility (CER). However as per direction of SEAC, an amount of Rs. 2.5 crores will be allocated towards CER activities for Massive Afforestation in Sulur Taluk, through / with the help of Forest Department.

We are aware that we can be prosecuted under relevant Acts and Rules, if I do not adhere to the above commitment.

Category of the Industry :

RED

CONSENT ORDER NO. 2401162773756 DATED: 04/12/2024.

PROCEEDINGS NO.T2/TNPCB/F.4330CBS/RL//CBS/W/2024 DATED: 04/12/2024

SUB: TNPC Board-Consent for Establishment-M/S SIPCOT INDUSTRIAL PARK AT VARAPATTI S.F No. 9/1A (part), 10/1A1, 10/1A2, 10/1B, 10/2A, 10/2B, 11/2, 11/3A, 11/3B, 11/4, 12/2, 12/3A (part), 13/2A1, 13/3, 13/4A1, 14/3B, 14/4A, 14/4B, 131/2L2, 131/3A2, 152/6, 153, 154, 155/1, 155/2, 156/1B, 156/2, 156/3, 157/1B, 157/3, 157/4, 157/5, 157/6, 157/7, 157/8, 158/1A, 158/1B, 158/1C, 158/2A2, 160/1, 160/2, 160/3, 160/4, 160/5, 161/1A, 161/1B1, 161/3, 162/1A, 165/1, 165/2, 165/3, 165/4, 166, 168, 169/1, 169/2, 169/3, 170/1, 170/2, 171/1, 171/2, 171/3, 171/4, 178/1A, 178/1B, 178/2A, 179/1A, 179/1B, 179/2, 179/3A, 236/1, 236/2, 236/3A, 236/4, 237/1, 237/2, 237/3A, 237/4, 238/1, 238/2, 249/1, 249/2, 250, 252, 253/1, 253/2, 253/4A, 256/1, 256/2, 256/3, 257/1, 257/2, 257/3, 258/1A, 258/1B, 258/1C2, 258/1C3, 258/1D, 258/2B, 258/3A1, 258/3A2, 259/1B, 259/2, 260/1B, 260/2, 262/2B, 263/1, 263/2, 264/1B2, 264/1C2, 264/2A, 264/2B, 264/3, 265/1B, 450/1, 450/2, 450/3, 451/1A (part), 451/1B, 451/2, 451/3, 262/1, 258/3B, 236/3B, 11/1, 163, 164, 233, 234, 235, 251, 255, VARAPATTY Village, Sulur Taluk, Coimbatore District - for the establishment or take steps to establish the industry under Section 25 of the Water (Prevention and control of Pollution)Act,1974, as amended in 1988(Central Act 6 of 1974)- Issued- Reg. (Industry User ID- R24CBS62773258)

REF: 1. Application no. 62773756 dated: 06.11.2024.
2. IR.No : F.4330CBS/RL/AEE/CBS/2024 dated 25/11/2024
3. Minutes of the 234th TSC meeting vide item No. 234-10 dated:28.11.2024.

Consent to establish or take steps to establish is hereby granted under Section 25 of the Water (Prevention and control of Pollution) Act,1974, as amended in 1988(Central Act 6 of 1974) (hereinafter referred to as 'The Act') and the Rules and Orders made there under to

The Managing Director,

SIPCOT INDUSTRIAL PARK AT VARAPATTI

Authorizing occupier to establish or take steps to establish the industry in the site mentioned below:

S.F No. 9/1A (part), 10/1A1, 10/1A2, 10/1B, 10/2A, 10/2B, 11/2, 11/3A, 11/3B, 11/4, 12/2, 12/3A (part), 13/2A1, 13/3, 13/4A1, 14/3B, 14/4A, 14/4B, 131/2L2, 131/3A2, 152/6, 153, 154, 155/1, 155/2, 156/1B, 156/2, 156/3, 157/1B, 157/3, 157/4, 157/5, 157/6, 157/7, 157/8, 158/1A, 158/1B, 158/1C, 158/2A2, 160/1, 160/2, 160/3, 160/4, 160/5, 161/1A, 161/1B1, 161/3, 162/1A, 165/1, 165/2, 165/3, 165/4, 166, 168, 169/1, 169/2, 169/3, 170/1, 170/2, 171/1, 171/2, 171/3, 171/4, 178/1A, 178/1B, 178/2A, 179/1A, 179/1B, 179/2, 179/3A, 236/1, 236/2, 236/3A, 236/4, 237/1, 237/2, 237/3A, 237/4, 238/1, 238/2, 249/1, 249/2, 250, 252, 253/1, 253/2, 253/4A, 256/1, 256/2, 256/3, 257/1, 257/2, 257/3, 258/1A, 258/1B, 258/1C2, 258/1C3, 258/1D, 258/2B, 258/3A1, 258/3A2, 259/1B, 259/2, 260/1B, 260/2, 262/2B, 263/1, 263/2, 264/1B2, 264/1C2, 264/2A, 264/2B, 264/3, 265/1B, 450/1, 450/2, 450/3, 451/1A (part), 451/1B, 451/2, 451/3, 262/1, 258/3B, 236/3B, 11/1, 163, 164, 233, 234, 235, 251, 255

VARAPATTY Village,

Sulur Taluk,

Coimbatore District.

This Consent to establish is valid upto **September 30, 2031**, or till the industry obtains consent to operate under Section 25 of the Water (Prevention and control of Pollution) Act, 1974, as amended in 1988 whichever is earlier subject to special and general conditions enclosed.

M VIJAYALAKSHMI Digitally signed by M VIJAYALAKSHMI Date: 2024.12.04 15:54:23 +05'30'

For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

To
The Managing Director,
M/s.SIPCOT INDUSTRIAL PARK AT VARAPATTI,
State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT),
19-A, Rukmani Lakshmipathy Road, Egmore, Chennai.

Pin: 600008

Copy to:

1.The Commissioner, SULUR-Panchayat Union, Sulur Taluk, Coimbatore District .

2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, COIMBATORE SOUTH.

3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Coimbatore.

4. File

SPECIAL CONDITIONS

1. This consent to establish is valid for establishing the facility for the manufacture of products/ byproducts (Col. 2) at the rate (Col 3) mentioned below. Any change in the product/byproduct and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Sl. No.	Description	Quantity	Unit
	Product Details		
1.	The Industrial Park is an infrastructure development project proposed in 150.036 Ha (370.59 Acres) to accommodate Non-EC category of Aerospace and Defence components manufacturing industries, along with other Non-EC Category industries that will not fall under category 'A' or 'B' as per EIA Notification, 2006 and amendments thereof.	150.036	Hectares

2. The unit shall provide Sewage Treatment Plant and /or Effluent Treatment Plant as indicated below.

a	**Sewage Treatment Plant:**		
Treatment status: Septic Tank and SP/DT			
SL. No.	Name of the Treatment Unit	No. of Units	Dimensions in metres
1.	Septic Tank	1	4.2 x 2.3 x 1.9
2.	Soak Pit	1	1.0 dia x 2.5 Ht
b	**Effluent Treatment Plant:**		
Treatment status: No trade effluent and hence does not arise			

3. This consent to establish is valid for establishing the facility with the below mentioned outlets for the discharge of sewage/trade effluent. Any change in the outlets and the quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Outlet No.	Description of Outlet	Maximum daily discharge in KLD	Point of disposal
Effluent Type : Sewage			
1.	Treated Sewage	0.85	On Industrys own land
Effluent Type : Trade Effluent - NILL			

4. **Special Additional Conditions:**

The unit shall obtain No Objection Certificate (NOC) from the Tamil Nadu Bio Diversity Board /National Bio Diversity Authority if the unit is using any Biological resources or knowledge associated thereto as per the provisions of Biological Diversity Act 2002.

The industries shall take all efforts to use and popularize "Mission LiFE" logo and mascot which is available in TNPCB & MoEFCC website. They shall also request their employees to adopt "Mission LiFE" action points and document the same and furnish half yearly report to Board.

5. **Additional Conditions:**

1. The Industrial Park shall ensure to comply with the conditions as stipulated in the Environmental Clearance obtained from SEIAA, TN vide EC Identification No. EC24B3813TN5290279N dated 01.10.2024 with at all times and six months compliance report of EC conditions submitted to SEIAA, TN to be furnished to TNPCB regularly.
2. The Industrial Park shall ensure that no industries as listed in Annexure I of G.O. Ms. No. 213 dated 30.03.1989, E&F (EC-I) Department shall be permitted to establish within 1 km radial distance from the notified water bodies and 5 km radial distance from the notified Rivers and its tributaries as listed in Annexure I of G.O. Ms.No:213 E&F (EC-I) Dept. Dated: 30.3.89 inside the proposed SIPCOT Industrial park campus.
3. In accordance with Item No.9 of the EIA Notification, 2006, the Industrial Park shall possess valid EC while applying for CTO of the Board.
4. In accordance with Item No.11 of the EIA Notification, 2006, any new industry shall obtain NOC from MoEF/ SEIAA in the event of transfer of original EC in a different name.
5. The Industrial Park shall spend the CER amount of Rs. 250 Lakhs as committed in the EC and furnish the details while applying for CTO of the Board.
6. The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB.
7. The Industrial Park shall start establishment only after complete alienation of Patta lands, Govt. Poramboke lands & water bodies within the proposed site in concurrence with the competent authority.
8. The issue of CTE to the project shall not be construed as CTO and shall not commission the project without obtaining CTO from the Board.
9. There shall not be any drawl of ground water within the premises under any circumstances. In case of any drawl of ground water thro' bore wells, permission from Competent Authority shall be obtained in this regard and furnish to TNPCB.
10. The Industrial Park shall undertake all safety precautions during the construction phase and adequate dust control measures (Netlon wind net)/ barrier shall be provided to control dust emission during construction phase.
11. The Industrial Park shall provide adequate sanitary facilities for the labours to be employed for the construction activity along with septic tank and soak pit arrangement for the treatment and disposal of sewage.
12. The Industrial Park shall obtain the necessary permission / NOC of water supply from the TWAD Board / competent Authority for supply of fresh water and shall ensure that the water supply from the local body is sourced from the approved water sources.
13. The Industrial Park shall furnish the stability certificate obtained from competent authority while applying for Consent to operate of the Board.
14. The Industrial Park shall provide septic tank followed by soak pit to treat the sewage generated from SIPCOT administrative building premises, so as to achieve the standards prescribed by the Board.
15. The Industrial Park shall ensure that no discharge of treated/untreated wastewater outside the premises through any means of conveyance at any point of time.
16. The Industrial Park shall start its establishment activities only after getting the necessary approvals from the competent authorities.
17. This consent order does not absolve from obtaining necessary permission/ Clearance from other Authority or under other statutes as applicable.
18. The stability of the entire building/STP/ETP does not falls under the purview of the TNPC Board.
19. The Industrial Park shall obtain planning permission and building plan approval from the competent authority and furnish the same to the Board before obtaining CTO.
20. The Industrial Park shall earmark the buffer zone all around the periphery of the layout and maintain the same.
21. The Industrial Park shall allow only housing the industries that do not attract the provisions of EIA notification 2006 as amended in the industrial park as per the Environmental Clearance obtained.
22. The Industrial Park shall ensure that all the allotted industrial units which require consent shall establish in this proposed industrial estate only after obtaining consent to establishment from the TNPCB.
23. The Industrial Park shall ensure that the allotted units shall not dig any wells or bore wells inside their premises for drawing of ground water. The Industrial Park shall ensure the water supply to all member units in the estate.
24. The Industrial Park shall submit baseline data for ground water to assess the quality of ground water for 10 KM radius outside the boundary of the project and also inside the premises within a three month's time.
25. The Industrial Park shall monitor the ground water in and around the unit premises once in six months, so as to assess its quality and submit the same to the Board.
26. The Industrial Park shall provide & maintain adequate storm water management & rain water harvesting structures as committed for the project site.

27. The Industrial Park shall obtain necessary permission for disposal of excess storm water from the competent authority before obtaining CTO.
28. The Industrial Park shall ensure that the disposal of Hazardous and Other Solid waste including Bio-medical waste and E-Waste are in line with the prescribed Rules enacted under Environmental (Protection) Act, 1986 as amended.
29. The Industrial Park shall obtain the necessary permission/NOC of water supply from the competent Authority.
30. The Industrial Park shall complete all the activities of Environment Management Plan (EMP), spend the Corporate Environment Responsibility (CER) fund fully as committed and shall submit the proof documents before obtaining CTO from TNPCB.
31. The proponent shall provide Rain Water Harvesting pits so as to recharge the ground water table.
32. The Industrial Park shall provide a common solid waste treatment and disposal facility for the disposal of solid wastes to be generated from the industries as reported as per the provision of Solid Waste (Management and Handling) Rules, 2016.
33. The Industrial Park shall earmark the buffer zone all around the periphery of the layout
34. The Industrial Park shall allow only housing the industries that do not attract the provisions of EIA notification 2006 as amended in the industrial park as per the EC obtained.
35. The Industrial Park shall ensure that the individual member Industries within the industrial Park shall provide adequate Sewage Treatment Plants in order to manage the sewage generated by the individual industries, as committed in the Environmental Clearance.
36. The Industrial Park shall ensure that the individual member Industries within the industrial Park shall make their own arrangements to achieve zero discharge of the trade effluents, disposal of Solid waste, Bio-medical Waste & E-Waste management, gaseous emission and noise control measures to achieve the standards prescribed by the TNPCB.
37. The Industrial Park shall not use “use and throwaway plastics” such as plastic sheets used for food wrapping, spreading on dining table etc., plastic plates, plastic coated tea cups, plastic tumbler, water pouches and packets, plastic straw, plastic carry bags and plastic flags irrespective of thickness, etc as per the G.O (Ms) No. 84, Environment & Forest Department of Tamil Nadu Government (EC.2) Notification dated 25.06.2018. Instead the unit shall encourage use of eco friendly alternative such as banana leaf, areca nut palm plate, stainless steel, glass, porcelain plates/cups, cloth bag, jute bag etc.
38. The bio degradable solid waste, non-bio degradable solid waste, STP sludge, etc generated from the project activity shall be properly collected, segregated and disposed as per the provision of Solid Waste (Management and Handling) Rules, 2016.
39. The plastic wastes shall be segregated and disposed as per the provisions of Plastic Waste (Management and Handling) Rules, 2016 as amended.
40. The Industrial Park shall allot 5% of the total plot area for Solid Waste Management as per the Solid waste Management Rules, 2016 as amended.
41. In case of revision of consent fee by the Government, the unit shall remit the difference in amount within one month from the date of notification. Failing to remit the consent fee, this consent order will be withdrawn without any notice and further action will be initiated against the unit as per the law.

M VIJAYALAKSHMI Digitally signed by M VIJAYALAKSHMI
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For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

GENERAL CONDITIONS

1. This consent to establish cannot be construed as consent to operate and the unit shall not commence the operation without obtaining the Consent to operate.
2. The applicant shall make a request for grant of consent to operate at least thirty days, before the commissioning of trial production.
3. Any Change in the details furnished in the conditions has to be brought to the notice of the Board and got approved by the Board, before obtaining consent to operate under the said Act.
4. The unit has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances (wherever applicable).
5. Consent to operate will not be issued unless the unit complies with the conditions of consent to establish.
6. The unit shall provide adequate water sprinklers for the control of dust emission during the loading and unloading of construction material so as to minimize the dust emission.
7. The unit shall provide water sprinklers along the temporary roads inside the premises to avoid fugitive dust emission during the vehicle movements.
8. The unit shall develop green belt of adequate width around the premises.
9. In case there is any change in the management, the unit shall inform the change with relevant documents immediately.

M VIJAYALAKSHMI

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Date: 2024.12.04 15:54:55 +05'30'

For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

Category of the Industry :

RED

CONSENT ORDER NO. 2401262773756 DATED: 04/12/2024.

PROCEEDINGS NO.T2/TNPCB/F.4330CBS/RL/CBS/A/2024 DATED: 04/12/2024

SUB: TNPC Board-Consent for Establishment-M/s. SIPCOT INDUSTRIAL PARK AT VARAPATTI , S.F. No. 9/1A (part), 10/1A1, 10/1A2, 10/1B, 10/2A, 10/2B, 11/2, 11/3A, 11/3B, 11/4, 12/2, 12/3A (part), 13/2A1, 13/3, 13/4A1, 14/3B, 14/4A, 14/4B, 131/2L2, 131/3A2, 152/6, 153, 154, 155/1, 155/2, 156/1B, 156/2, 156/3, 157/1B, 157/3, 157/4, 157/5, 157/6, 157/7, 157/8, 158/1A, 158/1B, 158/1C, 158/2A2, 160/1, 160/2, 160/3, 160/4, 160/5, 161/1A, 161/1B1, 161/3, 162/1A, 165/1, 165/2, 165/3, 165/4, 166, 168, 169/1, 169/2, 169/3, 170/1, 170/2, 171/1, 171/2, 171/3, 171/4, 178/1A, 178/1B, 178/2A, 179/1A, 179/1B, 179/2, 179/3A, 236/1, 236/2, 236/3A, 236/4, 237/1, 237/2, 237/3A, 237/4, 238/1, 238/2, 249/1, 249/2, 250, 252, 253/1, 253/2, 253/4A, 256/1, 256/2, 256/3, 257/1, 257/2, 257/3, 258/1A, 258/1B, 258/1C2, 258/1C3, 258/1D, 258/2B, 258/3A1, 258/3A2, 259/1B, 259/2, 260/1B, 260/2, 262/2B, 263/1, 263/2, 264/1B2, 264/1C2, 264/2A, 264/2B, 264/3, 265/1B, 450/1, 450/2, 450/3, 451/1A (part), 451/1B, 451/2, 451/3, 262/1, 258/3B, 236/3B, 11/1, 163, 164, 233, 234, 235, 251, 255, VARAPATTY village, Sulur Taluk and Coimbatore District - for the establishment or take steps to establish the industry under Section 21 of the Air(Prevention and control of Pollution)Act,1981, as amended in 1987(Central Act. 14 of 1981)-Issued -Reg. (Industry User ID- R24CBS62773258)

REF: 1. Application no. 62773756 dated: 06.11.2024.
2. IR.No : F.4330CBS/RL/AEE/CBS/2024 dated 25/11/2024
3. Minutes of the 234th TSC meeting vide item No. 234-10 dated:28.11.2024.

Consent to establish or take steps to establish is hereby granted under Section 21 of the Air (Prevention and control of Pollution) Act,1981, as amended in 1987 and the Rules and Orders made there under to

The Managing Director

M/s . SIPCOT INDUSTRIAL PARK AT VARAPATTI

S.F No. 9/1A (part), 10/1A1, 10/1A2, 10/1B, 10/2A, 10/2B, 11/2, 11/3A, 11/3B, 11/4, 12/2, 12/3A (part), 13/2A1, 13/3, 13/4A1, 14/3B, 14/4A, 14/4B, 131/2L2, 131/3A2, 152/6, 153, 154, 155/1, 155/2, 156/1B, 156/2, 156/3, 157/1B, 157/3, 157/4, 157/5, 157/6, 157/7, 157/8, 158/1A, 158/1B, 158/1C, 158/2A2, 160/1, 160/2, 160/3, 160/4, 160/5, 161/1A, 161/1B1, 161/3, 162/1A, 165/1, 165/2, 165/3, 165/4, 166, 168, 169/1, 169/2, 169/3, 170/1, 170/2, 171/1, 171/2, 171/3, 171/4, 178/1A, 178/1B, 178/2A, 179/1A, 179/1B, 179/2, 179/3A, 236/1, 236/2, 236/3A, 236/4, 237/1, 237/2, 237/3A, 237/4, 238/1, 238/2, 249/1, 249/2, 250, 252, 253/1, 253/2, 253/4A, 256/1, 256/2, 256/3, 257/1, 257/2, 257/3, 258/1A, 258/1B, 258/1C2, 258/1C3, 258/1D, 258/2B, 258/3A1, 258/3A2, 259/1B, 259/2, 260/1B, 260/2, 262/2B, 263/1, 263/2, 264/1B2, 264/1C2, 264/2A, 264/2B, 264/3, 265/1B, 450/1, 450/2, 450/3, 451/1A (part), 451/1B, 451/2, 451/3, 262/1, 258/3B, 236/3B, 11/1, 163, 164, 233, 234, 235, 251, 255

VARAPATTY Village

Sulur Taluk

Coimbatore District.

Authorizing occupier to establish or take steps to establish the industry in the site mentioned below:

S.F No. 9/1A (part), 10/1A1, 10/1A2, 10/1B, 10/2A, 10/2B, 11/2, 11/3A, 11/3B, 11/4, 12/2, 12/3A (part), 13/2A1, 13/3, 13/4A1, 14/3B, 14/4A, 14/4B, 131/2L2, 131/3A2, 152/6, 153, 154, 155/1, 155/2, 156/1B, 156/2, 156/3, 157/1B, 157/3, 157/4, 157/5, 157/6, 157/7, 157/8, 158/1A, 158/1B, 158/1C, 158/2A2, 160/1, 160/2, 160/3, 160/4, 160/5, 161/1A, 161/1B1, 161/3, 162/1A, 165/1, 165/2, 165/3, 165/4, 166, 168, 169/1, 169/2, 169/3, 170/1, 170/2, 171/1, 171/2, 171/3, 171/4, 178/1A, 178/1B, 178/2A, 179/1A, 179/1B, 179/2, 179/3A, 236/1, 236/2, 236/3A, 236/4, 237/1, 237/2, 237/3A, 237/4, 238/1, 238/2, 249/1, 249/2, 250, 252, 253/1, 253/2, 253/4A, 256/1, 256/2, 256/3, 257/1, 257/2, 257/3, 258/1A, 258/1B, 258/1C2, 258/1C3, 258/1D, 258/2B, 258/3A1, 258/3A2, 259/1B, 259/2, 260/1B, 260/2, 262/2B, 263/1, 263/2, 264/1B2, 264/1C2, 264/2A, 264/2B, 264/3, 265/1B, 450/1, 450/2, 450/3, 451/1A (part), 451/1B, 451/2, 451/3, 262/1, 258/3B, 236/3B, 11/1, 163, 164, 233, 234, 235, 251, 255

VARAPATTY Village,
Sulur Taluk,
Coimbatore District.

This Consent to establish is valid upto **September 30, 2031**, or till the industry obtains consent to operate under Section 21 of the Air (Prevention and control of Pollution) Act, 1981, as amended in 1987 whichever is earlier subject to special and general conditions enclosed.

M VIJAYALAKSHMI Digitally signed by M VIJAYALAKSHMI Date: 2024.12.04 15:52:38 +05'30'

For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

To
The Managing Director,
M/s.SIPCOT INDUSTRIAL PARK AT VARAPATTI,
State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT),
19-A, Rukmani Lakshmipathy Road, Egmore, Chennai.

Pin: 600008

Copy to:

1.The Commissioner, SULUR-Panchayat Union, Sulur Taluk, Coimbatore District .
2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, COIMBATORE SOUTH.
3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Coimbatore.
4. File

SPECIAL CONDITIONS

1. This consent to establish is valid for establishing the facility for the manufacture of products/ byproducts (Col. 2) at the rate (Col 3) mentioned below. Any change in the product/byproduct and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Sl. No.	Description	Quantity	Unit
	Product Details		
1.	The Industrial Park is an infrastructure development project proposed in 150.036 Ha (370.59 Acres) to accommodate Non-EC category of Aerospace and Defence components manufacturing industries, along with other Non-EC Category industries that will not fall under category 'A' or 'B' as per EIA Notification, 2006 and amendments thereof.	150.036	Hectares

2. This consent to establish is valid for establishing the facility with the below mentioned emission/noise sources along with the control measures and/or stack .Any change in the emission source/control measures/change in stack height has to be brought to the notice of the Board and fresh consent has to be obtained if necessary.

I	**Point source emission with stack :**			
Stack No.	**Point Emission Source**	**Air pollution Control measures**	**Stack height from Ground Level in m**	**Gaseous Discharge in Nm3/hr**
II	**Fugitive/Noise emission :**			
Sl. No.	**Fugitive or Noise Emission sources**	**Type of emission**	**Control measures**	

3. **Special Additional Conditions:**

The unit shall obtain No Objection Certificate (NOC) from the Tamil Nadu Bio Diversity Board /National Bio Diversity Authority if the unit is using any Biological resources or knowledge associated thereto as per the provisions of Biological Diversity Act 2002.

The industries shall take all efforts to use and popularize "Mission LiFE" logo and mascot which is available in TNPCB & MoEFCC website. They shall also request their employees to adopt "Mission LiFE" action points and document the same and furnish half yearly report to Board.

4. **Additional Conditions:**

1. The Industrial Park shall ensure to comply with the conditions as stipulated in the Environmental Clearance obtained from SEIAA, TN vide EC Identification No. EC24B3813TN5290279N dated 01.10.2024 with at all times and six months compliance report of EC conditions submitted to SEIAA, TN to be furnished to TNPCB regularly.
2. In accordance with Item No.9 of the EIA Notification, 2006, Project Proponent shall possess valid EC while applying for CTO of the Board.
3. In accordance with Item No.11 of the EIA Notification, 2006, any new industry shall obtain NOC from MoEF/ SEIAA in the event of transfer of original EC in a different name.
4. The Industrial Park shall start establishment only after complete alienation of Patta lands, Govt. Poramboke lands & water bodies within the proposed site in concurrence with the competent authority.
5. The Industrial Park shall adhere to NAAQ/Ambient Noise Level standards prescribed by the Board.
6. The Industrial Park shall complete all the activities of Environment Management Plan (EMP), spend the Corporate Environment Responsibility (CER) fund fully as committed and shall submit the proof documents before obtaining CTO from TNPCB.
7. The Industrial Park shall install online Continuous Ambient Air Quality Monitoring System (CAAQMS) stations in the downwind and upwind directions and shall connect the same to CAC, TNPCB, Chennai before obtaining CTO.
8. The Industrial Park shall conduct Ambient Noise level survey report and Ambient Air Quality survey report for base line data to assess the quality of Ambient Air and Ambient Noise level and submit the report within three month's time.
9. The Industrial Park shall develop greenbelt to an extent of 52.31 Ha (34.87% of the total plot area) as stipulated in the Environmental Clearance and the same shall be reflected in the application when applying for CTO of the Board.
10. The Industrial Park shall allow only housing the industries that do not attract the provisions of EIA notification 2006 as amended in the industrial park as per the Environmental Clearance obtained.
11. The Industrial Park shall not create any nuisance to the nearby public during the construction phase of the project
12. The Industrial Park shall maintain good housekeeping inside and outside the project site and shall fumigate the project site for prevention of breeding of pathogens such as flies, Mosquitoes etc., inside the project site.
13. The Industrial Park shall contain the dust emanated during demolition and construction activity by providing necessary wind net arrestor
14. The Industrial Park shall use the recovered materials recovered (viz concrete, soil, bricks and mortar) from construction and demolition waste to a certain percentage subject to strict quality control and strict compliance of Construction and Demolition Waste Management Rules, 2016, as amended.
15. In case of revision of consent fee by the Government, the unit shall remit the difference in amount within one month from the date of notification. Failing to remit the consent fee, this consent order will be withdrawn without any notice and further action will be initiated against the unit as per law.
16. This consent order does not absolve this unit from obtaining necessary permission / clearance from other Authority or under other Statute as applicable.

