

EC/Thervoykandigai/HYC/June/2025

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

Sir/Madam,

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

Ref: EC Obtained Vide File No 21-41/2009-IA.III. Dated: 09.08.2010

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

Thanking you

Yours faithfully,

Date: 30.05.2025

CONSULTANT (PROJECT MANAGEMENT)

Encl: As above.

Copy to:

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

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

 The Project Officer SIPCOT Industrial Park, Thervoy Kandigai.

# State Industries Promotion Corporation of Tamil Nadu Limited

(A Government of Tamil Nadu Undertaking)

CIN: U74999TN1971SGC005967

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

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

#### HALF YEARLY ENVIRONMENTAL COMPLIANCE REPORT

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

For

# "Development of Industrial Park at Thervoy Kandigai, Thiruvallur District, Tamil Nadu"

EC OBTAINED Vide Letter No 21-41/2009-IA.III. Dated: 09.08.2010

**Submitted by** 



# M/S. STATE INDUSTRIES PROMOTION CORPORATION OF TAMILNADU LIMITED

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

Prepared by



HUBERT ENVIRO CARE SYSTEMS (P) LTD CHENNAI

(ENVIRONMENTAL CONSULTANT)

**MAY 2025** 

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