M VIJAYALAKSHMI Digitally signed by M VIJAYALAKSHMI
Date: 2024.12.04 15:53:05 +05'30'

For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

GENERAL CONDITIONS

1. This consent to establish cannot be construed as consent to operate and the unit shall not commence the operation without obtaining the Consent to operate.
2. The applicant shall make a request for grant of consent to operate at least thirty days, before the commissioning of trial production.
3. Any Change in the details furnished in the conditions has to be brought to the notice of the Board and got approved by the Board, before obtaining consent to operate under the said Act.
4. The unit has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances (wherever applicable).
5. Consent to operate will not be issued unless the unit complies with the conditions of consent to establish.
6. The unit shall provide adequate water sprinklers for the control of dust emission during the loading and unloading of construction material so as to minimize the dust emission.
7. The unit shall provide water sprinklers along the temporary roads inside the premises to avoid fugitive dust emission during the vehicle movements.
8. The unit shall develop green belt of adequate width around the premises.
9. In case there is any change in the management, the unit shall inform the change with relevant documents immediately.

M VIJAYALAKSHMI Digitally signed by M VIJAYALAKSHMI
Date: 2024.12.04 15:53:24 +05'30'

For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

Annexure -3

SIPCOT

Lr. No SIPCOT/Civil/IWC/Varapatti/2024 **Dated 21.06.24**

To

The Additional Chief Secretary and Managing Director,
New Tirupur Area Development Corporation Ltd.,
"PolyHose Towers"(SPIC Annex BLDG) I[st] Floor,
No 86 Mount Road,
Guindy,Chennai-32.

Sir,

Sub: SIPCOT-CIVIL-IWC –External water supply system- Providing 3.50 MLD water supply to the proposed Defence Industrial Park , Varapatti from NTADCL water supply project WDS-21 at Iduvampalayam – DPR submitted-Scrutinized & observations made- Communicated for compliance- -Reg .

Ref: Letter from the Chief Financial Officer, NTADCL addressed to the Managing Director, SIPCOT vide Lr.No. NTADCL /CFO/2024/107 dated 06-05-2024.

This is regarding the provision of 3.50 MLD water supply to the proposed Defence industrial park at Varapatti from NTADCL water supply project WDS-21 at Iduvampalayam.

A DPR prepared by M/s NTADCL has been received vide reference cited and upon scrutiny by SIPCOT, the following Observations/ remarks are made:

1. SIPCOT has envisaged the cost reduction of proposals by selecting OPVC pipe material instead of CI/DI pipe for water supply system of all external water supply projects including the works entrusted to TWAD Board. Accordingly, the OPVC pipeline of suitable size to withstand adequate pressure may be considered for economical design analysis and if feasible, the same be adopted in the estimate for the conveyance system.
2. A provision for three numbers of 300mm dia size Electromagnetic flow meter has been made in the pipe line estimate and also additionally one number of the same size has been provided in the electrical estimate. Please clarify and also to mark the location of flow meter in the pumping main alignment drawing.

3. a) In the report, it is mentioned that a land of 50 m x40 m has been identified for the proposed pumping station at 1.32 Km from the WDS-21 towards Defence Park and is to be acquired by SIPCOT. In this regard, it is stated that the pumping station and the collection sump as "a single unit" may be proposed and accommodated within the complex of WDS-21 to cut down cost towards acquiring land as well as to avoid time loss for the new land acquisition.

   b) A provision for Twin type quarters for pump operators has been made at a cost of Rs 18.50 Lakhs. With the proposal of pumping station within the WDS21, this item may be deleted from the scope of work.

   c) The cost estimate for compound wall and road, drain and lighting arrangements has been worked out for the land of 50m x 40 m. This may be deleted from the scope of work.

4. Electrical Estimate:

   i) *Supply, delivery and erection of vertical turbine pumpsets in pump well cum pump house , item No12.d(Page No207)*- The rate adopted for jointing the cable for 3.5core, 300sq mm is to be revised to Rs.2295/- instead of adopted rate in the estimate is Rs.2938/-.

   ii) Two sets of 56 KVAR capacitor bank has to be provided in the estimate instead of one set of 56kvar capacitor and also provide the capacitor for lighting and other loads.

   iii) Justify the rate adopted in the estimate for providing turbine pump set with duty cycle of 2917 lpm x 168m (oil lubrication, Page No.196.) for Rs.21,36,700/-.

   iv) Justify the generator capacity adopted in the Estimate (ie.160KVA) also it needs the additional provision of cable and MCCB in MV Panel to be included in this estimate.

5. O&M Cost:

   The establishment charges are to be worked out as per the recommended staff pattern indicated in the CPHEEO manual.

6. Overheads & Payment to Other Departments:

   i. In the abstract estimate, the miscellaneous provisions made towards land acquisition and payment to line departments may be excluded from the calculation of GST.

   ii. Provisions towards contingencies, labour welfare fund, Price adjustment, third party inspection charges etc shall be made only for the base cost excluding GST.

   iii. Road restoration charges:

      a) The length of road restoration has been estimated as 30860 m against the total length of 30740 m and it needs clarification.

      b) A flat rate of Rs 3300 per m has been adopted for the road restoration charges for Village road/ SH /NH. Necessary justification is required.

   iv. The cost towards investigation charges, preparation of DPR and PMC shall be worked out on the "**base cost**" of the proposals only and shall not include any overheads.

7. General:

   i) Furnish the detailed drawing for the following:

      a) General layout of the proposal showing pump house, sump, delivery line alignment etc.

      b) General pumping arrangement drawing with specials for the delivery / Header main.

      c) Electrical single line diagram.

      d) Interconnection arrangements for collection sump and pump house.

   ii) Nature of soil at pump house and the collection sump and along the pipeline alignment may be discussed in the DPR and the relevant soil investigation report may be furnished.

SIPCOT

iii) No lump sum is allowed in the estimate (Item No 10, Page-24, Item Nos 17,18 &19 (Page No22) etc. Necessary detailing shall be worked out and the cost estimate shall be prepared.

iv) The location for laying pipeline across SH/NH by trenchless technology shall be mentioned and marked in the pipeline alignment drawing.

The estimate is to be revised by complying with the above remarks, besides revision of drawings concerned.

Hence, it is requested that necessary action may be taken to revise the DPR accordingly and resubmit the same for taking further necessary action.

Sd/-
Managing Director

Superintending Engineer
21/6/24

New Tirupur Area Development Corporation Ltd.

"POLYHOSE TOWERS" (SPIC Annex BLDG) 1st Floor, No. 86 Mount Road
Guindy, Chennai 600032. Tel: +91-44-22351890/91 Fax: +91-44-22351894
Email: contactus@ntadcl.com CIN : U91990TZ1995PLC005869 www.ntadcl.co.in

Ref: NTADCL/CFO/2024/107

May 06th 2024

To

The Managing Director,
The State Industries Promotion
Corporation of Tamil Nadu Limited (SIPCOT),
No. 19 – A, Rukmani Lakshmipathy Road,
Egmore,
Chennai – 600 008.

Sir,

Sub: SIPCOT – CIVIL- Water supply for the proposed Defence Industrial Park at Varapatti, Coimbatore District –DPR Submitted- Reg.

Ref: 1. Lr.No.SIPCOT/CIVIL-Water / Varapatti/2024 dated:06.02.2024
2. Lr.No.NTADCL/CFO/2024/019 Dated:15th February 2024.
3. Lr.No.NTADCL/CFO/2024/026 Dated:27th February 2024.
4. Lr.No.NTADCL/CFO/2024/045 Dated:11th March 2024

NTADCL vide reference 4th cited, the NTADCL is submitted for Detailed Project Report (DPR) of 3.50 MLD of water supply for the proposed Defence Industrial Park at Varapatti, from WDS 21 of NTADCL at Idhvampalayam, Coimbatore District.

The DPR with costing & detailed drawings and Executive Summary and the cost of DPR is Rs.40 crores & Operations and Maintenance is Rs. 10 crores.

Yours sincerely,

For New Tirupur Area Development Corporation Limited

Girish Kumar N J R V
Chief Financial Officer

Cc: The Project Officer, SIPCOT, Perundurai

Executive Summary

DETAILED PROJECT REPORT FOR PROVIDING 3.50 MLD WATER TO SIPCOT DEFENCE INDUSTRIAL PARK, VARAPATTI FROM NTADCL WATER SUPPLY PROJECT WDS – 21 AT IDUVAMPALAYAM

Background

TIDCO has initiated the process to establish Aerospace & Defence industrial parks at Varapatti village in Sulur Taluk of Coimbatore District. TIDCO has identified a land parcel measuring about 366 acres. It is at a distance of about 30 kms and 50 kms from Coimbatore and Tirupur cities respectively which have their own industrial ecosystems. The development of the Defence Park with all infrastructure facilities has been taken up by SIPCOT. The lands identified are dry lands where currently outdated wind turbines exist. Infrastructure creation in form of roads, water and power have been undertaken.

Infrastructure Development – Water Supply

Water is the basic demand for developing the area. Most of the Industries will require water for processing. The Defence Park is located in an over exploited area where ground water resources have very low yield. The quality of underground water is not suitable for industrial use. Minimum requirement of 3.50 MLD has been worked out in the approved Detailed Project Report prepared by SIPCOT. Various alternatives have been studied to fix the source for the water. SIPCOT has requested New Tirupur Area Development Corporation to spare 3.50 MLD water to the Project area from NTADCL Water Supply Project and to submit a Detailed Project Report for the Water Supply Proposal. Accordingly, this Detailed Project Report has been prepared.

Proposed Tapping Point for Defense Park from the above Project

Various locations for drawing water from the NTADCL Project were studied. Tapping water from the Water Distribution Station 21 located at Iduvampalayam in Tirupur is found feasible in terms of sustainability of source to ensure the required water without interruption. The designed quantity in WDS 21 is 16.20 mld. The total quantity supplied for industrial and domestic purpose as on date is 5 mld. The quantity for upgradation to existing beneficiaries is 0.50 mld. The quantity required for similar proposals received by NTADCL is 6 mld. Accordingly, the net available quantity to spare from WDS 21 is 4.70 mld. Hence the requirement of 3.50 mld for Defence Industrial Park can be given from WDS 21.

It is not feasible to tap 3.50 MLD from the GLR as the existing system of NTADCL will get altered. Moreover, there is not enough space to accommodate additional pumps in the existing Pump House. The feasibility is to draw the requirement of the Project from the Distribution Main commencing from the ELSR. Pressure head of 20 m could be ensured at the tapping point. There is no space inside the WDS 21 premises and also in and around the station for construction of the Collection Sump. Suitable land for construction of Collection Sump has been identified at 1.32 Km away along the alignment of pipeline towards Defence Park.

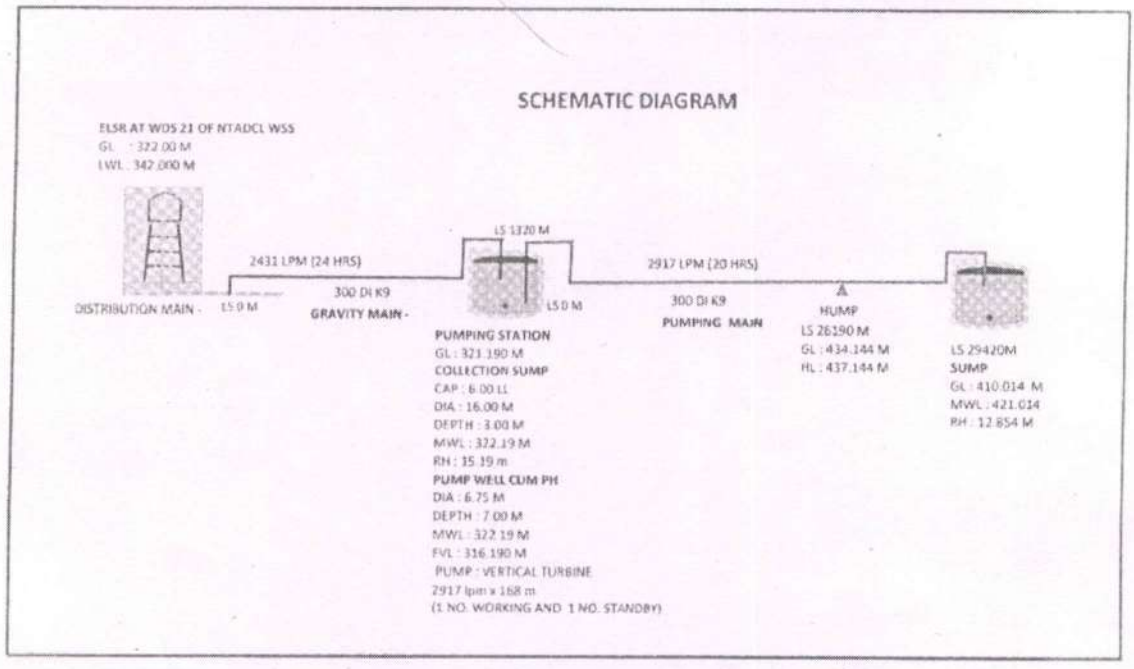
Pipeline from Source to Defence Park

The Defence Industrial Park is located 30 Km away from the source location. The Ground Level varies from 322.00 m at source location and gradually increases to 434.00 m near the Defence Park. The requirement will be tapped from the Distribution main and conveyed by gravity to the Collection Sump proposed at LS 1.38 km through 300 mm DI K9 pipes. Water meter will be provided near the Inlet to the Collection Sump to measure the quantity supplied to the Defence Industrial Park. From the Sump, water will be pumped to the Sump to be constructed inside the Defence Industrial Park premises through 300 mm DI K9 pipes of 29.42 Km length. Total Length of pipeline is 30.74 km. Economical Size calculation has been done to arrive the optimum size of pipe.

Since the alignment traverses through villages as well as through busy traffic area, DI K9 pipes are proposed to prevent illegal tapping as well as to sustain heavy traffic loads. Necessary Air valves and Scour valves have been provided.

Pumping Station

3.50 MLD of water will be received at the Collection Sump proposed in the Pumping Station. It is proposed to pump the water from the sump at 20 hours pumping rate allowing cushion of 4 hours for power break and for attending maintenance work. Hence the collection sump will have a storage capacity of 4 hours. The capacity of underground collection sump proposed is 6.00 Lakh litres. Pump well cum Pump House of 6.75 m dia is proposed adjacent to the Collection Sump. The water received in the sump will be pumped to the Defence Industrial Park at Varapatti by Vertical Turbine Pump of duty 2927 lpm x 68 m (150 HP). The receiving sump at the Industrial Park is not under the scope of this Proposal. Quarters for Pump Operators (2 Nos) have been proposed apart from compound wall, road, drains and lighting arrangements in the Pumping Station. The requirement of land for Pumping station is 0.50 acre, which is to be acquired by SIPCOT. Provision for Land acquisition has been given in the Estimate. Provision for Generator has also been included in the Estimate.



Cost Estimate

The Cost of installation of the Project has been arrived adopting PWD and TWAD Board Schedule of rates for the Year 2023-24. The cost of Electric Energy, Establishment charges and the Water Charges of NTADCL @ Rs.70.00/KL have been included in the Annual Maintenance Cost. The Installation Cost works out to Rs. 40.00 Crores. The AM Cost will be Rs.10.00 Crores.

NEWSPAPER ADVERTISEMENT

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

SIPCOT INDUSTRIAL PARK

ENVIRONMENTAL CLEARANCE

Environmental Clearance has been obtained for the proposed Development of Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu from the State Environment Impact Assessment Authority (SEIAA), Tamil Nadu vide **EC Identification No. EC24B3813TN5290279N**, **File No. 11191** dated **01.10.2024**.

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

DIPR/1033/Display/2024 **MANAGING DIRECTOR**

CORPORATION OF THIRUVANANTHAPURAM
No: DB/62983/08 (37) Date: 08.10.2024

TENDER NOTICE

Thiruvananthapuram Municipal Corporation Online E-tenders are inviting for the below mentioned project in 2 cover system.

1. E7/39295/2022(E) – Supply, Installation and Annual Maintenance for 5 years of Septage Collection Vehicle 5000L (suction type) with Sludge Suction application in Thiruvananthapuram Municipal Corporation.
2. E7/39295/2022(F) – Supply, Installation and Annual Maintenance for 5 years of Septage Collection Vehicle 3000L (suction type) with Sludge Suction application in Thiruvananthapuram Municipal Corporation.
3. E7/39295/2022(G) – Supply of Diesel Engine Driven dewatering pumps of 32 HP with canopy and all allied accessories to be delivered. Last date of online submission of tender: 24.10.2024,3:00 PM

The detailed e-tender notice is published in our website **https://tmc.lsgkerala.gov.in** and office notice board. For participating e-tender visit website **https://etenders.kerala.gov.in**

Superintending Engineer

TAMILNADU POLLUTION CONTROL BOARD

கோயம்புத்தூர் மாநகராட்சி
பொறியியல் பிரிவு
ஒப்பந்தப்புள்ளி கால நீட்டிப்பு அறிவிக்கை (e-Tendering)
ஒப்பந்தப்புள்ளி கால நீட்டிப்பு அறிவிக்கை எண் (e) 43/2024 நாள் 08.10.2024

நிர்வாகக் காரணங்களால் ஒத்திவைக்கப்பட்ட ஒப்பந்தப்புள்ளி அறிவிப்பின்படி ஒப்பந்தப்புள்ளிகள் பெறுதல் மற்றும் சமர்ப்பித்தல் கீழ்க்கண்டவாறு:

தூய்மை இந்தியா திட்டம் 2.0

விபரம்	ஏற்கனவே ஒப்புக்கொள்ளப்பட்ட விபரம்	காலநீட்டிப்பு செய்யப்படும் ஒப்பந்தப்புள்ளி விபரம்
ஒப்பந்தப்புள்ளி திறக்கும் நாள்/நேரம்	20.09.2024 at 11.00 A.M	29.10.2024 at 11.00 A.M
ஒப்பந்தப்புள்ளி சமர்ப்பித்தல்	08.10.2024 at 3.00 P.M	13.11.2024 at 3.00 P.M
தொழில் நுட்ப ஒப்பந்தப்புள்ளிகள் திறத்தல்	09.10.2024 at 4.00 P.M	14.11.2024 at 4.00 P.M

மேலும் முழு விபரங்களுக்கு கீழ்கண்ட இணையதள முகவரி மூலம் தெரிந்து கொள்ளலாம்.
https://tntenders.gov.in ஆணையர், கோயம்புத்தூர் மாநகராட்சி அலுவலகம், பெரியகடை வீதி, டவுன்ஹால், கோயம்புத்தூர் - 641001 தொலைபேசி எண். 0422 2396020, Email: commr.coimbatore@tn.gov.in ஆணையாளர்.
செ.தொ.இ./1122/ஒப்பந்தப்புள்ளி/2024 கோயம்புத்தூர் மாநகராட்சி

தமிழ்நாடு தொழில் முன்னேற்ற நிறுவனம்
19–ஏ, ருக்குமணி இலட்சுமிபதி சாலை,
எழும்பூர், சென்னை – 600 008.
CIN U74999TN1971SGC005967

சிப்காட் தொழிற் பூங்கா

சுற்றுசூழல் இசைவாணை

மாநில சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையம், தமிழ்நாடு **அடையாள எண்: EC24B3813TN5290279N**, **கோப்பு எண்: 11191 தேதி: 01.10.2024** மூலம் கோயம்புத்தூர் மாவட்டம், சூலூர் வட்டம், வாரப்பட்டி கிராமத்தில் சிப்காட் தொழிற் பூங்கா அமைப்பதற்கான சுற்றுச்சூழல் இசைவாணை வழங்கியுள்ளது.

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

செ.ம.தொ.இ.1033/வணகலை/2024 **மேலாண்மை இயக்குநர்**

Annexure 5

State Industries Promotion Corporation of Tamil Nadu Limited

(A Government of Tamil Nadu Undertaking)

Project Office : SIPCOT INDUSTRIAL PARK, Perundurai

NH-47, Kovai Main Road, P.V.Palayam Post, Perundurai Taluk, Erode District - 638 052.

Phone : 04294 - 234001, **E-mail :** popr@sipcot.in, CIN : U74999TN1971SGC005967

Selfless Service to Industries

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

Phone : 044-45261777 **Website :** www.sipcot.tn.gov.in

PO/SIP/Varapatti/EC/2024

Date : 23.10.2024

To,

The President,
Varapatti village panchayat,
Varapatti.

Sir/Madam,

Sub: SIPCOT – Proposed Development of Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu – Submission of Copy of Environmental Clearance (EC) issued by SEIAA – Reg.

Ref: SEIAA EC Identification No. EC24B3813TN5290279N dated: 01.10.2024

****

With reference to the above, it is to inform that, SIPCOT has obtained Environmental Clearance (EC) from the State Environment Impact Assessment Authority (SEIAA) for the Proposed Development of Industrial Park over an extent of 150.036 Ha (370.59 Acres) at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu.

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

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

Yours faithfully,

23/10/24

Project Officer,
SIPCOT, Varapatti.

Encl : As above

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.**

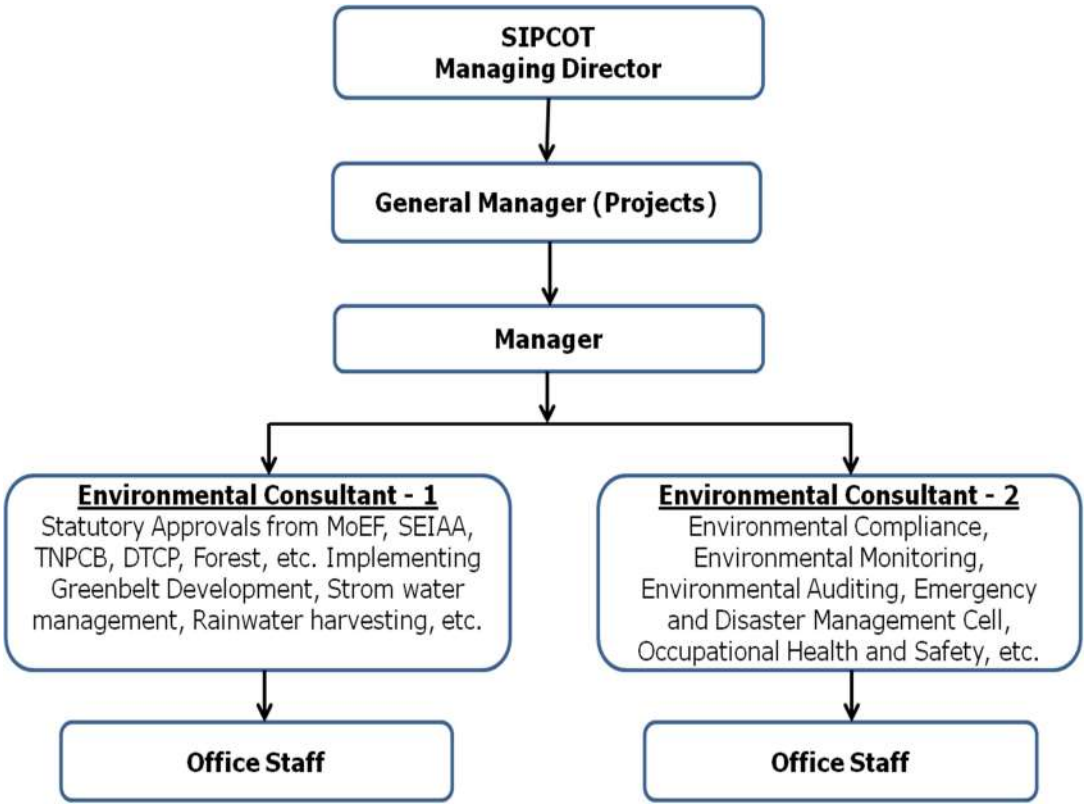


Figure - 1 Organogram for Environmental Management Cell

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	➢ Responsible for overall environmental management. ➢ Regularly conduct meeting with EMC and take feedback regarding all the activities performed under Environmental Management and give directions to succeeding component. ➢ Approval of funds for carrying out environmental management activities.
2	GM – Projects	➢ Keep aware about all the activities performed under EMC in the industrial parks. ➢ Issuing direction to Project officers for implementing Greenbelt development, Storm water management, rain water harvesting, etc. ➢ To deal with legal entity pertaining to environmental issues.
3	Manager	➢ To prepare and allocate budget for Environment Management Plan. ➢ Ensuring compliance to the conditions prescribed by statutory authority. ➢ Mandating member industries to comply with the conditions stipulated in the statutory approvals and non-compliance if any shall be reported to GM and immediately required action will be taken.
4	Environmental Consultants (Two)	➢ Obtaining Statutory Approvals from MoEF&CC / SEIAA / TNPCB, etc. ➢ Addressing the various queries received from statutory authorities on environmental front. ➢ Submitting Environmental compliance report and coordinating with project officers for Environmental monitoring, audit, etc. ➢ Compliance with the environmental laws and implications which dynamically changes from time to time due to the emerging challenges.

TENTATIVE GREEN BELT LAYOUT FOR PROPOSED SIPCOT INDUSTRIAL PARK IN VARAPATTI VILLAGE, SULUR TALUK, COIMBATORE DISTRICT.

Annexure -7

PLOT AREA

PLOT NO.	AREA IN ACRE.
A1	7.91
A2	12.74
A3	4.44
A4	4.64
A5	4.48
A6	4.82
A7	9.99
A8	4.46
A9	5.14
A10	8.27
A11	7.62
A12	4.76
A14	3.27
A15	4.41
A16	9.65
A17	21.87
A18	7.00
A19	9.68
A20	4.77
A22	4.66
A23	3.87
A24	5.32
A25	2.12
A26	3.98
A27	2.90
A28	5.85
A29	4.99
A30	6.21
A31	3.12
A32	3.45
A33	3.62
A34	4.14
A35	3.00
A35A	3.40
A36	6.23
A37	10.18
A38	8.48
A39	15.00
A40	11.02
A41	13.93
A42	6.19
A43	4.68
A44	1.03
A45/1	1.64
A45/2	1.64
TOTAL	280.57

LEGEND:-

- Project Boundary
- Industrial Plots
- Commercial Plots
- Amenities
- Proposed Road
- O.S.R.
- Others Land
- Existing Building

AMENITIES

	Acres
AM-1	2.50
AM-2	3.73
AM-3	5.00
PP-1	1.37
PP-2	2.90
TOTAL	15.50

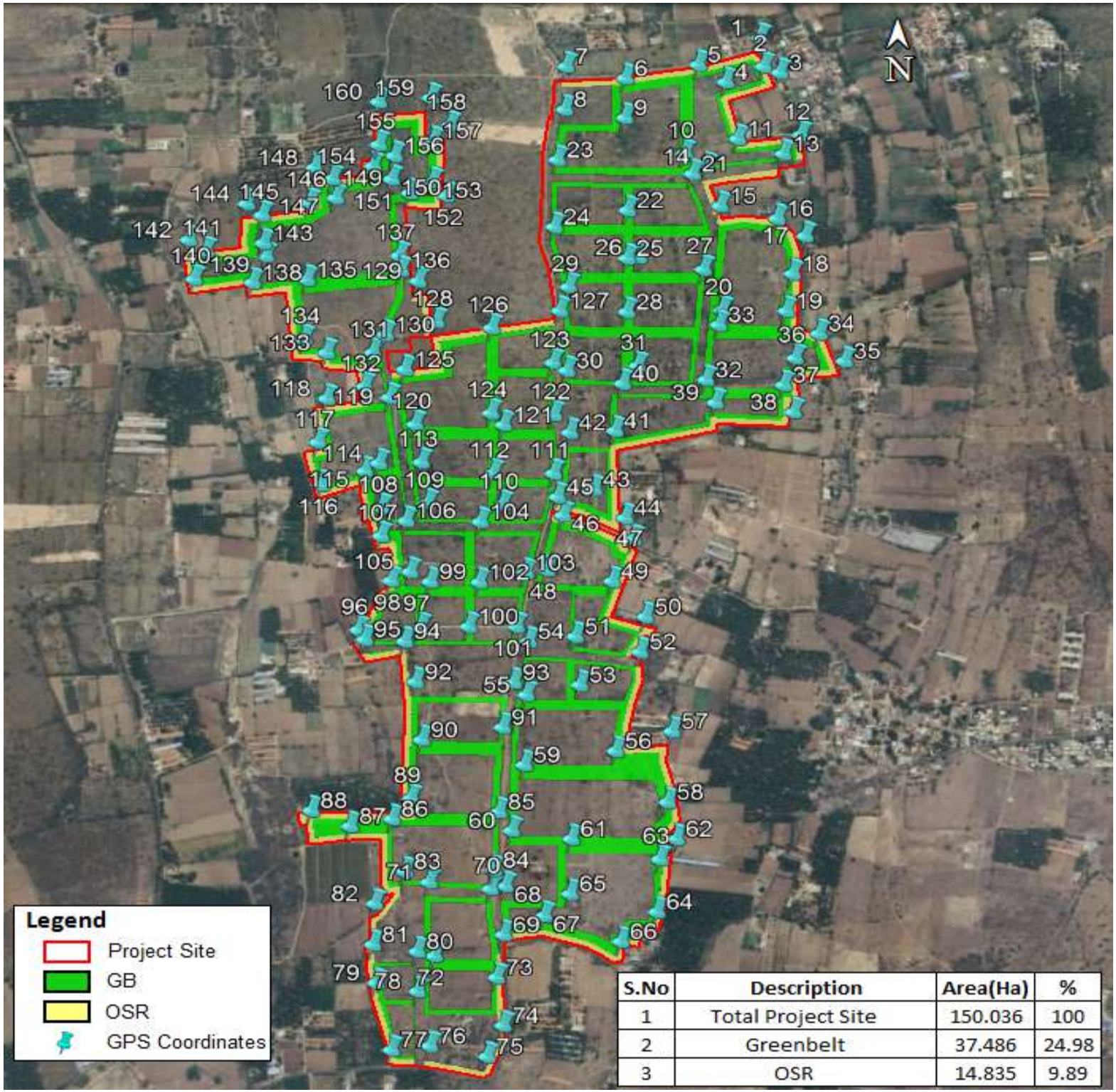
COMMERCIAL

	Acres
CP-1	3.66
CP-2	3.15
CP-3	5.40
TOTAL	12.21

GREEN BELT	*Area in Hectares*	*Area in Acres*	*Area in %*
O.S.R.	*14.835*	*36.64*	*9.89%*
33% GREEN BELT IN PLOT AREA	*37.486*	*92.59*	*24.98%*
TOTAL	*52.321*	*129.23*	*34.87%*

of Developable Area

	Area in Hectares	Area in Acres	% of total Area
PLOT AREA (33% GREEN BELT 92.59 Ac INCLUDED)	113.589	280.57	75.71%
COMMON AMENITIES	6.276	15.50	4.18%
COMMERCIAL ACTIVITIES	4.942	12.21	3.29%
O.S.R. (15M Peripheral of Boundary)	14.835	36.64	9.89%
ROAD , STORM WATER DRAIN	10.394	25.67	6.93%
TOTAL AREA	150.036	370.59	100.00%



S.No	Description	Area(Ha)	%
1	Total Project Site	150.036	100
2	Greenbelt	37.486	24.98
3	OSR	14.835	9.89

S.No	Latitude(N)	Longitude(E)	S.No	Latitude(N)	Longitude(E)
1	10° 55' 23.661"	77° 11' 54.737"	81	10° 54' 13.301"	77° 11' 27.287"
2	10° 55' 21.417"	77° 11' 55.007"	82	10° 54' 16.49"	77° 11' 27.421"
3	10° 55' 20.95"	77° 11' 56.151"	83	10° 54' 18.977"	77° 11' 29.561"
4	10° 55' 20.216"	77° 11' 52.32"	84	10° 54' 19.095"	77° 11' 35.86"
5	10° 55' 21.566"	77° 11' 50.375"	85	10° 54' 23.595"	77° 11' 36.223"
6	10° 55' 20.51"	77° 11' 45.191"	86	10° 54' 23.053"	77° 11' 28.662"
7	10° 55' 21.426"	77° 11' 40.998"	87	10° 54' 22.496"	77° 11' 25.673"
8	10° 55' 18.088"	77° 11' 40.892"	88	10° 54' 23.705"	77° 11' 22.926"
9	10° 55' 17.443"	77° 11' 45.163"	89	10° 54' 24.641"	77° 11' 29.985"
10	10° 55' 14.672"	77° 11' 49.391"	90	10° 54' 29.19"	77° 11' 30.753"
11	10° 55' 15.806"	77° 11' 53.168"	91	10° 54' 30.16"	77° 11' 36.481"
12	10° 55' 16.099"	77° 11' 57.631"	92	10° 54' 33.689"	77° 11' 30.321"
13	10° 55' 14.647"	77° 11' 56.398"	93	10° 54' 33.635"	77° 11' 37.261"
14	10° 55' 13.653"	77° 11' 50.926"	94	10° 54' 36.83"	77° 11' 29.555"
15	10° 55' 10.606"	77° 11' 51.922"	95	10° 54' 36.977"	77° 11' 26.713"
16	10° 55' 9.641"	77° 11' 55.971"	96	10° 54' 37.705"	77° 11' 26.257"
17	10° 55' 8.264"	77° 11' 57.943"	97	10° 54' 37.955"	77° 11' 30.648"
18	10° 55' 5.351"	77° 11' 57.05"	98	10° 54' 41.541"	77° 11' 28.576"
19	10° 55' 2.461"	77° 11' 56.602"	99	10° 54' 41.453"	77° 11' 31.36"
20	10° 55' 2.523"	77° 11' 52.059"	100	10° 54' 37.984"	77° 11' 34.088"
21	10° 55' 13.1"	77° 11' 49.957"	101	10° 54' 37.984"	77° 11' 37.47"
22	10° 55' 10.267"	77° 11' 45.351"	102	10° 54' 41.424"	77° 11' 34.836"
23	10° 55' 14.189"	77° 11' 40.376"	103	10° 54' 42.146"	77° 11' 38.117"
24	10° 55' 8.987"	77° 11' 40.158"	104	10° 54' 46.101"	77° 11' 34.916"
25	10° 55' 6.55"	77° 11' 45.327"	105	10° 54' 42.226"	77° 11' 29.937"
26	10° 55' 6.617"	77° 11' 46.13"	106	10° 54' 46.18"	77° 11' 29.656"
27	10° 55' 5.683"	77° 11' 50.738"	107	10° 54' 45.004"	77° 11' 27.866"
28	10° 55' 2.389"	77° 11' 45.299"	108	10° 54' 47.188"	77° 11' 27.9"
29	10° 55' 4.324"	77° 11' 41.181"	109	10° 54' 47.545"	77° 11' 31.178"
30	10° 54' 57.837"	77° 11' 41.056"	110	10° 54' 47.43"	77° 11' 36.463"
31	10° 54' 58.197"	77° 11' 46.054"	111	10° 54' 49.856"	77° 11' 40.1"
32	10° 54' 57.115"	77° 11' 50.912"	112	10° 54' 49.87"	77° 11' 35.807"
33	10° 55' 1.388"	77° 11' 51.825"	113	10° 54' 50.719"	77° 11' 30.735"
34	10° 55' 0.708"	77° 11' 58.933"	114	10° 54' 50.647"	77° 11' 27.717"
35	10° 54' 58.563"	77° 12' 0.735"	115	10° 54' 50.033"	77° 11' 26.729"
36	10° 54' 58.797"	77° 11' 57.239"	116	10° 54' 48.968"	77° 11' 23.645"
37	10° 54' 56.713"	77° 11' 56.41"	117	10° 54' 52.263"	77° 11' 23.396"
38	10° 54' 54.611"	77° 11' 57.119"	118	10° 54' 55.66"	77° 11' 24.021"
39	10° 54' 55.344"	77° 11' 51.578"	119	10° 54' 55.748"	77° 11' 28.476"
40	10° 54' 56.833"	77° 11' 45.007"	120	10° 54' 53.66"	77° 11' 30.289"
41	10° 54' 53.16"	77° 11' 44.463"	121	10° 54' 53.622"	77° 11' 36.563"
42	10° 54' 53.023"	77° 11' 41.264"	123	10° 54' 58.442"	77° 11' 40.072"
43	10° 54' 48.606"	77° 11' 42.972"	122	10° 54' 54.397"	77° 11' 40.119"
44	10° 54' 46.396"	77° 11' 45.178"	124	10° 54' 54.546"	77° 11' 35.661"
45	10° 54' 48.033"	77° 11' 40.391"	125	10° 54' 57.925"	77° 11' 29.55"

46	10° 54' 46.607"	77° 11' 40.767"	126	10° 55' 1.144"	77° 11' 35.714"
47	10° 54' 44.751"	77° 11' 45.745"	127	10° 55' 2.482"	77° 11' 40.546"
48	10° 54' 42.365"	77° 11' 39.64"	128	10° 55' 1.629"	77° 11' 31.785"
49	10° 54' 41.502"	77° 11' 44.259"	129	10° 55' 4.78"	77° 11' 30.499"
50	10° 54' 38.736"	77° 11' 46.614"	130	10° 55' 0.627"	77° 11' 28.179"
51	10° 54' 37.21"	77° 11' 41.646"	131	10° 54' 59.22"	77° 11' 27.282"
52	10° 54' 36.009"	77° 11' 46.24"	132	10° 54' 56.585"	77° 11' 26.694"
53	10° 54' 33.455"	77° 11' 41.971"	133	10° 54' 59.217"	77° 11' 24.002"
54	10° 54' 36.814"	77° 11' 38.335"	134	10° 55' 0.274"	77° 11' 22.4"
55	10° 54' 32.681"	77° 11' 38.169"	135	10° 55' 4.889"	77° 11' 22.613"
56	10° 54' 28.324"	77° 11' 44.503"	136	10° 55' 5.606"	77° 11' 29.27"
57	10° 54' 29.848"	77° 11' 48.509"	137	10° 55' 6.748"	77° 11' 29.165"
58	10° 54' 24.35"	77° 11' 48.182"	138	10° 55' 4.665"	77° 11' 18.753"
59	10° 54' 27.24"	77° 11' 38.025"	139	10° 55' 6.707"	77° 11' 19.7"
60	10° 54' 22.148"	77° 11' 37.14"	140	10° 55' 4.923"	77° 11' 14.613"
61	10° 54' 21.509"	77° 11' 41.359"	141	10° 55' 7.095"	77° 11' 15.428"
62	10° 54' 21.507"	77° 11' 48.814"	142	10° 55' 7.981"	77° 11' 14.219"
63	10° 54' 19.923"	77° 11' 47.637"	143	10° 55' 7.716"	77° 11' 19.522"
64	10° 54' 15.841"	77° 11' 47.448"	144	10° 55' 10.779"	77° 11' 18.348"
65	10° 54' 17.248"	77° 11' 41.283"	145	10° 55' 9.887"	77° 11' 19.437"
66	10° 54' 13.542"	77° 11' 44.877"	146	10° 55' 10.857"	77° 11' 22.797"
67	10° 54' 15.535"	77° 11' 39.44"	147	10° 55' 11.222"	77° 11' 24.658"
68	10° 54' 17.843"	77° 11' 36.682"	148	10° 55' 13.567"	77° 11' 23.152"
69	10° 54' 14.065"	77° 11' 36.567"	149	10° 55' 12.705"	77° 11' 24.417"
70	10° 54' 17.624"	77° 11' 35.626"	150	10° 55' 12.68"	77° 11' 28.613"
71	10° 54' 18.144"	77° 11' 31.283"	151	10° 55' 11.604"	77° 11' 29.915"
72	10° 54' 12.431"	77° 11' 31.651"	152	10° 55' 11.412"	77° 11' 32.491"
73	10° 54' 10.754"	77° 11' 36.069"	153	10° 55' 12.472"	77° 11' 31.504"
74	10° 54' 7.02"	77° 11' 36.536"	154	10° 55' 13.692"	77° 11' 27.3"
75	10° 54' 4.618"	77° 11' 35.391"	155	10° 55' 15.36"	77° 11' 27.708"
76	10° 54' 5.445"	77° 11' 31.332"	156	10° 55' 14.503"	77° 11' 28.822"
77	10° 54' 5.128"	77° 11' 28.604"	157	10° 55' 15.654"	77° 11' 31.542"
78	10° 54' 9.679"	77° 11' 30.461"	158	10° 55' 16.846"	77° 11' 32.75"
79	10° 54' 10.332"	77° 11' 27.506"	159	10° 55' 18.996"	77° 11' 31.398"
80	10° 54' 12.769"	77° 11' 30.436"	160	10° 55' 18.685"	77° 11' 27.711"

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

TC-12310

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

TEST REPORT

ULR : TC1231025000016580F
Report No. : HECS/AP/107/270325
Sample ID No : 270325234
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Project Site
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m³	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	µg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene-AAQ	ng/m³	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	µg/m³	13.30	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/ m³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	µg/m³	23.81	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m³	15.14	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m³	98.29	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	32.50	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	12.49	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

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

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

Laboratory Services Division
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BIS, FSSAI Notified Laboratory
ISO 9001, 14001 & 45001 Certified.

TEST REPORT

Report No. : HECS/AP/107/270325/N
Sample ID No : 270325234
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Project Site
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

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

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

TC-12310

Laboratory Services Division
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ISO 9001, 14001 & 45001 Certified.

TEST REPORT

ULR : TC1231025000016581F
Report No. : HECS/AP/108/270325
Sample ID No : 270325235
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m³	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	µg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene-AAQ	ng/m³	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	µg/m³	BLQ(LOQ 5)	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/ m³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	µg/m³	17.39	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m³	BLQ(LOQ 10)	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m³	79.06	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	22.62	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	8.04	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

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

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

End of Report

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Authorized Signatory

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Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

Report No. : HECS/AP/108/270325/N
Sample ID No : 270325235
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

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

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

End of Report

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TEST REPORT

ULR : TC1231025000016582F
Report No. : HECS/AP/109/270325
Sample ID No : 270325236
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Annupatti
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m³	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	µg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene-AAQ	ng/m³	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	µg/m³	12.14	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	14.27	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m³	13.77	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m³	92.09	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	27.88	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	11.66	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

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

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

End of Report

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E-mail : labsales@hecs.in

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TEST REPORT

Report No. : HECS/AP/109/270325/N
Sample ID No : 270325236
Sampling Date : 27/03/2025

Name of the Client : **M/s. SIPCOT.,**

Address of the Client : **Varapatti**

Group : **Atmospheric Pollution**
Sample Name : **Ambient Air**
Sample Mark : **NA**
Sample Reference : **NA**
Sample Drawn By : **M/s.Hubert Enviro care Systems (P) Ltd.**
Sample Location : **Annupatti**
Environmental Condition : **Temperature (°C) : 30.7 | Humidity (%) : 53.0**
Sampling Method & Plan : **IS 5182 Part 5 & Part 14**

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

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

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

End of Report

D.Anusuya
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Authorized Signatory

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TEST REPORT

ULR : TC1231025000016583F
Report No. : HECS/AP/110/270325
Sample ID No : 270325237
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Pusaraipalayam
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m³	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	µg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene-AAQ	ng/m³	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	µg/m³	9.96	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	19.18	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	µg/m³	12.87	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	µg/m³	82.91	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	29.74	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	10.62	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

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

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

End of Report

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TEST REPORT

Report No. : HECS/AP/110/270325/N
Sample ID No : 270325237
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Pusaraipalayam
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	TVOC	ppmv	BLQ(LOQ 0.05)	HECS-G/ENV/AAQ/SOP/005 Issue No.:01 Issue Date:02:07 2020

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

End of Report

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TEST REPORT

ULR : TC1231025000016584F
Report No. : HECS/AP/111/270325
Sample ID No : 270325238
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Varappatti
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Standards : 2009	
Discipline : Chemical						
1	Arsenic	ng/m³	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m3	BLQ (LOQ: 2.0)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene-AAQ	µg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene-AAQ	ng/m³	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NH3	µg/m³	BLQ(LOQ 5)	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/ m³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	µg/m³	15.04	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	85.69	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 µm)	µg/m³	24.16	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	µg/m³	6.92	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	µg/m3	BLQ (LOQ: 0.002)	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

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

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

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Lab Manager
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TEST REPORT

Report No. : HECS/AP/111/270325/N
Name of the Client : M/s. SIPCOT.,
Sample ID No : 270325238
Sampling Date : 27/03/2025
Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Air
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Varappatti
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 5182 Part 5 & Part 14

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 05/04/2025
Report Date : 05/04/2025
Sample quantity : NA

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

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

End of Report

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TEST REPORT

ULR : TC1231025000017060F
Report No. : HECSL/WT/060/270325
Sample ID No : 270325240
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,
Address of the Client : Varapatti

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 Site
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Bi carbonate	mg/l	427.0	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	56.11	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	108.81	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
6	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
7	Electrical Conductivity at 25°C	µS/cm	1210.0	IS 3025 Part-14: 2013	NA	NA
8	Fluoride as F	mg/l	0.41	APHA 23rd edition (Method 4500F-B , D): 2017	1.0	1.5
9	Iron as Fe	mg/l	0.034	IS 3025 (Part 53): 2003	1.0	No relaxation
10	Magnesium as Mg	mg/l	48.60	IS 3025 Part 46: 1994 (Valumetric Method using EDTA)	30	100
11	Nitrate as NO3	mg/l	34.2	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
12	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
13	pH at 25°C	-	8.12	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation

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Lab Manager
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TEST REPORT

ULR : TC1231025000017060F
Report No. : HECSL/WT/060/270325
Sample ID No : 270325240
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 Site
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
14	Potassium as K	mg/l	9.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	110.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	51.28	IS 3025 Part 24 Sec 1: 2022(Turbidity Method)(Turbidity Method)	200	400
17	Total dissolved solids	mg/l	646.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	340.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
23	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
24	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
25	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
26	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017060F
Report No. : HECSL/WT/060/270325
Sample ID No : 270325240
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 Site
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
27	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
28	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
29	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
30	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
31	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
32	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
33	Percent Sodium	%	40.30	HECS /WT/SOP/002:: 2019	NA	NA
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994		
35	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
36	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
37	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit	2.6	IS 11624 : 2019	NA	NA
38	Dissolved oxygen	mg/l	6.6	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017060F
Report No. : HECSL/WT/060/270325
Sample ID No : 270325240
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 Site
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
39	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
40	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
41	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA	NA
42	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
43	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
44	Total alkalinity as CaCO3	mg/l	350.0	IS 3025 (Part 23): 1986	200	600

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

End of Report

HECS ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

Name of the Client	: M/s. SIPCOT.,	Report No.	: HECSL/WT/060/270325N
		Sample ID No	: 270325240
		Sampling Date	: 27/03/2025
Address of the Client	: Varapatti		
Group	: Water	Received Date	: 27/03/2025
Sample Name	: Ground Water	Commenced Date	: 27/03/2025
Sample Mark	: NA	Completed On	: 07/04/2025
Sample Reference	: NA	Report Date	: 07/04/2025
Sample Drawn By	: M/s.Hubert Enviro care Systems (P) Ltd.	Sample quantity	: 2 Litres
Sample Location	: Near Project Site		
Environmental Condition	: Temperature (°C) : 27.8 | Humidity (%) : 55.0		
Sampling Method & Plan	: IS 17614(Part-1):2021		

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

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

End of Report

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017061F
Report No. : HECSL/WT/061/270325
Sample ID No : 270325241
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Bi carbonate	mg/l	341.6	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/l	88.18	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	128.66	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
6	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
7	Electrical Conductivity at 25°C	µS/cm	1140.0	IS 3025 Part-14: 2013	NA	NA
8	Fluoride as F	mg/l	0.39	APHA 23rd edition (Method 4500F-B , D): 2017	1.0	1.5
9	Iron as Fe	mg/l	0.043	IS 3025 (Part 53): 2003	1.0	No relaxation
10	Magnesium as Mg	mg/l	48.60	IS 3025 Part 46: 1994 (Valumetric Method using EDTA)	30	100
11	Nitrate as NO3	mg/l	28.97	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
12	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
13	pH at 25°C	-	8.09	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017061F
Report No. : HECSL/WT/061/270325
Sample ID No : 270325241
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,
Address of the Client : Varapatti

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 : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
14	Potassium as K	mg/l	5.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	60.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	61.66	IS 3025 Part 24 Sec 1: 2022(Turbidity Method)(Turbidity Method)	200	400
17	Total dissolved solids	mg/l	607.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	420.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
23	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
24	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
25	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
26	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017061F
Report No. : HECSL/WT/061/270325
Sample ID No : 270325241
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
27	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
28	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
29	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
30	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
31	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
32	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
33	Percent Sodium	%	23.30	HECS /WT/SOP/002:: 2019	NA	NA
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994		
35	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
36	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
37	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit	1.3	IS 11624 : 2019	NA	NA
38	Dissolved oxygen	mg/l	6.5	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017061F
Report No. : HECSL/WT/061/270325
Sample ID No : 270325241
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
39	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
40	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
41	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA	NA
42	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
43	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
44	Total alkalinity as CaCO3	mg/l	280.0	IS 3025 (Part 23): 1986	200	600

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

Report No. : HECSL/WT/061/270325N
Sample ID No : 270325241
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

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

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017062F
Report No. : HECSL/WT/062/270325
Sample ID No : 270325242
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 : Annupatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
Discipline : Chemical						
1	Bi carbonate	mg/l	280.6	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/l	204.41	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA
5	Chloride as Cl	mg/l	435.49	IS 3025 Part 32: 1988 (Argentometric Method)	250	1000
6	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
7	Electrical Conductivity at 25°C	µS/cm	2710.0	IS 3025 Part-14: 2013	NA	NA
8	Fluoride as F	mg/l	0.52	APHA 23rd edition (Method 4500F-B , D): 2017	1.0	1.5
9	Iron as Fe	mg/l	0.048	IS 3025 (Part 53): 2003	1.0	No relaxation
10	Magnesium as Mg	mg/l	87.48	IS 3025 Part 46: 1994 (Valumetric Method using EDTA)	30	100
11	Nitrate as NO3	mg/l	33.15	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
12	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
13	pH at 25°C	-	7.87	IS 3025(Part 11) : 2022 (Electrometric method)	6.5-8.5	No relaxation

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017062F
Report No. : HECSL/WT/062/270325
Sample ID No : 270325242
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 : Annupatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
14	Potassium as K	mg/l	16.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/l	152.0	IS 3025 Part 45: 1993 (Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	376.2	IS 3025 Part 24 Sec 1: 2022(Turbidity Method)(Turbidity Method)	200	400
17	Total dissolved solids	mg/l	1461.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022 (Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	870.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	BLQ(LOQ:0.1)	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
23	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
24	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
25	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
26	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	1.5

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

TC-12310

Laboratory Services Division
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TEST REPORT

ULR : TC1231025000017062F
Report No. : HECSL/WT/062/270325
Sample ID No : 270325242
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 : Annupatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
27	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
28	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
29	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
30	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
31	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
32	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
33	Percent Sodium	%	26.94	HECS /WT/SOP/002:: 2019	NA	NA
34	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994		
35	Residual Sodium Carbonate	meq/l	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
36	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 (Nesslerization Method)	0.5	No relaxation
37	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit	2.2	IS 11624 : 2019	NA	NA
38	Dissolved oxygen	mg/l	6.4	IS 3025 (Part 38): 1989 (Titrimetric Method)	NA	NA

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Lab Manager
Authorized Signatory

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Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
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TEST REPORT

ULR : TC1231025000017062F
Report No. : HECSL/WT/062/270325
Sample ID No : 270325242
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

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 : Annupatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	IS 10500 : 2012	
					Acceptable Limits (Max)	Permissible Limits (Max)
39	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
40	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
41	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA	NA
42	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
43	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
44	Total alkalinity as CaCO3	mg/l	230.0	IS 3025 (Part 23): 1986	200	600

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
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Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

Name of the Client	: M/s. SIPCOT.,	Report No.	: HECSL/WT/062/270325N
		Sample ID No	: 270325242
		Sampling Date	: 27/03/2025
Address of the Client	: Varapatti		
Group	: Water	Received Date	: 27/03/2025
Sample Name	: Ground Water	Commenced Date	: 27/03/2025
Sample Mark	: NA	Completed On	: 07/04/2025
Sample Reference	: NA	Report Date	: 07/04/2025
Sample Drawn By	: M/s.Hubert Enviro care Systems (P) Ltd.	Sample quantity	: 2 Litres
Sample Location	: Annupatti		
Environmental Condition	: Temperature (°C) : 27.8 | Humidity (%) : 55.0		
Sampling Method & Plan	: IS 17614(Part-1):2021		

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

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

End of Report

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D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
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Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
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TEST REPORT

ULR : TC1231025000017039F
Report No. : HECSL/WT/063/270325
Sample ID No : 270325243
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Water
Sample Name : Surface Water
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Annupatti Kuttai
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI
Discipline : Chemical					
1	Total alkalinity as CaCO3	mg/l	60.0	IS 3025 Part 23: 1986	NA
2	Bi carbonate	mg/l	73.2	IS 3025 Part 51: 2001	NA
3	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	3.0	IS 3025 Part 44: 1993	30
4	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 (Curcumin Method)	NA
5	Calcium as Ca	mg/l	108.22	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA
6	Chemical Oxygen Demand (COD)	mg/l	24.0	IS 3025 Part 58: 2006	250
7	Chloride as Cl	mg/l	489.93	IS 3025 Part 32: 1988 (Argentometric Method)	NA
8	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	NA
9	Dissolved oxygen	mg/l	6.1	IS 3025 Part 38: 1989	NA
10	Electrical Conductivity at 25°C	µS/cm	3400.0	IS:3025 Part 14: 2013	NA
11	Fluoride as F	mg/l	54.0	APHA 23rd edition Method 4500 F -B,D: 2017	2.0
12	Iron as Fe	mg/l	0.072	IS 3025 Part 53: 2003	3.0
13	Nitrate as NO3	mg/l	13.56	APHA 23rd edition Method 4500 NO3B: 2017	NA

HECS ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017039F
Report No. : HECSL/WT/063/270325
Sample ID No : 270325243
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Water
Sample Name : Surface Water
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Annupatti Kuttai
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI
14	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
15	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
16	Phosphate as PO4	mg/l	BLQ(LOQ:0.02)	APHA 23rd edition Method 4500-P B,D: 2017	NA
17	pH at 25°C	-	7.95	IS 3025 Part 11: 2022 (Electrometric Method)	5.5- 9.0
18	Total dissolved solids	mg/l	1821.0	IS 3025 Part 16: 1984	NA
19	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
20	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.2
21	Magnesium as Mg	mg/l	77.76	IS 3025 Part 46: 1994 (Valumetric Method using EDTA)	NA
22	Potassium as K	mg/l	35.0	IS 3025 Part 45: 1993	NA
23	Sodium as Na	mg/l	370.0	IS 3025 Part 45: 1983	NA
24	Sulphate as SO4	mg/l	676.89	IS 3025 Part 24 Sec 1: 2022	NA
25	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43:Sec 1: 2022	1.0
26	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B , C: 2017	NA

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Lab Manager
Authorized Signatory

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TEST REPORT

ULR : TC1231025000017039F
Report No. : HECSL/WT/063/270325
Sample ID No : 270325243
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Water
Sample Name : Surface Water
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Annupatti Kuttai
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI
27	Percent Sodium	%	55.71	HECSG /WT/SOP/002 Issue No:01,Issue date 18.12: 2021	NA
28	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	NA
29	Residual Sodium Carbonate	mg/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA
30	Ammonia as NH3	mg/l	0.33	IS 3025 Part 34 Sec 2: 2021	5.0
31	Sodium Adsorption Ratio(SAR)	Square root of (millimole/litr	6.60	IS 11624: 2019	NA
32	Total Hardness as CaCO3	mg/l	590.0	IS 3025 Part 21: 2009	NA
33	Total Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA
34	Total Suspended Solids	mg/l	2.0	IS 3025 Part 17: 1984	100
35	Turbidity	NTU	0.7	IS 3025 Part 10: 1984	NA
36	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.2
37	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	2.0
38	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
39	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0

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D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
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Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
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TEST REPORT

ULR : TC1231025000017039F
Report No. : HECSL/WT/063/270325
Sample ID No : 270325243
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Water
Sample Name : Surface Water
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Annupatti Kuttai
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

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

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
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TEST REPORT

Report No. : **HECSL/WT/063/270325N**
Sample ID No : **270325243**
Sampling Date : **27/03/2025**

Name of the Client : **M/s. SIPCOT.,**
Address of the Client : **Varapatti**

Group : **Water**
Sample Name : **Surface Water**
Sample Mark : **NA**
Sample Reference : **NA**
Sample Drawn By : **M/s.Hubert Enviro care Systems (P) Ltd.**
Sample Location : **Annupatti Kuttai**
Environmental Condition : **Temperature (°C) : 27.8 | Humidity (%) : 55.0**
Sampling Method & Plan : **IS 17614(Part-1):2021**

Received Date : **27/03/2025**
Commenced Date : **27/03/2025**
Completed On : **07/04/2025**
Report Date : **07/04/2025**
Sample quantity : **2 Litres**

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discipline : Chemical					
1	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
***

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

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TEST REPORT

ULR : TC1231025000017063F
Report No. : HECSL/WT/064/270325
Sample ID No : 270325244
Sampling Date : 27/03/2025

Name of the Client : **M/s. SIPCOT.,**

Address of the Client : **Varapatti**

Group : **Water**
Sample Name : **Surface Water**
Sample Mark : **NA**
Sample Reference : **NA**
Sample Drawn By : **M/s.Hubert Enviro care Systems (P) Ltd.**
Sample Location : **Near Poorandampalayam Kuttai**
Environmental Condition : **Temperature (°C) : 28.4 | Humidity (%) : 55.0**
Sampling Method & Plan : **IS 17614(Part-1):2021**

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI
Discipline : Chemical					
1	Total alkalinity as CaCO3	mg/l	70.0	IS 3025 Part 23: 1986	NA
2	Bi carbonate	mg/l	85.4	IS 3025 Part 51: 2001	NA
3	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	4.0	IS 3025 Part 44: 1993	30
4	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 (Curcumin Method)	NA
5	Calcium as Ca	mg/l	22.04	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA
6	Chemical Oxygen Demand (COD)	mg/l	36.0	IS 3025 Part 58: 2006	250
7	Chloride as Cl	mg/l	14.84	IS 3025 Part 32: 1988 (Argentometric Method)	NA
8	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	NA
9	Dissolved oxygen	mg/l	5.8	IS 3025 Part 38: 1989	NA
10	Electrical Conductivity at 25°C	µS/cm	260.0	IS:3025 Part 14: 2013	NA
11	Fluoride as F	mg/l	0.23	APHA 23rd edition Method 4500 F -B,D: 2017	2.0
12	Iron as Fe	mg/l	0.327	IS 3025 Part 53: 2003	3.0
13	Nitrate as NO3	mg/l	3.37	APHA 23rd edition Method 4500 NO3B: 2017	NA

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TEST REPORT

ULR : TC1231025000017063F
Report No. : HECSL/WT/064/270325
Sample ID No : 270325244
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Water
Sample Name : Surface Water
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Poorandampalayam Kuttai
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI
14	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
15	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
16	Phosphate as PO4	mg/l	0.117	APHA 23rd edition Method 4500-P B,D: 2017	NA
17	pH at 25°C	-	8.05	IS 3025 Part 11: 2022 (Electrometric Method)	5.5- 9.0
18	Total dissolved solids	mg/l	137.0	IS 3025 Part 16: 1984	NA
19	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
20	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.2
21	Magnesium as Mg	mg/l	10.94	IS 3025 Part 46: 1994 (Valumetric Method using EDTA)	NA
22	Potassium as K	mg/l	1.0	IS 3025 Part 45: 1993	NA
23	Sodium as Na	mg/l	8.0	IS 3025 Part 45: 1983	NA
24	Sulphate as SO4	mg/l	20.5	IS 3025 Part 24 Sec 1: 2022	NA
25	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43:Sec 1: 2022	1.0
26	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B , C: 2017	NA

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D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
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Ph: 42985555 / 43635555 Fax : 42985500
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TEST REPORT

ULR : TC1231025000017063F
Report No. : HECSL/WT/064/270325
Sample ID No : 270325244
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Water
Sample Name : Surface Water
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Poorandampalayam Kuttai
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI
27	Percent Sodium	%	14.57	HECSG /WT/SOP/002 Issue No:01,Issue date 18.12: 2021	NA
28	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	NA
29	Residual Sodium Carbonate	mg/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA
30	Ammonia as NH3	mg/l	0.52	IS 3025 Part 34 Sec 2: 2021	5.0
31	Sodium Adsorption Ratio(SAR)	Square root of (millimole/lit r	0.35	IS 11624: 2019	NA
32	Total Hardness as CaCO3	mg/l	100.0	IS 3025 Part 21: 2009	NA
33	Total Phosphorous as P	mg/l	0.036	IS 3025 Part 31 Sec 1: 2022	NA
34	Total Suspended Solids	mg/l	91.0	IS 3025 Part 17: 1984	100
35	Turbidity	NTU	39.7	IS 3025 Part 10: 1984	NA
36	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.2
37	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	2.0
38	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
39	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

TC-12310

Laboratory Services Division
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BIS FSSAI Notified Laboratory
ISO 9001, 14001 & 45001 Certified.

TEST REPORT

ULR : TC1231025000017063F
Report No. : HECSL/WT/064/270325
Sample ID No : 270325244
Sampling Date : 27/03/2025

Name of the Client : **M/s. SIPCOT.,**

Address of the Client : **Varapatti**

Group : **Water**
Sample Name : **Surface Water**
Sample Mark : **NA**
Sample Reference : **NA**
Sample Drawn By : **M/s.Hubert Enviro care Systems (P) Ltd.**
Sample Location : **Near Poorandampalayam Kuttai**
Environmental Condition : **Temperature (°C) : 28.4 | Humidity (%) : 55.0**
Sampling Method & Plan : **IS 17614(Part-1):2021**

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

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

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

End of Report

HECS ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

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TEST REPORT

ULR : TC1231025000017063F
Report No. : HECSL/WT/064/270325
Sample ID No : 270325244
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Water
Sample Name : Surface Water
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Poorandampalayam Kuttai
Environmental Condition : Temperature (°C) : 27.8 | Humidity (%) : 55.0
Sampling Method & Plan : IS 17614(Part-1):2021

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discipline : Chemical					
1	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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Lab Manager
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TEST REPORT

ULR : TC1231025000017067F
Report No. : HECS/PE/057/270325
Sample ID No : 270325245
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Project Site
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	15.77	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	6.17	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	5.20	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Clay loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	31.8	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	32.0	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	36.2	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	8.13	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	147.6	IS 14767: 2000

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TEST REPORT

ULR : TC1231025000017067F
Report No. : HECS/PE/057/270325
Sample ID No : 270325245
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Project Site
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.99	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.52	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.90	IS 2720 (Part 22) Section I 1972
14	Available Phosphorous as P	µg/g	17.12	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	27.72	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	%	116.34	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	7.79	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.79	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	1.8	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	18.4	IS 14765: 2000
22	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue

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

End of Report

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TEST REPORT

Report No. : HECS/PE/057/270325/N
Sample ID No : 270325245
Sampling Date : 27/03/2025

Name of the Client : **M/s. SIPCOT.,**

Address of the Client : **Varapatti**

Group : **Pollution & Environment**
Sample Name : **Soil**
Sample Mark : **NA**
Sample Reference : **NA**
Sample Drawn By : **M/s.Hubert Enviro care Systems (P) Ltd.**
Sample Location : **Near Project Site**
Environmental Condition : **Temperature (°C) : 28.4 | Humidity (%) : 55.0**
Sampling Method & Plan : **ICARDA:2013**

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	4.72	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Manganese	mg/kg	146.14	HECS-G/INS/SOP/ 042
3	Iron	mg/kg	4.47	Inhouse method
4	Infiltration Rate	-	0.7	Inhouse method

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

End of Report

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Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
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TEST REPORT

ULR : TC1231025000017068F
Report No. : HECS/PE/058/270325
Sample ID No : 270325246
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	14.58	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	10.74	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	7.18	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Sandy loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	60.8	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	20.2	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	19.0	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	7.83	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	284.0	IS 14767: 2000

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TEST REPORT

ULR : TC1231025000017068F
Report No. : HECS/PE/058/270325
Sample ID No : 270325246
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	1.00	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.60	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	1.03	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	31.78	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	%	0.0164	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	15.54	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.77	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	2.6	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	20.6	IS 14765: 2000
22	Colour	-	Black	HECS-G/ENV/SSW/SOP/011 Issue

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

End of Report

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TEST REPORT

Report No. : HECS/PE/058/270325/N
Sample ID No : 270325246
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Tirumandampalaiyam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	9.90	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Manganese	mg/kg	138.01	HECS-G/INS/SOP/ 042
3	Iron	mg/kg	4.52	Inhouse method
4	Infiltration Rate	-	1.3	Inhouse method

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

End of Report

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TEST REPORT

ULR : TC1231025000017069F
Report No. : HECS/PE/059/270325
Sample ID No : 270325247
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Annupatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	14.95	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	6.85	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	6.30	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	35.6	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	48.8	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	15.6	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	8.10	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	194.0	IS 14767: 2000

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TEST REPORT

ULR : TC1231025000017069F
Report No. : HECS/PE/059/270325
Sample ID No : 270325247
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Annupatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.99	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	29.28	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	%	0.0097	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	7.75	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	11.62	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	%	30.4	IS 14765: 2000
22	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue

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

End of Report

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TEST REPORT

Report No. : HECS/PE/059/270325/N
Sample ID No : 270325247
Sampling Date : 27/03/2025

Name of the Client : **M/s. SIPCOT.,**

Address of the Client : **Varapatti**

Group : **Pollution & Environment**
Sample Name : **Soil**
Sample Mark : **NA**
Sample Reference : **NA**
Sample Drawn By : **M/s.Hubert Enviro care Systems (P) Ltd.**
Sample Location : **Annupatti**
Environmental Condition : **Temperature (°C) : 28.4 | Humidity (%) : 55.0**
Sampling Method & Plan : **ICARDA:2013**

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	4.24	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Manganese	mg/kg	149.59	HECS-G/INS/SOP/ 042
3	Iron	mg/kg	5.61	Inhouse method
4	Infiltration Rate	-	0.5	Inhouse method

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

End of Report

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Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.
A-21, III Phase, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Ph: 42985555 / 43635555 Fax : 42985500
E-mail : labsales@hecs.in

TC-12310

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

TEST REPORT

ULR : TC1231025000017070F
Report No. : HECS/PE/060/270325
Sample ID No : 270325248
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Pusaraipalayam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	12.60	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	13.25	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	8.70	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	%	12.0	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	35.4	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	52.6	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	8.02	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	280.0	IS 14767: 2000

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

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Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Pusaraipalayam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	0.98	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.37	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.64	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	41.39	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	%	0.0103	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	11.80	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	11.80	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	2.8	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	20.4	IS 14765: 2000
22	Colour	-	Brown	HECS-G/ENV/SSW/SOP/011 Issue

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

End of Report

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TEST REPORT

Report No. : HECS/PE/060/270325/N
Name of the Client : M/s. SIPCOT.,
Sample ID No : 270325248
Sampling Date : 27/03/2025
Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Pusaraipalayam
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	5.35	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Manganese	mg/kg	116.82	HECS-G/INS/SOP/ 042
3	Iron	mg/kg	5.50	Inhouse method
4	Infiltration Rate	-	0.3	Inhouse method

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

End of Report

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TEST REPORT

ULR : TC1231025000017071F
Report No. : HECS/PE/061/270325
Sample ID No : 270325249
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Varappatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Cadmium	mg/Kg	BLQ (LOQ: 0.1)	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/Kg	15.80	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/Kg	11.36	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	6.74	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
5	Soil Texture	-	Silty clay loam	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	14.6	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	50.8	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	34.6	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	7.92	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1 : 2)	µS/cm	179.8	IS 14767: 2000

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TEST REPORT

ULR : TC1231025000017071F
Report No. : HECS/PE/061/270325
Sample ID No : 270325249
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Varappatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm3	1.01	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.53	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.92	IS 2720 (Part 22) Section I 1972
14	Available Phosphorous as P	µg/g	10.28	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	20.05	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	%	0.0137	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	11.48	FAO of United Nations, Rome Chapter - III 2008
19	Exchangable Magnesium as Mg	mEq/L	3.82	FAO of United Nations, Rome Chapter - III 2008
20	Cation Exchange Capacity	mEq/100g	1.7	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	18.8	IS 14765: 2000
22	Colour	-	Black	HECS-G/ENV/SSW/SOP/011 Issue

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

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TEST REPORT

Report No. : HECS/PE/061/270325/N
Sample ID No : 270325249
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Pollution & Environment
Sample Name : Soil
Sample Mark : NA
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : Near Varappatti
Environmental Condition : Temperature (°C) : 28.4 | Humidity (%) : 55.0
Sampling Method & Plan : ICARDA:2013

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 07/04/2025
Report Date : 07/04/2025
Sample quantity : 1 Kg

S.No.	Test Parameters	Units	Results	Test Method
Discipline : Chemical				
1	Moisture	%	7.98	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Manganese	mg/kg	146.74	HECS-G/INS/SOP/ 042
3	Iron	mg/kg	7.17	Inhouse method
4	Infiltration Rate	-	1.3	Inhouse method

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

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

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ISO 9001, 14001 & 45001 Certified.

TEST REPORT

ULR : TC1231025000016585F
Report No. : HECS/AP/112/270325
Sample ID No : 270325239
Sampling Date : 27/03/2025

Name of the Client : M/s. SIPCOT.,

Address of the Client : Varapatti

Group : Atmospheric Pollution
Sample Name : Ambient Noise Levels (Excluding vibration)
Sample Mark : Noise
Sample Reference : NA
Sample Drawn By : M/s.Hubert Enviro care Systems (P) Ltd.
Sample Location : NA
Environmental Condition : Temperature (°C) : 30.7 | Humidity (%) : 53.0
Sampling Method & Plan : IS 9989:1981

Received Date : 27/03/2025
Commenced Date : 27/03/2025
Completed On : 04/04/2025
Report Date : 05/04/2025
Sample quantity : NA

S.No	Sampling Location	Day Noise level in dB (A)	Night Noise level in dB (A)
1	Near Project Site	46.9	44.3
2	Tirumandampalaiyam	47.8	40.9
3	Annupatti	40.9	41.9
4	Pusaraaipalayam	40.9	43.4
5	Near Varapatti	48.8	40.9

Noise Standards - CPCB:

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

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

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

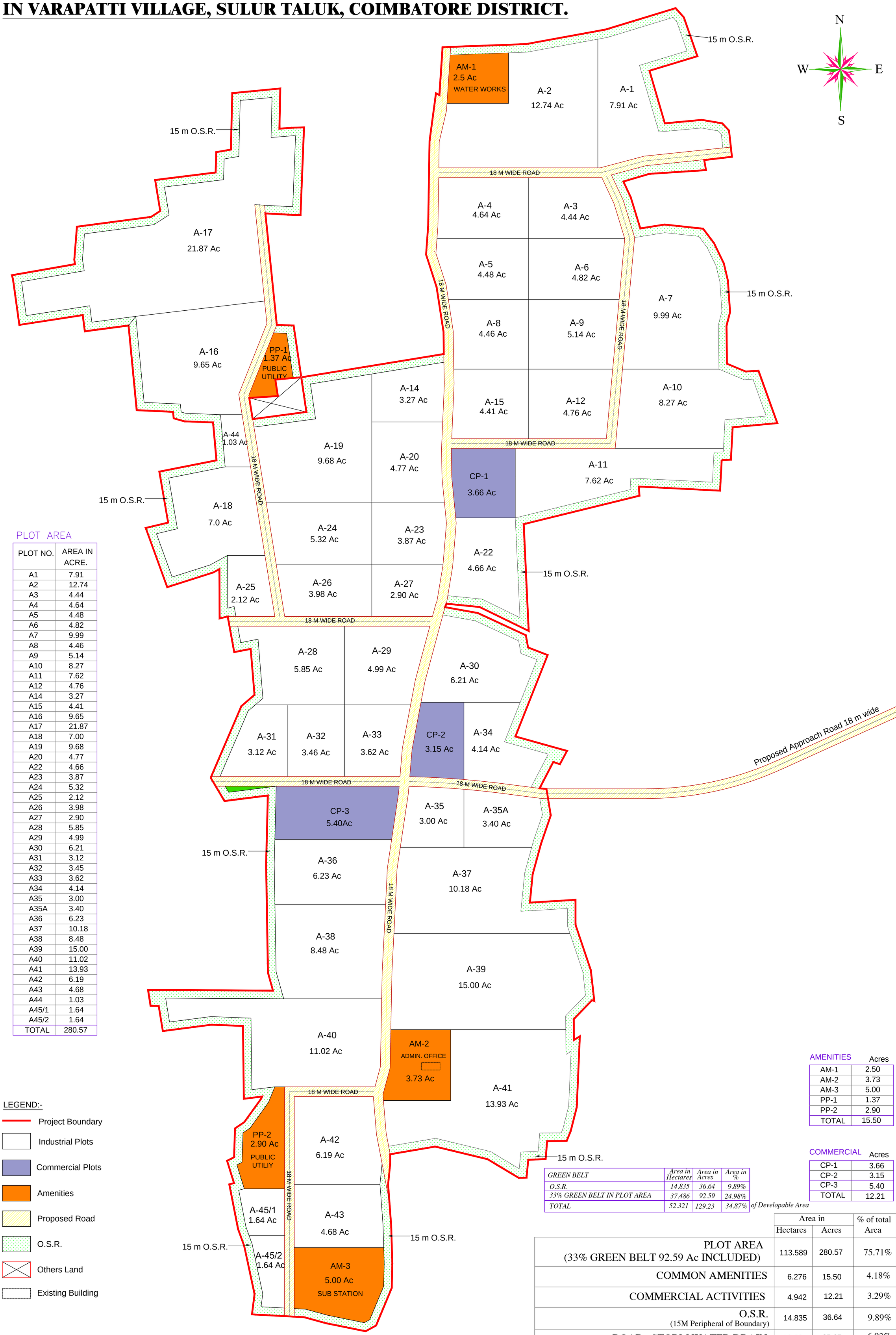
End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. Chennai 600 032

D.Anusuya
Lab Manager
Authorized Signatory

TENTATIVE LAYOUT FOR PROPOSED SIPCOT INDUSTRIAL PARK IN VARAPATTI VILLAGE, SULUR TALUK, COIMBATORE DISTRICT.

Annexure 9



PLOT AREA

PLOT NO.	AREA IN ACRE.
A1	7.91
A2	12.74
A3	4.44
A4	4.64
A5	4.48
A6	4.82
A7	9.99
A8	4.46
A9	5.14
A10	8.27
A11	7.62
A12	4.76
A14	3.27
A15	4.41
A16	9.65
A17	21.87
A18	7.00
A19	9.68
A20	4.77
A22	4.66
A23	3.87
A24	5.32
A25	2.12
A26	3.98
A27	2.90
A28	5.85
A29	4.99
A30	6.21
A31	3.12
A32	3.45
A33	3.62
A34	4.14
A35	3.00
A35A	3.40
A36	6.23
A37	10.18
A38	8.48
A39	15.00
A40	11.02
A41	13.93
A42	6.19
A43	4.68
A44	1.03
A45/1	1.64
A45/2	1.64
TOTAL	280.57

LEGEND:-

- Project Boundary
- Industrial Plots
- Commercial Plots
- Amenities
- Proposed Road
- O.S.R.
- Others Land
- Existing Building

AMENITIES

	Acres
AM-1	2.50
AM-2	3.73
AM-3	5.00
PP-1	1.37
PP-2	2.90
TOTAL	15.50

COMMERCIAL

	Acres
CP-1	3.66
CP-2	3.15
CP-3	5.40
TOTAL	12.21

GREEN BELT	*Area in Hectares*	*Area in Acres*	*Area in %*
O.S.R.	*14.835*	*36.64*	*9.89%*
33% GREEN BELT IN PLOT AREA	*37.486*	*92.59*	*24.98%*
TOTAL	*52.321*	*129.23*	*34.87%*

of Developable Area

	Area in Hectares	Area in Acres	% of total Area
PLOT AREA (33% GREEN BELT 92.59 Ac INCLUDED)	113.589	280.57	75.71%
COMMON AMENITIES	6.276	15.50	4.18%
COMMERCIAL ACTIVITIES	4.942	12.21	3.29%
O.S.R. (15M Peripheral of Boundary)	14.835	36.64	9.89%
ROAD , STORM WATER DRAIN	10.394	25.67	6.93%
TOTAL AREA	150.036	370.59	100.00%

STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED

ENVIRONMENT POLICY

PREAMBLE

SIPCOT has established 21 Industrial Complexes / Parks / Growth Centres besides 7 SEZs within these Industrial Parks. SIPCOT is also in the process of establishing eight new Industrial Parks besides other ongoing Land Acquisition schemes.

As per the EIA notification, 2006 of MoEF&CC, SIPCOT obtained Environmental Clearance for 8 Industrial Complexes / Parks; also, SIPCOT is in the process of obtaining Environmental Clearance for the upcoming Industrial Complexes/ Parks/ Growth Centers. As per the condition stipulated in the Environmental Clearance, the Company shall have a well laid down Environment Policy approved by the Board of Directors.

1. OBJECTIVE OF ENVIRONMENT POLICY

1.1 The key objective of the SIPCOT Environment Policy is to attract Industrial Investment, Employment Generation, and Creation of Industrial Infrastructure across Tamil Nadu by ensuring a balance between development and environment.

1.2 The present policy is formulated with the following objectives:

1.2.1 To continuously improve the environmental status of the Industrial Complexes / Parks / Growth Centers / SEZs through the implementation of sustainable environmental practices.

1.2.2 To obtain all statutory clearances and approvals and to follow the conditions stipulated by the regulatory authorities.

1.2.3 To improve social infrastructure and environmental conditions in and around the project site by earmarking separate fund for carrying out the implementation works.

1.2.4 To form an exclusive Environmental Management Cell to implement and review the progress of environmental safeguard measures.

1.2.5 To encourage allottee units to adopt efficient and effective environmental management and monitoring systems.

2. STRATEGIES AND ACTION PLANS

2.1 Regulatory Approach:

2.1.1 In accordance with the EIA Notification, 2006, SIPCOT has obtained prior Environmental Clearance for the Industrial Complexes / Parks established after the year 2006.

2.1.2 For the proposed Industrial Complexes / Parks / Growth Centres / SEZ, SIPCOT shall obtain Environmental Clearance / CRZ Clearance as per EIA / CRZ notification. All necessary approvals/clearance shall be obtained from the competent authority as stipulated in Environmental Clearance conditions, and the same shall be complied as per the standards and norms stipulated by MoEF&CC/SEIAA.

2.1.3 As per the norms and conditions of EC, SIPCOT shall obtain Consent to Establish (CTE) / Consent to Operate (CTO) for the Industrial Complexes/ Parks/ Growth Centers from Tamil Nadu Pollution Control Board.

2.2 Compliance to Regulatory Conditions:

2.2.1 SIPCOT shall comply with the following conditions stipulated in the Environmental Clearance:

a) Submission of Half Yearly compliance report including the results of monitoring data to the SEIAA / MoEF / CPCB Zonal office / TNPCB in Hard and Soft copies on 1st June and 1st December of each calendar year in respect of the conditions stipulated in the prior Environmental Clearance.

b) Environmental Statement for each financial year ending 31st March in Form – V as mandated by TNPCB shall be submitted as prescribed under Environment (Protection) Rules, 1986 and amended subsequently. The same shall be made available in the website of SIPCOT along with the status of compliance of EC conditions and shall also be sent to the respective regulatory authority.

c) Monitoring ambient air, water, and noise quality during the operation phase, including criteria pollutant levels or critical sectoral parameters, indicated if any, for the project.

2.3 Corporate Environmental Responsibility (CER):

2.3.1 As per the Office Memorandum dated 1st May 2018 from MoEF&CC, GOI (F.No.22-65/2017-IA.III), the fund allocation for the Corporate Environment Responsibility (CER) shall be in addition to the cost envisaged for the implementation of the EIA/EMP which includes the measures for the pollution control, environmental protection measures including the NPV and Compensatory Afforestation, required, if any, and any other activities, to be derived as part of the EIA process subject to the maximum percentage as prescribed below for different cases:

Table - 1: CER Cost for Implementation of Projects

Sl.No.	Capital Investment / Additional Capital Investment (in Rs.)	Greenfield Project - % of Capital Investment	Brownfield Project - % of Additional Capital Investment
I	II	III	IV
1.	<= 100 Crores	2.0%	1.0%
2.	> 100 Crores to <= 500 Crores	1.5%	0.75%
3.	> 500 Crores to <= 1000 Crores	1.0%	0.50%
	> 1000 Crores to <= 10000 Crores	0.5%	0.25%
4.	> 10000 Crores	0.25%	0.125%

2.3.2 Greenfield projects are the projects which are not following a prior work i.e., the projects on the unused lands where there is no need to remodel or demolish an existing structure. Brownfield projects are the projects which are modified or upgraded.

2.3.3 The activities proposed under CER shall be worked out based on the issues raised during the public hearing, social need assessment, R&R plan, Environmental Management Plan, etc.

2.3.4 Some of the activities which can be carried out in CER are infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase the yield of crop and fodder, rainwater harvesting, soil moisture conservation works, avenue plantation, plantation in community areas, etc.

2.3.5 A separate fund may be earmarked for implementing Environmental Protection Measures, in respect of the projects for which EC has been obtained after the CER notification dated 01.05.2018, the cost of the project shall include CER provisions for the specified percentage depending upon the investment amount. The fund shall be utilized for the purpose of allocation of Green initiatives and CER activities.

2.3.6 The entire activities proposed under the CER shall be treated as SIPCOT Social & Environmental Initiative and shall be monitored periodically. The monitoring report shall be submitted to the regional office as a part of the half-yearly compliance report.

2.4 Environmental Management Cell:

2.4.1 As per the Condition stipulated in the Environmental Clearance; the Company shall have an Environmental Management Cell consists of 7 team members to implement the Environmental Management Plan.

2.4.2 SIPCOT Environmental Management Cell may 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.

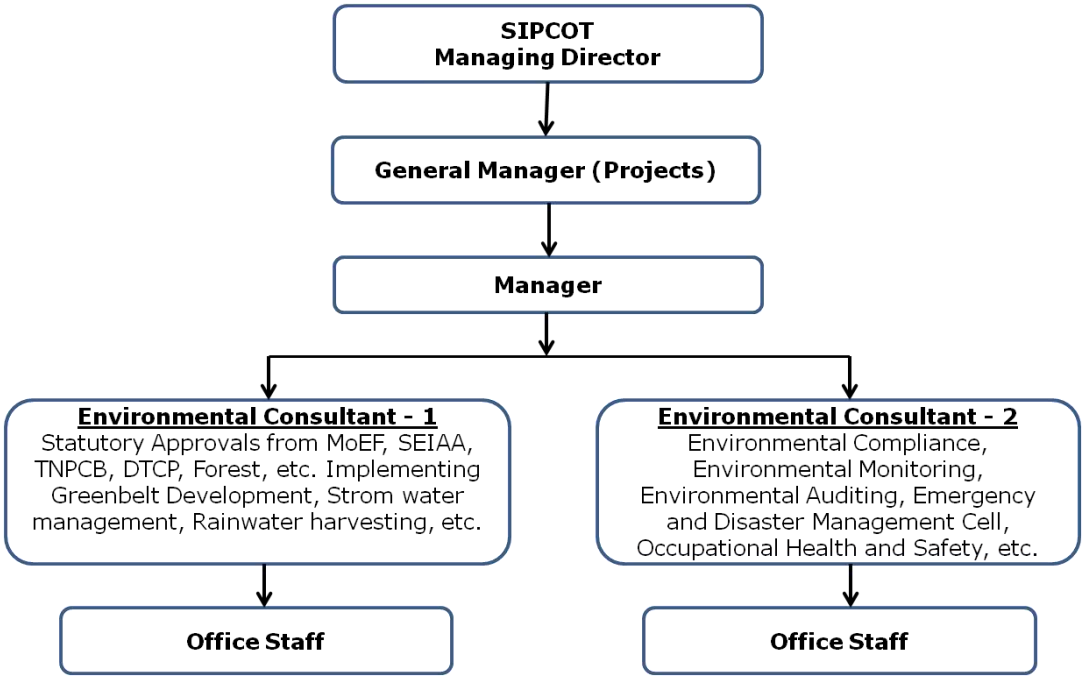


Figure – 1: Environmental Management Cell

2.4.3 The Environmental Management Cell shall obtain all applicable statutory clearances and approvals as mandated by the regulatory authorities and maintain the Industrial Complexes/ Parks/ Growth Centers in compliance with all applicable rules and regulations. The team shall address various queries received from statutory authorities on the environmental front related to SIPCOT projects.

2.5 Other Environmental Safeguard Action Plans:

2.5.1 SIPCOT land-use policy would accord priority to the protection and preservation of vulnerable ecosystems, including protected forests, bio-reserves, wetlands, coastal ecosystems.

2.5.2 Appropriate locating of industries (depending on the category of industry) and environmental safeguards will be built into the planning and management of these industrial corridors and nodes.

2.5.3 Encouraging the industrial units to install Continuous and Emission Monitoring Systems in collaboration with TNPCB.

2.5.4 SIPCOT shall develop greenery around its boundary wall of the acquired land, maintain and recommend the individual units to allocate 33% of green area as per EIA notification.

2.5.5 SIPCOT shall stipulate specific conditions in the Allotment Order / Lease Deed to comply with the Environmental Clearance conditions by a suitable undertaking from the allottees.

3. ENVIRONMENTAL INITIATIVES BY SIPCOT

3.1 SIPCOT insists the industrial units to adopt Zero Liquid Discharge (ZLD) concept.

3.2 Rainwater harvesting systems be implemented in SIPCOT industrial parks to further increase groundwater table.

3.3 SIPCOT initiate a mission-mode program to clean and rejuvenate the existing water bodies, within and around (1 km radius) SIPCOT Industrial Areas.

3.4 Revamping of damaged roads, drainages, and storage structures in SIPCOT Industrial Complexes/ Parks/ Growth Centers.

3.5 SIPCOT initiate the process of closing the unauthorized bore wells located within the industrial area in view of limiting the groundwater extraction and mandating the industrial units to use treated water.

4. ENVIRONMENTAL AWARENESS, AWARDS AND TRAINING PROGRAMS

4.1 SIPCOT plans to conduct environmental awareness and training programmes for the allottee units along with TNPCB, Integrated Waste Management Association, and other government bodies.

4.2 SIPCOT may conduct training program for SIPCOT employees in:

a) Understanding of Environmental Laws.
b) Updating knowledge on environmental rules and its subsequent amendments.
c) Protocol for conducting environmental monitoring within the industrial units.
d) Environmental Health and Safety management system.

4.3 SIPCOT also has plans to issue Green Awards to the Industries, to encourage green initiatives and to maintain sustainability in their industrial premises.

5. ENCOURAGING INDUSTRIES TOWARDS GREEN INITIATIVES

5.1 In order to promote Green Initiatives, SIPCOT 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.

5.2 SIPCOT also encourages industries to reduce the use of one time use plastics, Styrofoam, and other plastic material during the packing and delivery of goods. SIPCOT encourages allottees to maintain the biodiversity nature of their nativity.

5.3 SIPCOT plans to gradually implement Energy Conservation measures such as the installation of LED for lighting the roads, common areas and to utilize solar energy wherever possible.

6. ENVIRONMENTAL REGULATORY UPDATING AND DOCUMENTATION

The Environmental Management Cell will review, implement, update, and comply with the Environment Policy to ensure the effective implementation of environmental safeguard measures. The team shall review the progress of regulatory compliance of SIPCOT and initiate necessary action for the compliance of the same. The team shall document the activities implemented under Corporate Environmental Responsibility through the line department of SIPCOT for periodical review and submission of the same to the regulatory authority.

7. POLICY REVIEW AND IMPLEMENTATION

7.1 The Environment Policy shall be implemented by improving the institutional arrangements and resources for the environmental improvement measures identified in the policy.

7.2 This policy has been drafted with current developments, information, and knowledge. The progress with respect to priorities, strategies, and actions addressing emerging environmental issues if any shall be submitted to the Board of SIPCOT for review periodically.

8. SUMMARY

8.1 SIPCOT shall obtain Consent to Establish (CTE) / Consent to Operate (CTO) for the Industrial Complexes/ Parks/ Growth Centers from Tamil Nadu Pollution Control Board, as per Sl. No. 2.1.3 supra.

8.2 SIPCOT shall submit Half Yearly Compliance Report along with the results of monitoring data and to submit Environmental Statement (Form-V) for each financial year ending 31st March to the respective regulatory authority and to upload the same in SIPCOT website, as per Sl. No. 2.2.1 (a) & (b) supra.

8.3 SIPCOT shall take necessary initiatives to monitor ambient air, water, and noise quality during the operation phase in respect of the Projects for which EC was obtained and the projects to be implemented in the future, as per Sl. No. 2.2.1 (c) supra.

8.4 SIPCOT shall allocate a separate fund for implementing Environmental Protection Measures, in respect of the projects for which EC has been obtained after the CER notification dated 01.05.2018, the cost of the project shall include CER provisions for the specified percentage depending upon the investment amount. The fund shall be utilized for the purpose of allocation of Green initiatives and CER activities, as per Sl. No. 2.3 supra.

8.5 SIPCOT shall approve the Environmental Management Cell consisting of 7 team members headed by SIPCOT Managing Director to enforce and implement the plan designed by the team, as per Sl. No. 2.4 supra.

8.6 SIPCOT shall develop greenery around its boundary wall of the acquired land, maintained, and recommends the individual units to allocate 33% of green area as per EIA notification, as per Sl. No. 2.5.4 supra.

8.7 SIPCOT shall conduct environmental awareness training programs for the industries and SIPCOT employees on an annual basis, as per Sl. No. 4.1 & 4.2 supra.

8.8 SIPCOT shall gradually implement Energy Conservation measures such as the installation of CFL/TFL for lighting the common area, to utilize solar energy wherever possible, as per Sl. No. 5.3 supra.

EMERGENCY EVACUATION AND DISASTER MANAGEMENT PLAN

for the proposed

Development of Industrial Park at Varapatti village, sulur taluk, Coimbatore district, Tamilnadu - Over an extent of 150.036 HA (370.59 acres)

(Exclusively for Industries which do not require Environmental Clearance - Neither A nor B category)

AT

Village: Varapatti
Taluk: Sulur
District: Coimbatore
State: Tamil Nadu

Project Termed under Schedule 8(b) - Category B1

BY

STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED

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

PREPARED BY

ENVIRONMENTAL CONSULTANT

HUBERT ENVIRO CARE SYSTEMS (P) LTD, CHENNAI

AUGUST 2024

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1. INTRODUCTION

1.1 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.

1.2 PURPOSE

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

1.3 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.

1.4 OVERVIEW

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

Everyone leaves the premises safely.

1. A procedure to safely evacuate individuals who cannot negotiate stairs is in place.
2. Building occupants are accounted for after an emergency evacuation.
3. 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.

1.5 PROJECT DESCRIPTION

The proposed project is “Development of Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu” over an extent of 150.036 HA (370.59 acres). (Exclusively

for Industries which does not require Environmental Clearance Neither A nor B Category) by State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).

Since the area of the industrial park is <500 Ha and not housing any A or B category industry as per EIA Notification 2006 and its subsequent amendments, the project is falling under Schedule 8(b) Category – B1.

The type of industries proposed,

Table 1: The type of industries proposed

S. No	Industry Type	% of plotted area
1	Aerospace and Defence Components manufacturing and other Non EC category industries	100
Total		**100**

1.6 PROJECT LOCATION

Proposed project site is located at Varapatti Village, Sulur Taluk, Coimbatore District of Tamil Nadu. The nearest Highway to the project site is SH-165 (Kamanaikanpalayam-Annur),~1.1 km, ENE and NH-81 (Coimbatore-Chidambaram), ~9.05km, NNE.

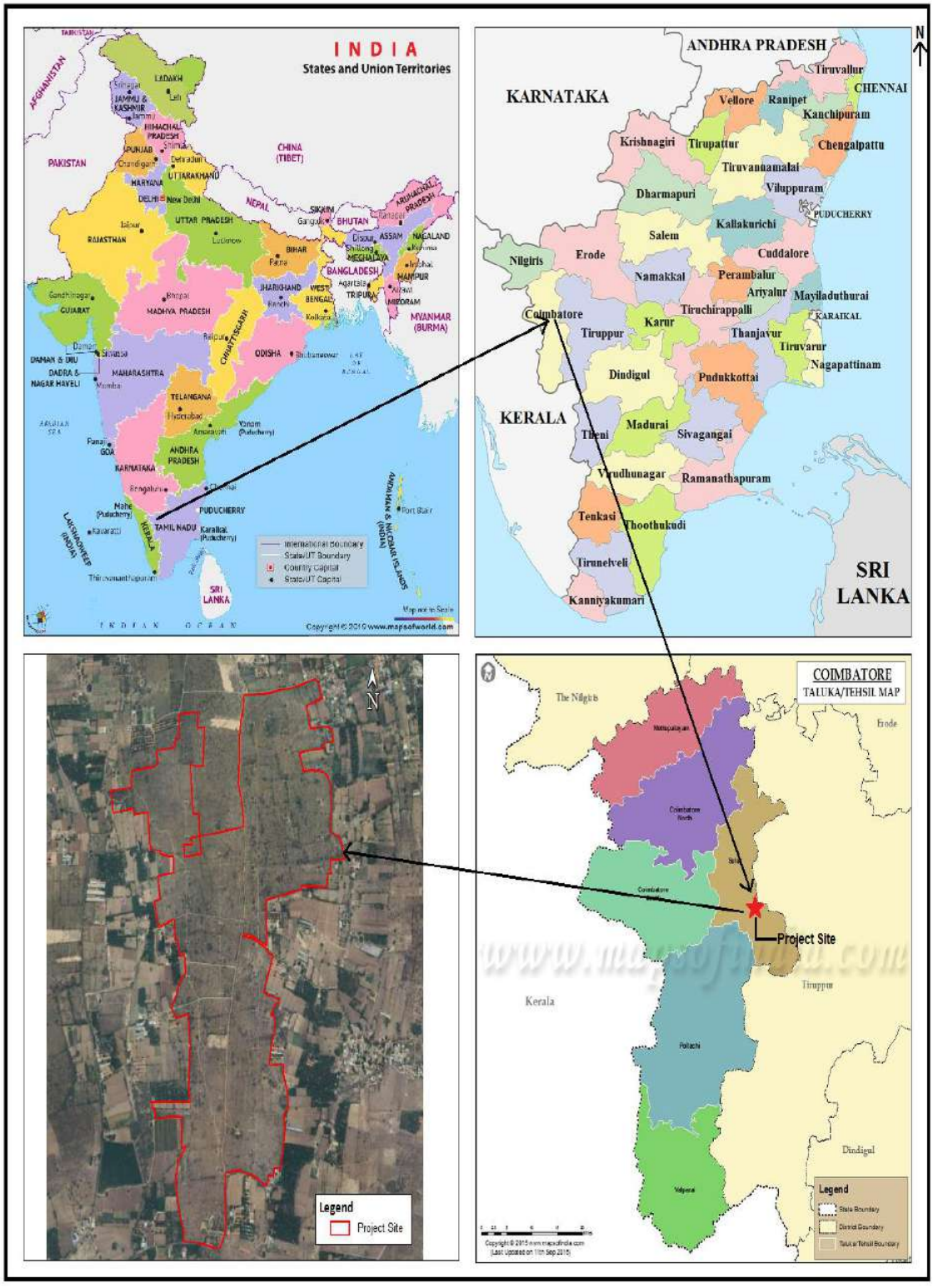


Figure 1: Location Map of the Project

1.7 PROJECT LAYOUT

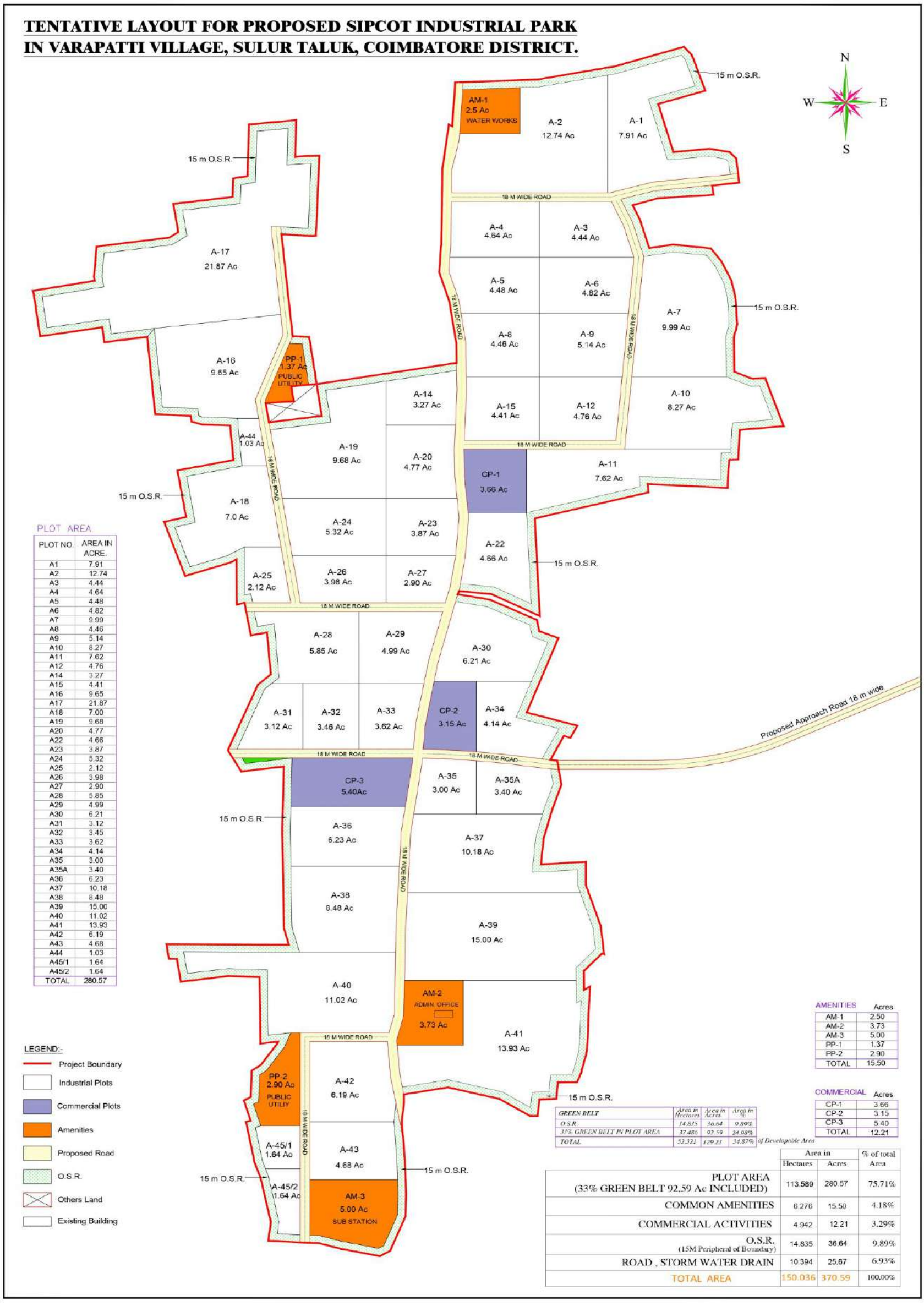


Figure 2: Project Layout

1.8 PROJECT DETAILS AND EMERGENCY CONTACTS

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

SIPCOT has so far developed 28 Industrial Parks/ Complexes including 6 Sector Specific Special Economic Zones (SEZs) in 16 districts across Tamil Nadu. SIPCOT is the Nodal Agency for Government of Tamil Nadu to sanction and for the disbursement of Structured Package of Financial Assistance to large industrial units.

Tamil Nadu Industrial Development Corporation Ltd (TIDCO), a Government of Tamil Nadu Undertaking company facilitates large industrial and infrastructure projects in Tamil Nadu involving large investments and huge employment potential. TIDCO is the Nodal Agency for the development of Chennai Bengaluru Industrial Corridor (CBIC), Chennai Kanyakumari Industrial Corridor (CKIC), Western Corridor (Kochi – Bangalore Industrial Corridor) and Industrial Corridor projects.

It has been diligently working as in the development of the Industrial Park in Tamil Nadu, in line with the state's goals of achieving a target of a USD 1 trillion economy. TIDCO has identified the present land in Varapatti Village, Sulur Taluk, Coimbatore District for the Development of the proposed Industrial Park.

SIPCOT and TIDCO would jointly design and develop the Industrial Park at Varapatti through Joint Venture, wherein TIDCO is the owner of the Land parcel and SIPCOT is the infrastructure developer of the industrial park and is responsible to obtain necessary statutory clearance/approvals.

The proposed project is "Development of Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu" over an extent of 150.036 HA (370.59 acres).

(Exclusively for Industries which does not require Environmental Clearance Neither A nor B Category) by State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).

Since the area of the industrial park is <500 Ha and not housing any A or B category industry as per EIA Notification 2006 and its subsequent amendments, the project is falling under Schedule 8(b) Category – B1.

Table 2: project details and emergency contacts

FACILITY NAME	Development of Industrial Park at Varapatti village, Sulur taluk, Coimbatore district, Tamilnadu - Over an extent of 150.036 Ha (370.59 Acres).
LOCATION	Village: Varapatti Taluk: Sulur District: Coimbatore State: Tamil Nadu
EMERGENCY COORDINATOR	SIPCOT Project Officer
PHONE:	044-45261777
ALTERNATE EMERGENCY COORDINATOR	SIPCOT office
PHONE:	044-45261778
OPENING HOURS	
AVERAGE NO. OF MANPOWER IN THE PARK	Construction phase: 100 Nos. Operational Phase: 9378 Nos.
EMPLOYEE POPULATION AFTER THE OFFICE HOURS	Will be identified after the occupancy of all the plots.
LOCATIONS, WHERE THE EVACUATION PLAN DRAWINGS ARE PASTED	1. Roads 2. Commercial and Common Amenities Areas
ASSEMBLY POINTS	Nearby the gates of the entrance, utility and common amenities.
EMERGENCY TELEPHONE NUMBERS	0422-2300211
OTHER EMERGENCY CONTACT NUMBERS	0422-2220077

1.9. GENERAL PROCEDURES

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

A. Pre-planning

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

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

B. Notification of Emergency Warning

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

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

C. Emergency Alarms and Advisories

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

Sprinkler alarm smoke detection fire alarm in the event of a fire, sprinkler and

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 pre-plan 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.

2. GENERAL GUIDELINES

2.1 Guidelines applied to this EEP

1. The Emergency Coordinator and alternate must be trained in emergency evacuation procedures. It is the responsibility of the department to train their staff accordingly.

2. All personnel must be trained in safe evacuation procedures. Refresher training is required whenever the employee's responsibilities or designated actions under the plan change, and whenever the plan itself is changed.

3. The training may include use of floor plans which clearly show the emergency escape routes included in the EEP. Floor plans and maps shall be posted at all times in main areas (i.e. offices, meeting rooms, stairwells, exit corridors etc.) to provide guidance in an emergency.

4. No visitor is permitted to re-enter a previously evacuated area until advised by the authorities.

5. Each staff member must also be trained and drilled in accordance with the evacuation plan.

2.2 Assembly Occupancies

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

- All staff must be trained and drilled in their duties and responsibilities related to emergency evacuation.

- Conducting mock drills (including fire drills and toxic release drills) to check whether the planned arrangements are working as per the required norms or not along with a few occupants.

- 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.

3. DUTIES AND RESPONSIBILITIES

3.1 Responsibilities of emergency Coordinator:

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

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. 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.

4. EVACUATION PROCEDURES FOR FACILITY OCCUPANTS

4.1. Evacuation

When the fire alarm sounds,

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

Notes and Precautions:

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

4.1.1. Evacuation Route

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

- **Commercial and Common Amenities Areas**
- **Roads of the site**

4.1.2. The Evacuation Routes and assembly points

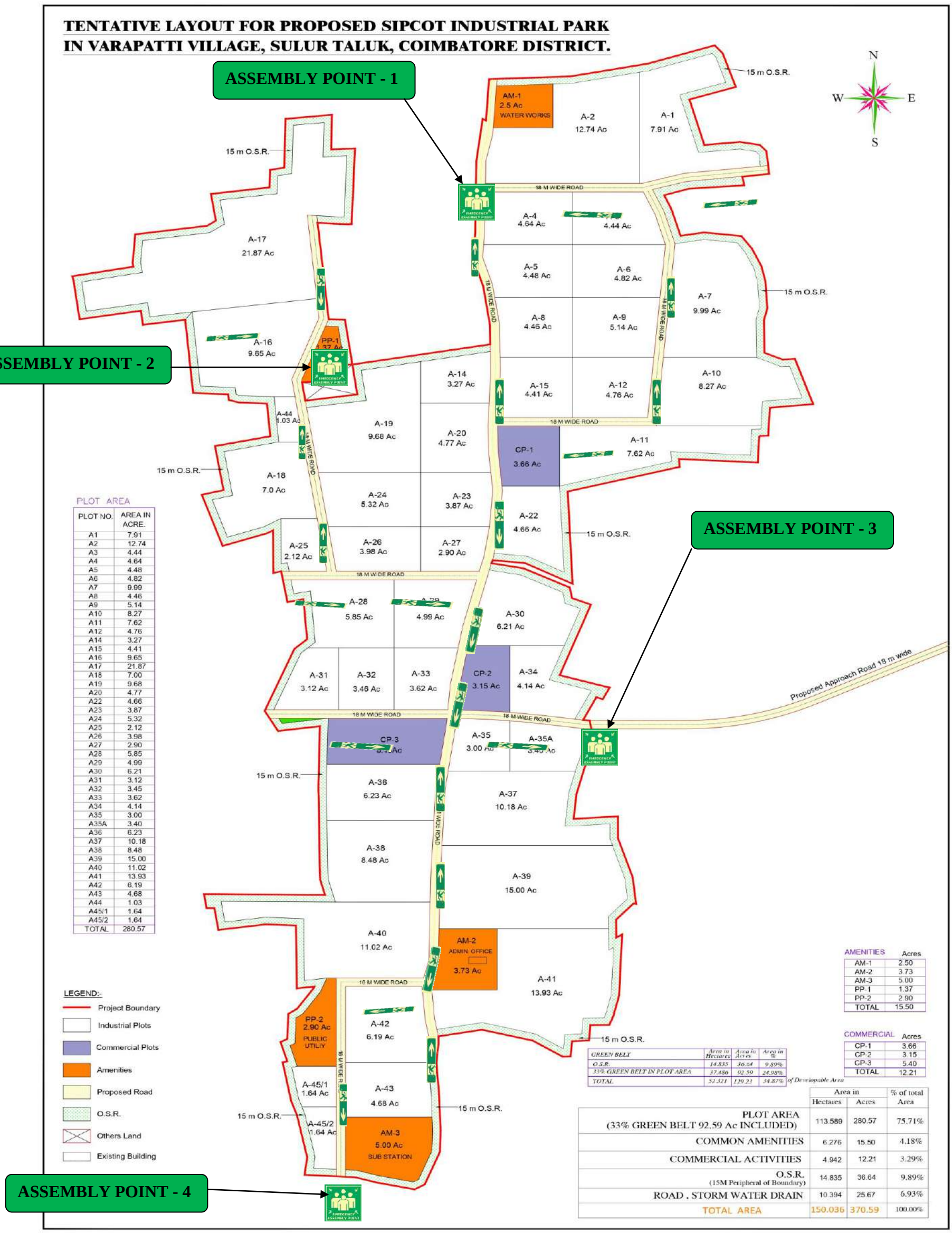


Figure 3: The evacuation routes and assembly points layout

4.1.3. EVACUATION PROCEDURE

DISABILITIES

- Each person has different skills and abilities. This reality calls for specific provisions for individuals with disabilities in the event of an emergency. The occupant with a disability is responsible for informing the security officer, while entering the building, that she/he will require assistance during an evacuation. (This can be done using a checklist form) It is important not to assume that persons with obvious disabilities need assistance, or to assume what type of assistance they may need.
- Persons with disabilities must study and remain aware of the features of each facility they are in, including stairways, exits, phone locations, and elevator procedures. At times, assistance from others may be needed. Individuals with disabilities may seek assistance (escorts) from others in their classes or work areas if emergency evacuation becomes necessary.

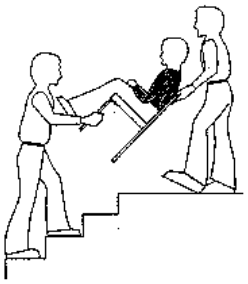
- Assign a designated area for persons who may need assistance in evacuation. The area for rescue assistance will have direct access to an exit, where those who are unable to use stairs or who are unable to navigate the emergency route may remain.
- Most people with vision limitations will be familiar with their immediate area at a given time. In the event of an emergency, tell the individual how and where to exit.
- Have the person take your elbow and escort them, as you walk, tell the person where you are and advise them of any obstacles. When you reach safety, orient the person to where they are and ask if any further assistance is needed.
- Since a person with impaired hearing may not perceive audio emergency alarms, an alternative warning technique is required. Two methods of warning are:

1. Write a note advising them of the emergency and the nearest evacuation route.
2. Turn the light switch on and off to gain attention, and then indicate through gestures or in writing what is happening and what to do. It may be prudent to escort the person with a hearing impairment as you leave the building.

- Security Officer should discuss emergency procedures with individual occupants who have obvious disabilities, those who have informed them of any special needs. It must be determined what assistance they may need and how they best to communicate.
- If a person remains in an area other than a designated area of rescue, then she/he must inform evacuating building occupants of their location.
- In an emergency, do not hesitate to inform others you need assistance, if your regular assistant is absent. Inform people unfamiliar with your needs how to assist you.

TWO-HANDED SEAT CARRY

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



CHAIR CARRY

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

4.1.4. RESPONDING TO EMERGENCIES

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

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.

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

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

Police	100
Fire	101
Ambulance	108
Disaster force	1078

4.1.5. ACCOUNTABILITY PROCEDURES FOR EMERGENCY EVACUATION

Designated Evacuation Assembly Areas:

Groups working together on or in the same area should meet outside the building in the prearranged designated Evacuation Assembly Area. Security Officers and Emergency Coordinators will conduct head counts once evacuation has been completed and report to the

Incident Coordinator. The Emergency coordinator of the property is responsible to do an immediate head count **(not later than 2 minutes)** and report to the person in charge of the building evacuation (Incident Commander) who is normally from Security unless the Authorities have taken over the situation.

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

Housekeeping

- Good housekeeping will be the responsibility of ALL occupants.
- Waste materials are to be discarded in their proper places.
- All aisles and exits will be kept clear.
- Access areas to fire extinguishers will be kept clear.
- Emergency telephone numbers will be posted on all telephones.
- All fire/smoke doors are to remain closed and unobstructed from their intended function of retarding the spread of fire and smoke.
- Maintenance of Fire Equipment and Systems
- Refer questions and problems regarding the fire sprinkler and/or smoke detector systems, fire extinguishers and their locations to the Person in charge.

4.2. POST-EMERGENCY EVALUATION

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

Post Evacuation Activities

- Provide a system to account for all disabled occupants `in designated Evacuation Assembly Areas

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

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 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.

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 / co-ordination 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.

The possible emergencies are as follows

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

5.1.2. ACTION PLAN TO VARIOUS EMERGENCIES

5.1.2.1. 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.

5.1.2.2. 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.

5.1.2.3. NATURAL CALAMITIES

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

- Earthquake
- Flooding
- Cyclone

a) Earthquake

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.
- Does not use lift. Do not stand near doors, gate
- If you are driving, or on road, go to open space
- Keep away from walls, building, and electric pole/wires.
- Keep away from building, sheds, electric wires
- Keep cool & keep others cool.

ii. 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.

b) Flooding

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.

c) Cyclone

I. In case of cyclone alert (before cyclone hits):

- Listen to the radio (All India Radio stations give weather warnings)
- Keep monitoring the warnings. This will help one to prepare for a cyclone emergency.
- Pass on the information to others. But one must not to spread rumors.
- Employees would be made aware to switch off electrical mains at emergency situation.
- 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.
- 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

II. 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

5.1.2.4. 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.

5.1.2.5. Medical Emergency

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

5.2.1. Introduction of Offsite emergency

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.

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 calamity, fire or injury. These procedures must be documented and all stakeholders should have the opportunity to practice their emergency response skills regularly.

The purpose of this plan is to describe the activities to be carried out in case of a major emergency or a disaster, assist concerned agencies in planning for hazardous materials incidents and to serve as a guide & training aid.

This plan is developed for the Govt. agencies and the industries to help them in understanding their roles in case of an emergency.

The purpose of this plan is also to outline the procedures for immediate action, if major off-site emergencies occur involving Major Hazard installations in the district.

Every Major Accident Hazard installation has its Onsite Emergency Plan to deal with an emergency inside the premises of the factory.

If an emergency arises beyond the resources of the factory, they have an obligation to seek assistance from the Government.

5.2.4. Scope

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

The plan will apply to the following emergency scenario:

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

5.2.5. Disaster Mitigation Measures:

a. Structural Sufficiency:

- Ensure compliance with structural design standards specified in the NBC, 2016, for all new construction and retrofit existing structures to meet seismic and wind load requirements.
- Conduct regular structural inspections and maintenance to identify and address structural deficiencies.
- Implement measures such as reinforcing vulnerable structural elements, upgrading foundations, and strengthening connections to enhance structural integrity.

b. Fire and Life Safety Compliance:

- Installation fire-resistant building materials and compartmentalization systems to prevent the spread of fire.
- Provide adequate fire suppression equipment, including fire extinguishers, sprinkler systems, and fire alarms, in accordance with NBC guidelines.
- Defined evacuation routes, assembly points, and emergency response procedures.
- Conduct regular fire drills and training sessions for occupants.

c. Emergency Evacuation Plan:

- Developed site-specific evacuation plans for different disaster scenarios, including earthquakes, floods, cyclones, and fires.
- Designated evacuation routes, assembly areas, and emergency communication methods.
- Assign responsibilities to designated personnel, including evacuation wardens and first aid responders.
- Conduct regular evacuation drills and exercises to familiarize occupants with emergency procedures and routes.

d. Communication and Coordination:

- Establish a centralized communication system to disseminate emergency alerts, instructions, and updates to all occupants.
- Coordinate with local emergency services, including fire departments, police, and medical personnel, for mutual aid and assistance during emergencies.
- Maintain contact information for key stakeholders, emergency responders, and government agencies for quick coordination and response.

The details of nearby Hospitals / Clinics, Emergency contact details etc. are given in the EIA report.

5.3. District Disaster Management Authority

The objective of DDMP is to formulate a set of guidelines, based on the NDMP and SDMP which will be a well-defined mechanism to meet any eventualities in future and which have to be updated based on the district needs, under the supervision of the District Collector in consultation with all line departments in accordance with the provisions of the Disaster Management Act. 2005. The various emergency support function of line departments are to be listed out in this plan. An inventory of resources available in the District is to be provided. The DDMA have to be fine-tuned by the requirement of the individual areas and emergency situations.

Vision:

To build a Safer Disaster resilient district by developing a pragmatic, multifaceted strategy for disaster management that will harness collective efforts of all stake holders in case of any eventuality.

Aim of District Disaster Management Plan:

- To outline the vulnerability of different parts of district to different type of disasters
- Set in place a reliable forecasting and early warning systems
- To specify measures to be adopted for prevention & mitigation of disasters
- Highlights the role of NGO's and other NGO in different phases of managing disasters
- Develop Standard Operating Procedure (SOP) for various possible disaster
- Define roles and responsibilities of different line department
- Integration of mitigation measures with all line departments

5.4. 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.

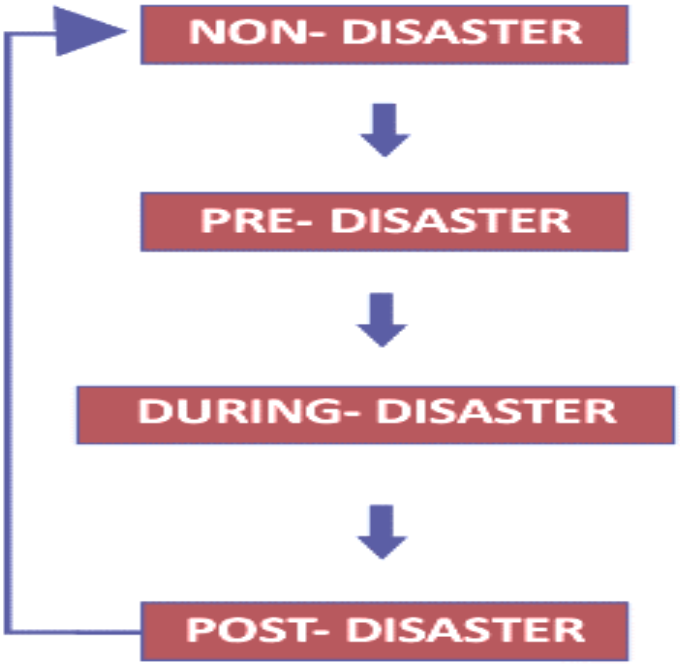


Figure 4: Framework of SDMP

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.

Community Based Disaster Management (CBDM)

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

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

Community-based disaster management (CBDM) – Approaches

Community-based disaster management (CBDM) is an approach that is incorporated in the State Disaster Management Plan that will contribute to building the capacity of communities to assess their vulnerability to both natural and man-made hazards and develop strategies and resources necessary to prevent and mitigate the impact of identified hazards as well as respond, rehabilitate, and reconstruct following its onset.

Adequate awareness and preparedness of the community to respond to any such situation can be crucial in mitigating damage and suffering. Therefore, there is no better alternative to

community and local level capacities for disaster response. The state and the district administration shall enhance the community's resilience against through various measures:

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

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

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

5.5. 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.

District Disaster Management Authority

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

- District Collector
- District Panchayat Secretary – Co. Chairperson
- Superintendent of Police (SP)
- Personal Assistant (General) to the Collector District Revenue Officer (DRO) Chief Executive Officer
- Additional Collector Development
- Joint Director (Health)

- The DDMA shall monitor the district preparedness throughout the year and particularly review non-disaster activities and preparedness of the departments to handle situations.
- DDMA is required to assess the situation and give directions to the department heads in the district for better handling of any disaster situation.
- The DDMA calls for outside support if necessary and will keep the SDMA/SEC informed about the handling of the situation
- Process requests for the NDRF/Army or any other specialized help requested by the government.
- During a disaster, the DDMA operates through the DEOC which is similar to the SEOC in functioning.

Roles and Responsibilities of Government Departments/Officials

District Collector

All departments of the State Government, including the Police, Fire Services, Public Works, Irrigation, Rural Development and others shall work in a coordinated manner under the

leadership of the district collector during disasters. The overarching role of the DC in handling the situation during a disaster is highlighted below.

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

- 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 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 man-made 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 Arakkonam, Vellore District, which maintains a close liaison with the designated State Governments and are available in the event of any disaster situation.

State Disaster Response Force (SDRF)

State Disaster Response Force (SDRF) team has been constituted with a strength of 80 police personnel comprising one 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 have been trained in disaster management and rescue operation in consultation with nation disaster Response Force (NDRF)

The SDRF is trained on the lines of the NDRF to deal with any untoward situation. In the past the SDRF has also been effectively involved 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, firefighting, medical and first aid.

Home guards:

It is a voluntary citizen's force to assist the police in maintenance of law and order and for meeting emergencies like floods, fires, cyclone etc.

National Service Scheme (NSS):

NSS is the Social Service Unit at the College level and has a vibrant and easily approachable youth force which can reach a spot that is in close proximity to a college in an organized manner to take up challenges to provide preliminary help, aid and awareness to the victims. They are trained in disaster response techniques such as detection and location, extrication and access, firefighting, medical and first aid.

National Cadet Corps (NCC):

There are 5 NCC Group Headquarters and 51 NCC units under the control of this Directorate. 5 NCC Group Headquarters are located in Chennai. (2) Coimbatore, Madurai and Tiruchirappalli. 51 NCC units are located in various places of Tamil Nadu. They were trained in formulation of SOPs / Plans within the State, Establishment of Control Room, check list of Warning Systems and Communication Systems, Capacity Building of units and cadets and assist during the emergencies

Nehru Yuva Kendra Sangathan (NYKS):

It is an autonomous body under the Ministry of Youth Affairs and Sports with a nation – wide presence. In nearly 500 districts it is a large grass- root level youth organization. NYKS volunteers have traditionally been active in the forefront of assisting the civil administration in times of disasters. The organization has been active in relief management and distribution. Their involvement will need to be harnessed and they should be a part of mock drills.

Indian Red Cross Society:

The Red Cross Society function at the state and district levels. This is a movement for providing relief to the people when they are in dire needs. As an organization that provides relief internationally to people in distress, it has credibility at the field level.

Indian Railways:

Indian Railways is spread over a vast geographical length over 63, 000 route kilometers in India. In the event of a disaster, Southern Railways can assist in the rescue and relief operations. Railways are often the preferred mode of transport both for the movement of people and relief material in bulk. Railways will also have a disaster management plan that will involve coordination with the district or state administration. The more effective the networking mechanism is the better will the coordination be in times of difficulty.

Emergency Management Contact Directory:

An Emergency Management Contact Directory Containing contact numbers of all nodal officers in disaster management at the national, State and District level – of the Government, Private, NGO’s and the community will need to be prepared and maintained. The Collector

will supervise and coordinate the preparation and regular updating of this directory at the district level and send a soft to the TNSDMA

- The TNSDMA and DDMA may develop a comprehensive resource inventory of NGO'S CBO's and Organizations in disaster management and emergency response. Web-enabled centralized database will need to be tapped. Networking will enable quick access resources minimize response time in emergencies. The system should give the location of specific equipment and resources as well as controlling authority for that resource so that it can be mobilized for response in the shortest possible time.

- The database will need to be made available at the district and state level and may be used for all emergencies.

- Similarly, an expect database comprising of trained experts in various disasters, volunteers, NGOs retired Government Servant, swimmers, rescuers etc. will need to be prepared by each district and sent to the TNSDMA.

- The District Collector will need to maintain an updated list of professionals like doctors, paramedics, civil and construction engineers, architects and town planners and send

NGO

- NGOs play a key role in disaster situations and go a long way in plugging the gaps during emergencies as they often have good relationship with the local Community. Here is why good, sincere and hard-working NGOs need to be involved in disaster mitigation activities.

- NGOs play a very important role in mobilizing communities and in initiating Disaster Risk Reduction activities.

- The strong linkages which NGOs have with grassroots communities can be effectively harnessed for creating greater public awareness on disaster risk and vulnerability, initiating appropriate strategies for strengthening the capacity of stakeholder groups to improve disaster preparedness, mitigation and improving the emergency response capacities of the stakeholders.

- In addressing the emerging concerns of climate change adaptation and mitigation, NGOs can play very significant role in working with local communities and introducing innovative approaches based on the good practices followed in other countries.

- NGOs can bring it financial resources from bi-lateral and multilateral donors for implementing pragmatic and innovative approaches to deal with disaster risk and vulnerability, and also by effectively integrating and converging the various government programmers, schemes and projects to create the required synergy in transforming the lives of at-risk communities.

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 Center for Ocean Information Services

Table 3: Disasters and agencies

Tamil Nadu State Disaster Management Agency will coordinate with central agencies. These agencies shall be responsible for keeping track of developments in respect of specific hazards assigned to them and inform the designated authorities / agencies at National, State and District levels about the impending disasters. All these agencies would develop guidelines for early warning of disasters.

Preparedness Measures:

Disaster preparedness refers to measures taken to prepare for and reduce the effects of disasters. That is, predict and – where possible – prevent them, mitigate their impact of vulnerable population, and respond to and effectively cope with their consequences. Disaster

preparedness is best viewed from a broad perspective and is more appropriately conceived of as a goal, rather than as a specialized programme or stage that immediately precedes disaster response.

Disaster preparedness is achieved partially through readiness measures that expedite emergency response, rehabilitation and recovery and result in rapid, timely and targeted assistance. It is also achieved through community-based approaches and activities that build the capacities of people and communities to cope with and minimize the effects of a disaster on their lives.

A comprehensive disaster preparedness strategy would therefore include the following elements:

Table 4: Disaster preparedness strategy elements

1.Hazard, risk and Vulnerability assessments	2.Response mechanisms and strategies	3.Preparedness Plans
4.Coordination	5.Information Management	6.Early warning systems
7.Resourse mobilization	8.Public education, training & rehearsals	9.Community-Based disaster preparedness

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 manmade disasters like Structural Collapse, Stampedes, Terrorists attacks, fire etc.

Nodal Agencies for Early Warning

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

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

The major areas of emergency response activities and the respective responsible agencies are listed below:

Table 5: Emergency response activity and their agencies

S.NO	EMERGENCY RESPONSE ACTIVITIES	RESPONSIBLE AGENCY
1	Activation of Trigger Mechanism	SDMA, DDMA
2	Risk Communication	RADM&M Dept., SEOC, DEOC, DIPR, Media andTelecommunication 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
6	Cordoning off the disaster affected areas	SDRF, NDRF, Police, Home Guards and volunteers
7	Law and order maintenance	Police and Home Guards
8	Search and Rescue operation	Fire and Rescue Services, SDRF, NDRF, Police etc.,
10	Relief camps and basic amenities in shelters	RADM&M, Health Department & Local bodies
11	Identification of dead and injured	RADM&M, Police, Health Department and local bodies
12	Arrangement of medical support for	Health Department

	causalities	
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 and 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, Highways, Urban / Rural local bodies, RD&PR, TANGEDCO
20	Provision of water	TWAD, CMWSSB and local bodies
21	Restoration of Electricity	TANGEDCO
22	Resumption of transportation	Road transport and highways
23	Food Arrangements	RADM&M, civil supplies and local bodies
24	Provision of relief supplies	RADM&M, civil supplies, RD&PR and Urban local bodies
25	Temporary mortuary / dead body disposal	Health, RADM&M and local bodies
26	Evacuation and shelter arrangements 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

6. PLAN DEVELOPMENT AND MAINTENANCE

- SIPCOT is Only a developer. Individual industries will have their own Emergency Evacuation Plan and Disaster Management Plan
- This plan will be revised annually and/or updated time to time in accordance the authorities by individual industries.
- Departments and agencies assigned responsibilities in this plan are responsible for developing and maintaining SOPs covering those responsibilities.

ANNEXURE-1

General Evacuation Procedures

1. The following is a generalized step-by-step evacuation procedure to be followed:
2. The primary evacuation alarm is the fire alarm which will either be a loud ringing bell or continuous wailing siren AND /OR announcement to evacuate**.** All are required to evacuate a building when the Alarm is sounded.
3. Upon hearing an alarm or being instructed to evacuate, immediately

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

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

- Once clear of the building, report directly to your designated assembly area and Emergency Coordinator. Assembly coordinators or Floor Wardens are to perform a head count of all occupants in their building evacuation area and inform the concerned officer of occupants unaccounted for. After reaching your assigned evacuation assembly area, *do* not attempt to return to your area or inside the building until the **"all clear"** signal has been given by the Authority.

- If the designated assembly area is unsafe or inaccessible, evacuate the building to outside areas that are clear from trees and the building itself. Wait for instructions from your supervisor, security or fire or police personnel.

- The on-scene employee with the highest degree of emergency response preparedness will assume charge until relieved by Security or fire or police.

ANNEXURE 2

EMERGENCY ORGANISATION

Emergency Organization

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

Map: Emergency Organization

EMERGENCY ORGANISATION CHART				
Designation	Name	Phone (O)	Phone (R)	Phone (M)
EMERGENCY CONTROL CENTRE (ECC) SITE MAIN CONTROLLER				
Emergency Coordinator				
OTHER KEY PERSONNEL (OKP)				
Alternate Emergency Coordinator				
Safety Person in Charge				
INCIDENT CONTROLLERS (IC)				
Visiting Hours				
DEPUTY INCIDENT CONTROLLERS (Dy. IC)				
Visiting Hours				
KEY STAFF				
Communications				
Transport & Logistics				
Maintenance				
EHS				
EXTERNAL AGENCIES				
Near-by Hospital				
Police Station				
Fire Office				
Editor, Local				

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

ANNEXURE 3

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.

ANNEXURE 4

IMPORTANT CONTACT DETAILS

TAMILNADU DISASTER MANAGEMENT AUTHORITY DETAILS

Designation	office	Mobile	fax	Email ID
Chairman and project coordinator	28411552 Ext101	9445000444	28546624	tnsdma.chaiman@gmail.com
Director (Disaster management)	28528745 Ext103	9444446881	28592921	relief@tn.nic.in cdrrp.osd@gmail.com
Joint director (Disaster management)	28411552 Ext105	9444446559		tnsdma.jd@gmail.com
Deputy director (public relations)	28411552 Ext106	9444446558		tnsdma.ddpr@gmail.com
Assistant director (P&M)	28411552 Ext105	9445461709		tnsdma.adpm@gmail.com
Assistant director (SP)	28411552 Ext108	9444446885		tnsdma.adsp@gmail.com
Assistant director (RR)	28411552 Ext109	9444446882		tnsdma.adrr@gmail.com

INDIAN METEOROLOGICAL DEPARTMENT

Designation	office	Mobile	fax	Email ID
Director general (IMD)	011-24611842	-	-	dierctorgeneral.imd@imd.gov.in
Deputy director general	28276752	9445256157	28276752	sbthambi@gmail.com
Director (TMD)	28229860	9444765065	28271581	metmds@bsnl.in
Scientist (seismic section)	282552002	9840460410		amudha2003@gmail.com

COIMBATORE DISTRICT DISASTER MANAGEMENT AUTHORITY

SI. No.	District Disaster Authority	Details	Contact Details
1	District Collector, Coimbatore	Chair person	9444168000, 0422-2222230
2	Superintendent of Police	Member	0422-2220077
3	District Revenue Officer	Member	9445000914, 0422-2300035
4	Project Director District Rural Development Agency, Coimbatore	Member	7373704213 9442212278, 0422-2301577
5	Joint Director of Health Services, Coimbatore	Member	9498027043, 0422-2220364
6	Personal Assistant(General) to Collector, Coimbatore	Member	9445008133, 0422-2301527

NAME AND CONTACT DETAILS OF THE OFFICERS TO BE CONTACTED IN CASE OF EMERGENCY – COIMBATORE DISTRICT

S. No	Designation	Mobile Number
1	District Collector	9444168000
2	District Revenue Officer	9445000914
3	Personal Assistant (General) to Collector	94450008133
4	Commissioner of Police	9443388003
5	Corporation Commissioner	9442504600
6	District Superintendent of Police	9498107333
7	Project Director, District Rural Development	9442212278
8	Sub Collector, Pollachi	9445000445
9	Revenue Divisional Officer, Coimbatore North	9442144401
10	Revenue Divisional Officer, Coimbatore South	9445000442
11	Personal Assistant (Election) to Collector	9443273661
12	Additional Personal Assistant(Lands) to Collector	9442229373
13	Personal Assistant (Accounts) to Collector	9486586537
14	Special Deputy Collector(SSS)	9443052049
15	Personal Assistant (Agriculture) to Collector	9344060610
16	Personal Assistant (Development) to Collector	7402607246
19	District supply and Consumer Protection officer	9445000245
20	District Inspection Cell Officer	9952648475
21	District Manager(THADCO)	9445029457
22	Assistant Commissioner(ULT)	9443677077
23	Deputy Director(Health)	9444424790
24	Joint Director(Health)	9498027043
25	DE Highways(Coimbatore)	9443332695
26	DE Highways (Pollachi)	9443169519
27	Chief Engineer (TNEB)	9445851751
28	EE/PWD/Buildings	9443823809
29	SE/PWD/WRO/Pollachi	9865268054

30	AD Town Panchayat	9443487481
31	AD Panchayat	7402607248

FIRE AND RESCUE DEPARTMENT

SI. No	STATION	OFFICE NUMBER	MOBILE NUMBER
1	District Officer	0422-2300211	9445086306
2	Assistant District Officer	0422-2300211	9445086307
3	Fire and Rescue Team	-	9445086308
4	Station Officer (i/c) Coimbatore(South)	0422-2300101	9445086310
5	Station Officer Coimbatore(South)	0422-2300101	9445086311
6	Station Officer Coimbatore (North)	0422-2450101	9445086312
7	Station Officer, Peelamedu	0422-2511001	9445086318
8	Station Officer, Ganapathi	0422-2595101	9445086314
9	Station Officer, Pollachi	04259-223333	9445086319
10	Station Officer, Valparai	04253-222444	9445086324
11	Station Officer, Mettupalayam	04254-222299	9445086316
12	Station Officer, Annur	04254-264101	9445086535
13	Station Officer, Sulur	0422-2689101	8973507059
14	Station Officer Kinathukadavu	04259-296101	9003778101

RISK ASSESSMENT (RA) STUDY REPORT

for the proposed

Development of Defence industrial park at Varapatti village, sulur taluk, Coimbatore district, Tamilnadu - Over an extent of 150.036 HA (370.59 acres)

(Exclusively for Industries which do not require Environmental Clearance - Neither A nor B category)

AT

Village: Varapatti
Taluk: Sulur
District: Coimbatore
State: Tamil Nadu

Project Termed under Schedule 8(b) - Category B1

BY

STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED

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

Prepared by

ENVIRONMENTAL CONSULTANT

HUBERT ENVIRO CARE SYSTEMS (P) LTD, CHENNAI

AUGUST 2024

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1. INTRODUCTION

1.1 PURPOSE OF THE REPORT

State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) is the nodal agency of Government of Tamil Nadu to ensure sustainable development of industries. The objective of SIPCOT is to establish, develop, maintain and manage industrial complexes, parks and Growth Centres at various locations across the State of Tamil Nadu.
SIPCOT has so far developed 28 Industrial Parks/ Complexes including 6 Sector Specific Special Economic Zones (SEZs) in 16 districts across Tamil Nadu. SIPCOT is the Nodal Agency for Government of Tamil Nadu to sanction and for the disbursement of Structured Package of Financial Assistance to large industrial units.

Tamil Nadu Industrial Development Corporation Ltd (TIDCO), a Government of Tamil Nadu Undertaking company facilitates large industrial and infrastructure projects in Tamil Nadu involving large investments and huge employment potential. TIDCO is the Nodal Agency for the development of Chennai Bengaluru Industrial Corridor (CBIC), Chennai Kanyakumari Industrial Corridor (CKIC), Western Corridor (Kochi – Bangalore Industrial Corridor) and Industrial Corridor projects.

It has been diligently working as in the development of the Industrial Park in Tamil Nadu, in line with the state's goals of achieving a target of a USD 1 trillion economy. TIDCO has identified the present land in Varapatti Village, Sulur Taluk, Coimbatore District for the Development of the proposed Defence Industrial Park.

SIPCOT and TIDCO would jointly design and develop the Defence Industrial Park at Varapatti through Joint Venture, wherein TIDCO is the owner of the Land parcel and SIPCOT is the infrastructure developer of the industrial park and is responsible to obtain necessary statutory clearance/approvals.

The proposed project is "Development of Defence Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu" over an extent of 150.036 HA (370.59 acres).

(Exclusively for Industries which does not require Environmental Clearance Neither A nor B Category) by State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).

Since the area of the industrial park is <500 Ha and not housing any A or B category industry as per EIA Notification 2006 and its subsequent amendments, the project is falling under Schedule 8(b) Category – B1.

1.2. SCOPE OF THE STUDY

The scope of the study is to analyse the risk involves the identification an assessment of risks the persons involved in the proposed project and the neighbouring populations are exposed to as a result of hazard occurrence. In the sections below, the identification of various hazards, probable risks in the proposed project, maximum credible accident analysis and which give a broad identification of risks involved are addressed. The scope of study mainly involves in hazard identification and risk assessment.

1.3. PROJECT LOCATION

Proposed project site is located at Varapatti Village, Sulur Taluk, Coimbatore District of Tamil Nadu. The nearest Highway to the project site is SH-165 (Kamanaikanpalayam-Annur),~1.1km, ENE and NH-81 (Coimbatore-Chidambaram), ~9.05km, NNE.

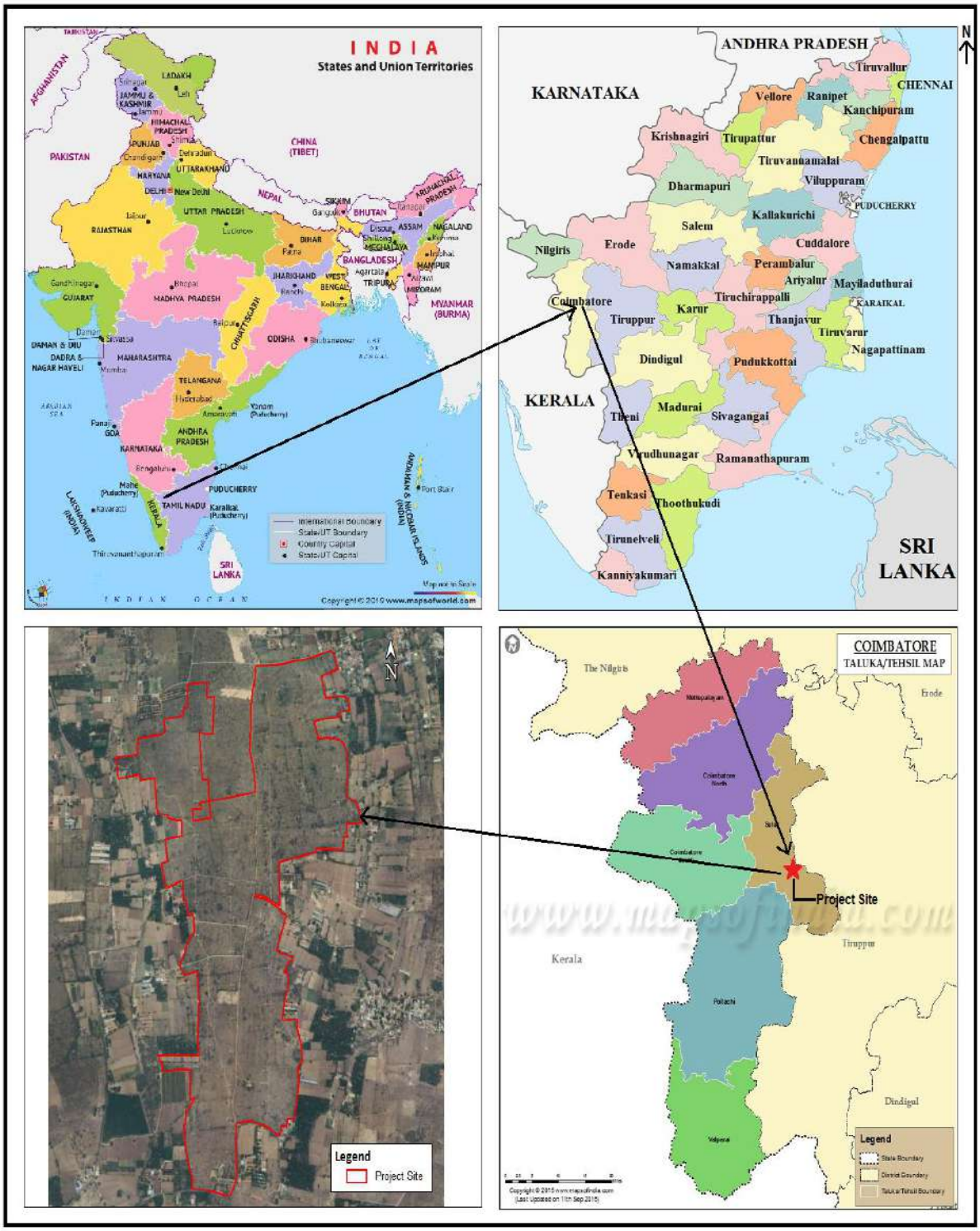


Figure 1: Location Map of the Project

1.4. PROJECT LAYOUT

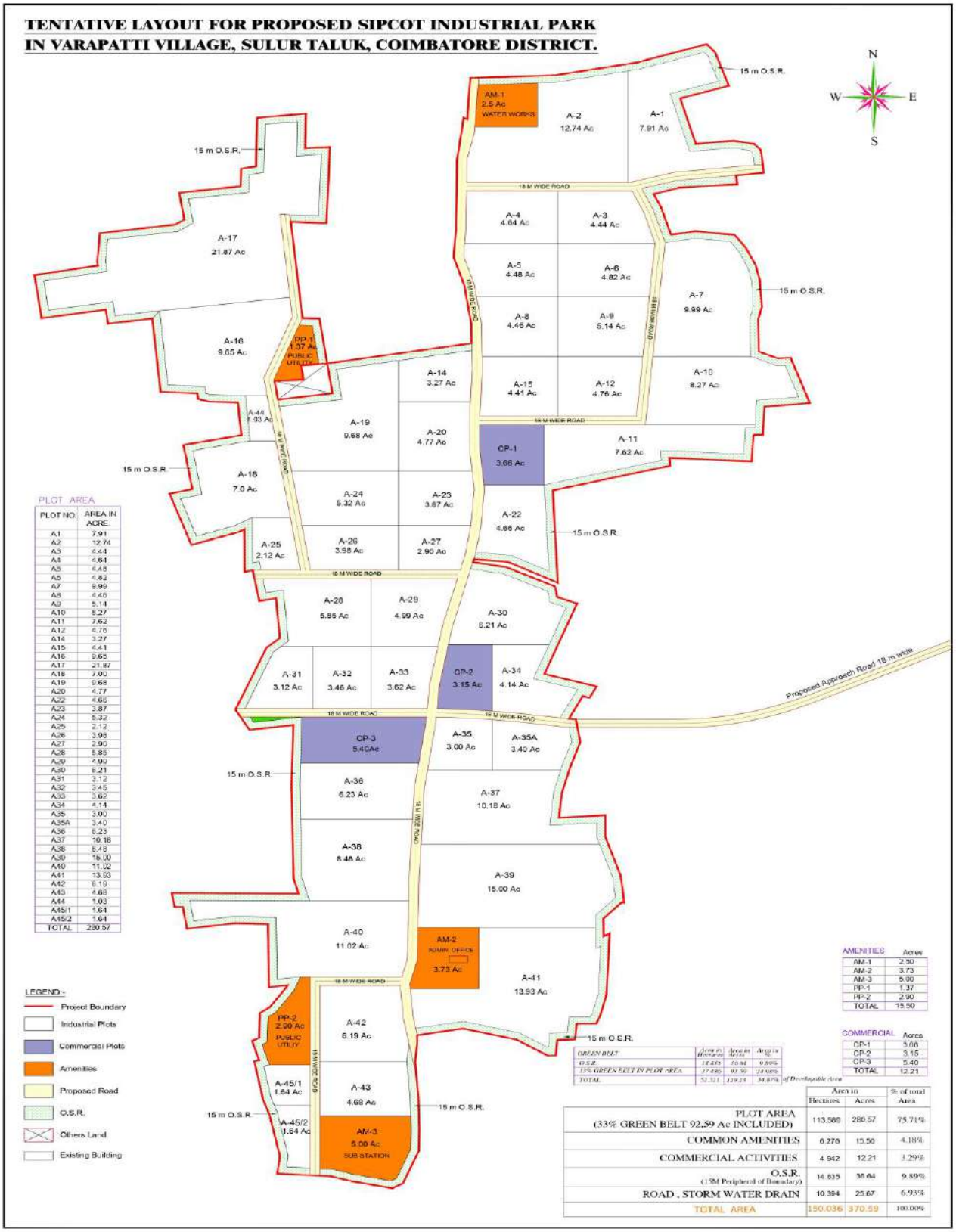


Figure 2: Project Layout

1.5. PROJECT DESCRIPTION

The proposed project is "Development of Defence Industrial Park at Varapatti Village, Sulur Taluk, Coimbatore District, Tamil Nadu" over an extent of 150.036 HA (370.59 acres). (Exclusively for Industries which does not require Environmental Clearance Neither A nor B Category) by State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT).

Since the area of the industrial park is <500 Ha and not housing any A or B category industry as per EIA Notification 2006 and its subsequent amendments, the project is falling under Schedule 8(b) Category – B1.

The type of industries proposed,

Table 1: The type of industries proposed

S. No	Industry Type	% of plotted area
1	Aerospace and Defence Components manufacturing and other Non EC category industries	100
Total		**100**

2. RISK ANALYSIS

Risk analysis involves the identification and assessment of risks the persons involved in the proposed project and the neighbouring populations are exposed to as a result of hazard occurrence.

In the sections below, the identification of various hazards, probable risks in the proposed project, maximum credible accident analysis and consequence analysis, which give a broad identification of risks involved are addressed.

- ❖ Analytical process to provide information regarding undesirable events
- ❖ Detailed examination including risk assessment, Risk evaluation and risk management alternatives, perform to understand the nature of unwanted outcome.

In Risk assessment, the quantitative or qualitative risk related to proposed construction are determined.

Hazard Identification and Risk Assessment (HIRA) is carried for identification of undesirable events that can lead to a hazard, the analysis of hazard of this undesirable event, that could occur and usually the estimation of its extent, magnitude and likelihood of harmful effects.

It is widely accepted within industry in general that the various techniques of risk assessment contribute greatly toward improvements in the safety of complex operations and equipment.

FIGURE 3: RISK ASSESSMENT PROCESS

Workplace hazards can be identified in a number of ways. Inspections provide a system of recognizing hazardous conditions so that those conditions can be corrected.

The data collected while performing inspections will be used to identify hazards and barriers to working safely and in an environmentally protective manner so that they can be addressed such as procedure changes or purchasing different PPE.

The data also will be tracked as a protective measure of acceptable HSE behavior on the site. reports and safe work observation information will be shared with employees at toolbox safety meetings.

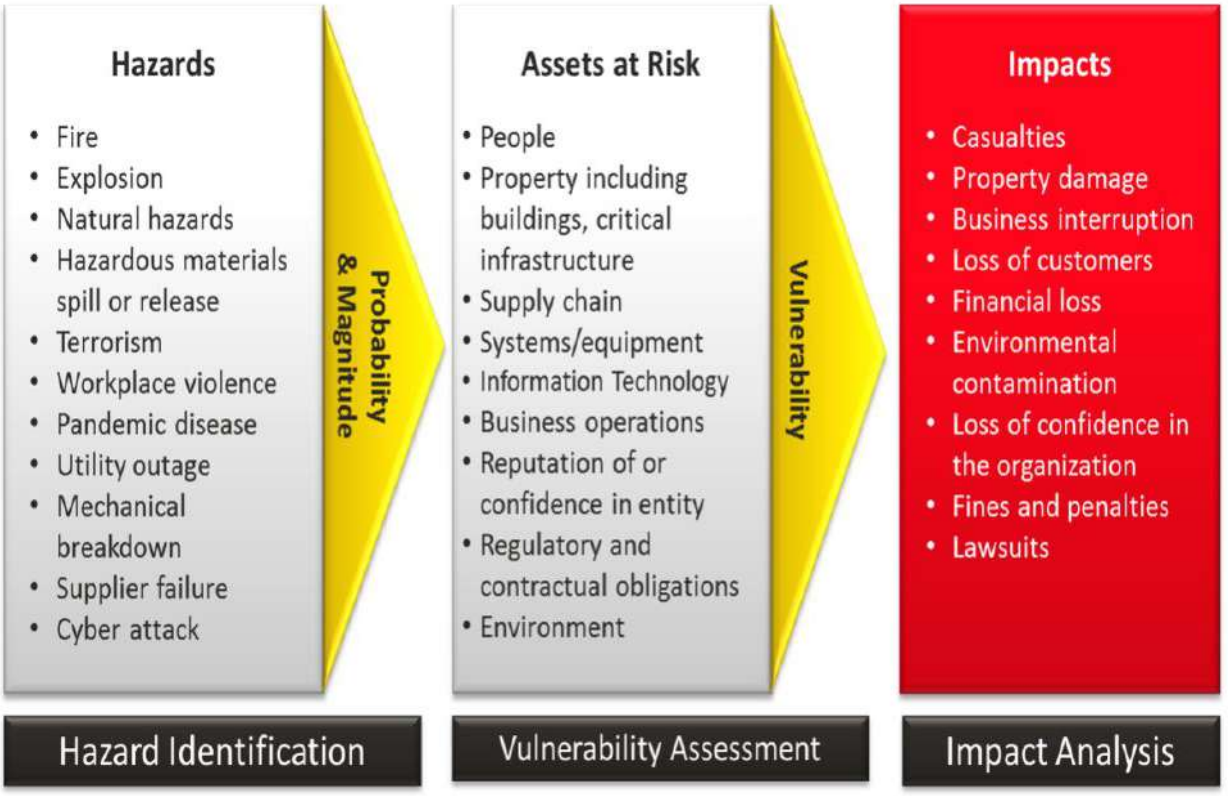


FIGURE 4: HAZARD IDENTIFICATION AND VULNERABILITY ASSESSMENT

Once the hazards have been identified, it is necessary to assess what risk they pose to employees in the workplace. In this way we can establish a measure of the risk and determine what priority they should have for corrective actions. The risk assessment step is that part of the process that assesses the probability (likelihood) and consequences (severity) of hazard that have been identified. Once we have estimated the probability and consequences for each hazard then we can allocate it a priority for corrective action. Generally, risk assessment is estimating: what are the chances (probability) of an accident happening, and if it does happen, what are the chances that someone will be hurt? What will be the extent of equipment or environmental damage, and how bad will it be (severity)? The level of risk is dependent on the exposure to the hazard and the probability and consequences of an event occurring.

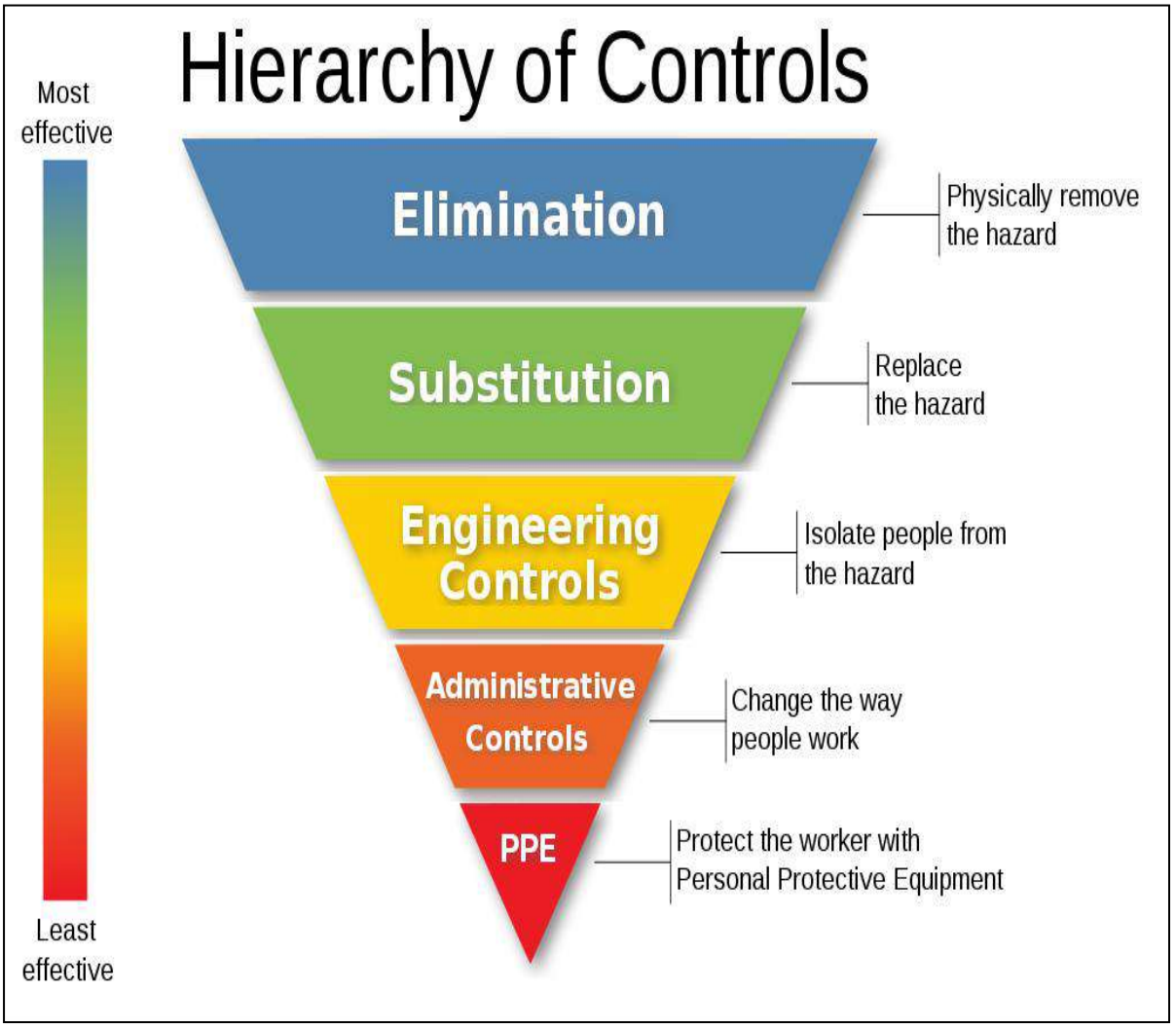


FIGURE 5: HIERARCHY OF CONTROLS

3. HAZARD & RISK

A hazard is a physical entity (i.e., energy or an environmental agent) which have a potential to cause injury or disease in people (or environmental damage to property etc.).

Risk is the chance or likelihood of the hazard, under the circumstances of its use, producing an injury, disease etc. Risk is influences by such factors as:

- Nature of hazard
- Quantity of hazard
- Energy of the hazard
- Use to which the hazard is put
- Work system / operator factors,
    - ❖ Leadership /teamwork
    - ❖ Design
    - ❖ Documentation
    - ❖ Training
    - ❖ work practices
    - ❖ Job selection
    - ❖ Environment control
- System auditing.

RISK = Hazard effect x Probability

(likelihood of occurrence)

3.1. RISK ASSESSMENT STEPS

There are five steps followed to assess the risks in workplace. They are;

Step 1: Identify the hazards

Step 2: Decide who might be harmed and how

Step 3: Evaluate the risks and decide on precautions

- Identify the existing control measures and recommendations, if necessary
- evaluate the residual risks

Step 4: Record the findings and implement them

Step 5: Review the assessment and update if necessary

3.2. HAZARD IDENTIFICATION

- This step seeks to identify the hazards and risks to be managed. Comprehensive identification using a well-structured systematic process is critical, because of hazard or risk not identified at this stage may be excluded from further analysis. Identification shall include actual and potential risks, whether or not they are under the control of the entity.
- The aim is to generate a comprehensive list of risks and events that might have an impact on the achievement of each of the objectives identified in the context. These events might prevent, degrade, delay or enhance the achievement of those objectives. These are then considered in more detail to identify what can happen.
- Having identified what can happen, it is necessary to consider possible causes and scenarios. There are many ways an event can occur.

3.3. RISK ANALYSIS AND EVALUATION

- Risk analysis is about developing an understanding of the risk. It involves the source of the risk, consequences and likelihood that the consequence may occur. The existing control measures shall also be identified in this section.
- The level of risk is calculated by multiplying the consequence score and probability of occurrence together.

Risk = Consequence score x probability of occurrence

- The next step is to identify and evaluate the adequacy of existing control measures and suggestion of addition recommendation, if necessary.

3.4. RISK ASSESSMENT MATRIX

The hazards and risks associated with construction phase are those from the below activities. The scope of construction by SIPCOT is limited to construction of office buildings, roads and other basic infrastructures.

The major activities during the construction phases are:

- Construction material and machines handling
- Hoisting & Lifting activity
- Working at height
- Operation of Material Handling Equipments
- Excavation
- Construction of roads and other civil works

4. RISK CATEGORIES

Probability	Severity				
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

15-25	Extreme Risk (E)	Activity should not proceed in current form without adequate control measures.
8 - 12	High Risk (H)	Activity should be modified to include remedial planning and action
4 - 6	Moderate Risk (M)	Activity can operate subject to management and/or modification
1 - 3	Low Risk (L)	No action required, unless escalation of risk is possible.

Table 2: Risk Categories

Please refer the below table for the definition and criteria for the above categories

5. DEFINITION AND CRITERIA FOR THE RISK CATEGORIES

Table 3: Definition and Criteria for Risk Categories

Probability		Severity Rating			
Probability Rating	**Expressed in terms of likelihood**	**Rating**	**Description**	**Effects**	**Outcome**
1	Highly unlikely	1	Minor Injury/damage	Cuts and abrasions, minor skin or eye irritations etc.	No lost time
2	Reasonably likely	2	Injury requiring first aid	Any injury that requires first aid	One to three days lost from work
3	Even Chance	3	Injury or industrial disease requiring medical treatment	Deep wounds, fractures, scalds, burns, eye injuries, respiratory infections, temporary blindness or hearing loss etc.	More than three days of sick leave reportable injury
4	Highly likely	4	Serious injury or long term medical effects (industrial diseases)	Loss of fingers, toes, damage to eyes, serious medical effects	Weeks or months of sick leave hospitalization etc. reportable injury.
5	Almost certain	5	Major injury or fatality	Loss of limbs, sight, hearing, long term illness or death	Permanent disablement or ling term sick leave. Reportable Injury.

6. RISK MATRIX

Risk matrix is analysed by combination of Severity and Probability (product of severity and probability is calculated risk). Risk is evaluated based on following consequences and likelihood.

6.1. HAZARD IDENTIFICATION AND RISK ASSESSMENT MATRIX (CONSTRUCTION PHASE)

6.1.1. Activity: Protecting the Guests and Public Interface

Table 4: Risk Matrix: Protecting the Public Interface

Sl. No	Activity/Element	Hazard	Consequence	Risk Rating				Existing /recommended Control Measures	Residual Risk			
				Severity	likelihood	Risk rating	cat		Severity	likelihood	Risk rtg	cat
1	Site Entrance	Struck by Vehicle	Personnel Injury Asset Damage Lost Time Traffic Congestion	**5**	**2**	**10**	**H**	• Most suitable entrance/exit location determined from Traffic Management plan / Site layout plan •Adequate warning signage erected • Good visibility allowing vehicles entering / exiting site • Entrance well	**5**	**1**	**5**	**M**
2	Site Visitors	Falls (People) Falls (things) Struck by vehicles	Personnel Injury Lost Time Asset Damage	**5**	**2**	**10**	**H**	• Display site layout and rules near entrance for guidance •Providing adequate directional signage showing route to car park and office establishment • All visitors to wear minimum PPE inclusive of hardhat, safety boots	**5**	**1**	**5**	**M**

6.1.2. Activity: Forklift Operation

Table 5: Risk Matrix: Forklift Operations

S. No	hazard	consequence	risk rating				existing/recommended control measures	residual risk			
			severity	likelihood	rating	cat		severity	likelihood	rating	cat
1	Pedestrian/ vehicle collision	Major Injury	**4**	**4**	**16**	**E**	Only competent, authorized persons to operate the forklift Daily visual inspection and maintenance of vehicle checklist Appropriate training, supervision, information and instruction should be given to all staff	**4**	**1**	**4**	**M**
2	Falling loads, dropping onto pedestrians in work area	Falling injury	**3**	**4**	**12**	**H**	Only competent, authorized persons to operate the forklift Pedestrians to be segregated from the operating areas of forklift Banks man /persons on foot to be wearing high vis clothing and remain clear of machine and load at all the time. Appropriate training supervision, information and instructions should be given	**3**	**1**	**3**	**L**
3	Adverse weather conditions causing poor visibility, impact injury	Major Injury	**5**	**4**	**20**	**E**	Restricted use in adverse weather conditions – management control. Suitable warning devices to be installed on forklift e.g. amber flashing light, reversing beepers etc. Appropriate training, supervision, information and instruction should be given to all staff	**5**	**1**	**5**	**M**
4	sliding or skidding on wet/contaminated surface	Falling injury	**3**	**4**	**12**	**H**	Roll-over protective structure to be fitted at all times Seat belts to be worn at all times Work area to be maintained in suitable condition for safe operation of Forklift	**4**	**1**	**4**	**M**

							Appropriate training supervision, information and instructions should be given				
5	Electric shock from touching live battery causing severe burns to the hands	electrocution -major injury	**4**	**4**	**16**	**E**	Operators to carry out daily check list on forklift- faults to be reported immediately Monthly inspections to be carried out by a competent person Operator to be aware of any overhead obstruction eg. power lines, top of doors, gantries etc.	**4**	**1**	**4**	**M**
6	Overloading of forklift causing load failure, falling objects	falling injury	**4**	**3**	**12**	**H**	Loads to be carried in accordance with packer's instructions and training No person to be allowed to pass under the load at any time Unstable loads not to be carried Operators to carry out daily checks on forklift – faults to be reported immediately Monthly inspections to be carried out by a competent person	**4**	**1**	**4**	**M**
7	Unsecured loads falling from height-causing injury	crushing injury	**5**	**3**	**15**	**E**	Load to be carried in accordance with packers No person to be allowed to pass under load at any time Unstable loads not be carried • Operations to carry of daily checks on forklift- faults to be report immediately • Appropriate training supervision, information and instructions should be given to all staff.	**5**	**1**	**5**	**M**

6.1.3. Activity: Operating of Crane

Table 6: Risk Matrix: Operating of Crane

S. No	hazard	consequence	risk rating				existing/recommended control measures	residual risk			
			severity	likelihood	rating	category		severity	likelihood	rating	cat
1	Equipment is not being Used in accordance with the manufacturer's recommendations. Equipment fail Lack of maintenance, negligence in inspection, or unauthorized repairs. Equipment has been used to lift items that were heavier than the manufacturer's weight ratings. (as per the load chart) Equipment is produced without the benefit of safety ratings or standard.	Fatal Serious Injuries	**3**	**4**	**12**	**H**	• Inspect equipment before use. • Ensure that it is in good working order and rated for the particular hoist or crane. • Ensure that the lifting environment is free of obstructions. • Keep people out of the area. • Lift loads away from people. • Use a crane or hoist only to lift objects - never people. • Balance loads properly.	**3**	**1**	**3**	**L**

2	Personnel are not trained or certified to operate equipment.		**3**	**4**	**12**	**H**	• Be aware of the items being lifted. Never leave a suspended load unattended. • Know the weights of the items to be lifted. Supervisors need to train operators to accurately estimate weights. Improperly estimating the weight of working loads (the weight of the item being lifted) is a violation of regulations. • Ensure that load slings and other attachments are the proper size, are rated for the load, and are properly attached to the saddle of the hook. Do not exceed the specified ratings when operating cranes, hoists, and attachments.	**3**	**1**	**3**	**L**

3	Slips, trips, and falls when getting on or off the plant.	Fatal Serious Injuries	**3**	**4**	**12**	**H**	Take the following precautions when you get in and off the crane: • Check that all guards and covers on the machine are fastened correctly. Tighten any loose bolts or repair any damage. • Wipe off any mud, oil or snow on the steps before you start work. • Do not jump onto or off the machine. • Do not hold onto the seat, control box, control levers or anything other than the hand grips provided when you get on or off the machine. • Do not get on and off the machine while it is moving.	**3**	**1**	**3**	**L**
4	Dropping of load	Fatal Serious Injuries	**3**	**4**	**12**	**H**	Check safety devices. Pick & Carry cranes are fitted with various safety devices which should be checked before starting work.	**3**	**1**	**3**	**L**
5	Crane overload or tip over in adverse working configuration.	Fatal Serious Injuries	**3**	**4**	**12**	**H**	Check the operation of the crane computer / Load Moment Indicator (“LMI”) according to the pre-operational check procedure described in the Operators Manual (this manual should be kept in the crane cabin).	**3**	**1**	**3**	**L**

	Falling objects (during erecting and dismantling activities)	damaged Property and present a risk of injury to workers and members of the public.	**3**	**4**	**12**	**H**	• Erect and maintain effective barricades around the mobile crane. • Only allow persons who are directly involved Pick& Carry crane operations inside the area. • Schedule the erecting and dismantling of the crane to occur when the movement of other persons and mobile plant at the workplace is at a minimum • Monitor the weather conditions before and during crane operation. Stop the operation of immediately, if there is a chance of heavy wind or cyclone. • The Crane shall be located in very stable.	**3**	**1**	**3**	**L**

6.1.4. Activity: use of scaffoldings

Table 7: Risk Matrix: Working on scaffoldings

Sl. No	Activity/Element	Hazard	Consequence	Risk Rating				Existing /recommended Control Measures	Residual Risk			
				Severity	likelihood	Risk rating	cat		Severity	likelihood	Risk rating	cat
1	Location of scaffolding	Toppling of scaffoldings due to place on uneven and slope surface	Fatal Major injury	**5**	**4**	**20**	**E**	• The scaffolding must be placed in stable and even surface. • The area surrounding the tower should be cleared of people and don't place the towers on near door opening and emergency exit. • The work area should be properly secured (barriers, cones, fencing, signs).	**5**	**1**	**5**	**M**
2		Toppling of scaffolding due to place near floor edge and use of tower on high	Fatal Major injury	**5**	**4**	**20**	**E**	• Do not use the tower when there is a high wind • Don not use the tower near the floor edges, if required standard distance should be maintained between floor edge and scaffolding	**5**	**1**	**5**	**M**

3	condition of scaffolding	Scaffold can collapse due to improper erection and use of damaged parts	Fatal Amputations Fractures Severe injuries	**5**	**4**	**20**	**E**	• The towers must be erected, inspected and tagged by competent person prior to start the activity • Castor when locks to be functional and engaged prior to lock the wheel • The scaffolding should have complete platform and secured/fastened properly with clamps or ropes and the planks are without knots, cracks, splits. • The access ladder should be provided for required height f reach the platform • Ensure the scaffolding should have complete bracing pieces' top rail, mid rail and toe boards • Inspect scaffolding on daily basis by concern in charge and weekly basis by competent person.	**5**	**1**	**5**	**M**
4	Working on scaffolding	Man on materials falling due to overloading and unsafe	Fatal fractures Sever injuries	**4**	**4**	**16**	**E**	• Only competent and Trained Should worked on the Scaffolding. • Safe access to be provided. • The work platform should be fully boarded and gat between plants should not exceed 1"	**4**	**1**	**4**	**M**

		work on scaffolding						• The platform capacity should be checked and safe working load (SWL) platform should be maintained • No modification should be done on the platform to Accommodate more man or materials • No loose materials should be kept on the platform • The height of the scaffolding been restricted to 3.5 times the minimum base width while working inside the building and 3 times while working outside the building. • Never sit and stand the guardrails of the scaffolding				
5		Man on materials falling due to overhead services and unsafe scaffolding.	Fatal fractures and severe injuries	**5**	**4**	**20**	**E**	• Ensure that the tower is empty (man and material) while tower is moving from one location to another • Move the tower manually by applying face on the base. Do not use machinery to push pull the tower. • Check all caters and stabilizers are on form contact with the ground.	**5**	**1**	**5**	**M**

6	Use of power tools in scaffolding	Electric shock, fire, fumes and dust due to the use of improper power tools	Fatal severe injuries	**5**	**4**	**20**	**E**	• Only tested and tagged machine should be used • Competent, trained workers to be engaged • Cable to be well insulated without any damages • The area to be cleared of flammable materials and other ignition sources. • Cables to be well insulated without any damages. • Cable routing area to be dried and not immersed in water. • Area should be cleared of flammable materials and other ignition sources. • The necessary fire extinguisher to be placed.	**5**	**1**	**5**	**M**

6.1.5. Activity: House Keeping

Table 8: Risk Matrix: House Keeping

Sl. No	Hazard	Consequence	Risk Rating				Existing /recommended Control Measures	Residual Risk			
			Severity	likelihood	Risk rating	cat		Severity	likelihood	Risk rating	cat
1	Spillages of liquids, oils etc. Incorrect storage of hoses, materials etc.	Slips, trips and falls	**5**	**4**	**20**	**E**	• High levels of housekeeping must be maintained. Supervisors shall monitor the standards and implement clean ups where necessary. • Rubbish shall be disposed of in the correct skip	**5**	**1**	**5**	**M**
2	Build-up of waste, combustible materials and debris	Fires and or explosions can occur when waste, debris are ignited by sparks or hot surfaces. Escape routes and fire equipment can become blocked	**5**	**3**	**15**	**E**	• All waste shall be removed from site immediately • Machinery shall be cleaned on a regular basis to remove any dust or debris which could be ignited by sparks or hot surfaces	**5**	**1**	**5**	**M**
3	Foreign bodies in eyes	Can occur when particles of dust, debris or grit etc. are blown around the workplace or when such particle is dislodged from work areas	**3**	**3**	**9**	**H**	• Personnel must wear appropriate eye protection and minimise the amount of dust created	**3**	**1**	**3**	**L**

6.1.6. Activity: Working at heights

Table 9: Risk Matrix: Working On Heights

Sl. No	Hazard	Consequence	Risk Rating				Existing /recommended Control Measures	Residual Risk			
			Severity	likelihood	Risk rating	cat		Severity	likelihood	Risk rating	cat
1	Risk of falling	Fatal Serious injury to personnel	**5**	**4**	**20**	**E**	• Work at height to be carried out only when scaffold cannot reasonably be provided. Step ladders are not to be used on walkways, ladders to be secured or footed. • Safety harnesses fall arrestor and climbers helmet, to be worn. Step ladders not to be used outside modules, on gratings, etc. • Work at height to be reviewed by competent personnel on site when wind exceeds 25 Kt., if there is danger of lightning strike, etc. • Process equipment not to be used for hand/foot holds or for supporting lifting gear or scaffolding.	**5**	**1**	**5**	**M**
2	Dropped Objects	Serious injury to personnel, plant and/or Equipment	**5**	**3**	**15**	**E**	• Utilization of competent personnel • Periodical training and supervision • Avoid the risk of dropped objects by securing tools and equipment	**5**	**1**	**5**	**M**

6.1.7. Activity: use of generators

Table 10: Risk Matrix: Use of Generator

S.No	Hazard	Consequence	Risk Rating				Existing/Recommended Control Measures	Residual Risk			
			Severity	Likelihood	Rating	Category		Severity	Likelihood	Rating	Category
1	Electrical shock - fire and explosion	fatal	5	2	10	H	Never attach a generator directly to the electrical system of a structure unless a qualified electrician has installed a transfer switch for the generator. If the structure's electrical system is not isolated, it may energize the utility's wiring system for great distances and create a risk of electrocution for utility workers and others in the area	5	1	5	M
		person injury					Always plug electrical equipment directly into the generator using the manufacturer's supplied cords or grounded (3-pronged) extension cords that are rated for the total anticipated load				
		damage to properties					Do not overload a generator; it can overheat and create a fire hazard				
							Ground and bond generators according to the manufacturer's recommendations; ensure that any manufacturer-required connections are secure before using the generator				
							Keep the generator dry; protect with a canopy if needed; do not use it in wet or rainy conditions				
							Carbon monoxide (CO) is a poisonous, colourless, and odourless gas that is produced by the incomplete burning of the generator's fuel. CO is harmful when breathed because it displaces oxygen in the blood and deprives the heart, brain, and other vital organs of oxygen				
							Never use a generator indoors				

6.1.8. Activity: Excavation

Table 11: Risk Matrix: Excavation

Sl. No	Hazard	Consequence	Risk Rating				Existing /recommended Control Measures	Residual Risk			
			Severity	likelihood	Risk rating	cat		Severity	Likelihood	Risk rating	cat
1	Collapsing of Excavated Area	Injury to body and death	**4**	**5**	**20**	**E**	Shielding or benching should be installed to prevent the collapse of trench cavity.	**1**	**5**	**5**	**M**
2	Exposure to vibrating equipments	Chances of permanent disabilities	**3**	**5**	**15**	**E**	Proper PPE's to be provided to the workers	**1**	**5**	**5**	**M**
3	Fall of equipments into the trenching site	Can lead to damage to property and life	**3**	**4**	**12**	**H**	Barricading should be provided at the trenching site.	**1**	**4**	**4**	**M**
4	Presence of poisonous gases/ low level of oxygen	Can cause respiratory issues and even to death.	**5**	**5**	**25**	**E**	Trenches and excavation should be inspected before entering	**1**	**5**	**5**	**M**

6.2. HAZARD IDENTIFICATION AND RISK ASSESSMENT MATRIX (OPERATIONAL PHASE)

Some general hazards and mitigation measures in proposed industry:

Table 12: Some general hazards in operational phase

Sl. No	Activity	Major Hazards	Risks	Risk Rating				Mitigation Measures	Risk Rating			
				S	L	R	C		S	L	R	C
1	Aerospace and Defence manufacturing industry.	**Chemical Exposure:** Exposure to toxic and flammable chemicals during manufacturing processes. **Fire and Explosion Hazards:** Presence of flammable gases and liquids, leading to fire and explosion	**Health Risks:** Respiratory issues, skin problems, and other health hazards due to chemical exposure. Potential hearing damage due to dust and noise exposure. Potential injuries from machinery, equipment, and electrical hazards. **Chemical Risks** Risks associated with	**3**	**5**	**15**	**E**	• Implementing dust control measures, ventilation systems, and respiratory protection. • Installing noise control measures in machinery and providing hearing protection. • Ensuring compliance with electrical safety standards and regular inspection of electrical systems. • Providing cooling measures and implementing heat stress management programs. • Installing safety guards on machinery and providing	**1**	**5**	**5**	**M**

		risks. **Process Safety Hazards:** Malfunctions or deviations in the manufacturing process leading to hazardous situations. **Respiratory Hazards:** Inhalation of Reparable Particulate Matter particles leading to respiratory issues. **Noise Hazards:** High noise levels generated during processing and	the handling and exposure to chemicals used in the process. **Environmental Risks:** Air, water, and soil pollution resulting from accidental releases, spillage or improper disposal. **Operational Risks:** Process disruptions, equipment failures, and production delays. Production interruptions due to equipment malfunctions or overheating.					training on safe equipment operation. • Using closed systems for chemical handling and implementing proper storage and disposal procedures. • Designing workstations ergonomically and providing training on proper lifting practices. • Regular equipment inspections and maintenance to prevent failures. • Developing and regularly updating emergency response plans to address potential accidents or releases. • Adhering to strict transportation safety regulations and secure handling of hazardous materials • Conducting thorough process hazard analyses (PHA) and			

		handling. **Electricity Hazards:** Potential electrical hazards in the operation of machinery. **Heat and Thermal Stress:** Exposure to high temperatures during certain production stages. **Mechanical Hazards:** Potential injuries from machinery, equipment, and moving parts. **Ergonomic Risks:**						implementing safety instrumentation systems. • Implementing strict safety protocols and providing proper personal protective equipment (PPE). • Providing comprehensive training for workers on handling materials, operating machinery, and emergency response. • Implementing effective waste management practices to minimize environmental impact. • Conducting routine inspections of equipment to identify and address potential hazards promptly. • Engaging with local communities to address concerns, provide information, and incorporate feedback.				

		Repetitive tasks and poor ergonomics leading to musculoskeletal issues										

S- Severity

L- Likelihood

R- Risk Rating

C- Category

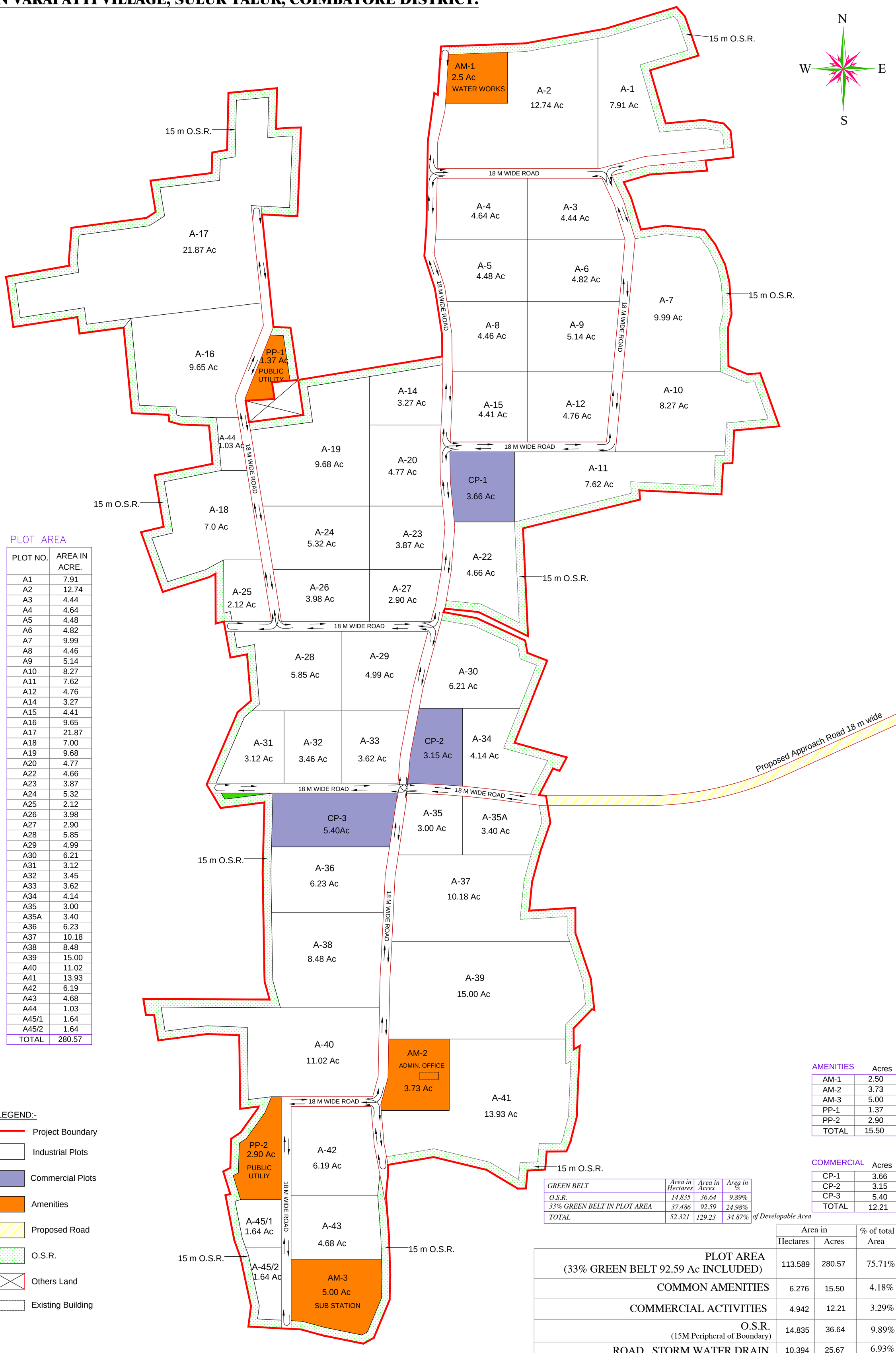
Note: It's crucial for the individual industries in IP to conduct a thorough project specific risk assessment, implement appropriate safety measures, and provide adequate training to ensure the well-being of workers and minimize the risks associated with these manufacturing activities, before the commencement.

7. Conclusion

- The purpose of risk assessments is ultimately to improve workplace health and safety. A specific risk assessment process needs to be followed to identify workplace hazards and reduce or eliminate their risks.
- The proposed industries should conduct the risk assessment study before commencement of the project specific conditions.

TENTATIVE TRAFFIC LAYOUT FOR PROPOSED SIPCOT INDUSTRIAL PARK IN VARAPATTI VILLAGE, SULUR TALUK, COIMBATORE DISTRICT.

Annexure - 12



PLOT AREA

PLOT NO.	AREA IN ACRE.
A1	7.91
A2	12.74
A3	4.44
A4	4.64
A5	4.48
A6	4.82
A7	9.99
A8	4.46
A9	5.14
A10	8.27
A11	7.62
A12	4.76
A14	3.27
A15	4.41
A16	9.65
A17	21.87
A18	7.00
A19	9.68
A20	4.77
A22	4.66
A23	3.87
A24	5.32
A25	2.12
A26	3.98
A27	2.90
A28	5.85
A29	4.99
A30	6.21
A31	3.12
A32	3.45
A33	3.62
A34	4.14
A35	3.00
A35A	3.40
A36	6.23
A37	10.18
A38	8.48
A39	15.00
A40	11.02
A41	13.93
A42	6.19
A43	4.68
A44	1.03
A45/1	1.64
A45/2	1.64
TOTAL	280.57

LEGEND:-

- Project Boundary
- Industrial Plots
- Commercial Plots
- Amenities
- Proposed Road
- O.S.R.
- Others Land
- Existing Building

AMENITIES	Acres
AM-1	2.50
AM-2	3.73
AM-3	5.00
PP-1	1.37
PP-2	2.90
TOTAL	15.50

COMMERCIAL	Acres
CP-1	3.66
CP-2	3.15
CP-3	5.40
TOTAL	12.21

GREEN BELT	*Area in Hectares*	*Area in Acres*	*Area in %*
O.S.R.	*14.835*	*36.64*	*9.89%*
33% GREEN BELT IN PLOT AREA	*37.486*	*92.59*	*24.98%*
TOTAL	*52.321*	*129.23*	*34.87%*

of Developable Area

	Area in Hectares	Area in Acres	% of total Area
PLOT AREA (33% GREEN BELT 92.59 Ac INCLUDED)	113.589	280.57	75.71%
COMMON AMENITIES	6.276	15.50	4.18%
COMMERCIAL ACTIVITIES	4.942	12.21	3.29%
O.S.R. (15M Peripheral of Boundary)	14.835	36.64	9.89%
ROAD , STORM WATER DRAIN	10.394	25.67	6.93%
TOTAL AREA	150.036	370.59	100.00%

Annexure–13

SIPCOT – VARAPATTI MONITORING PHOTOS

AMBIENT AIR QUALITY MONITORING PHOTOS:

NEAR PROJECT AREA

TIRUMANDAMPALAIYAM

ANNUPATTI

27-03-2025

PUSARAIPALAYAM

NEAR VARAPATTI


GROUND WATER SAMPLING PHOTOS

PROJECT AREA	TIRUMANDAMPALAIYAM
	

ANNUPATTI


SURFACE WATER SAMPLING PHOTOGRAPH

Anupatti kuttai

Poorandampalayam


SOIL SAMPLING PHOTOGRAPH

PROJECT AREA	TIRUMANDAMPALAIYAM
	
ANNUPATTI	**PUSARAIPALAYAM**
	
NEAR VARAPATTI	
	

NOISE MONITORING PHOTOGRAPH

PROJECT AREA	TIRUMANDAMPALAIYAM
	
ANNUPATTI	**PUSARAIPALAYAM**
	
NEAR VARAPATTI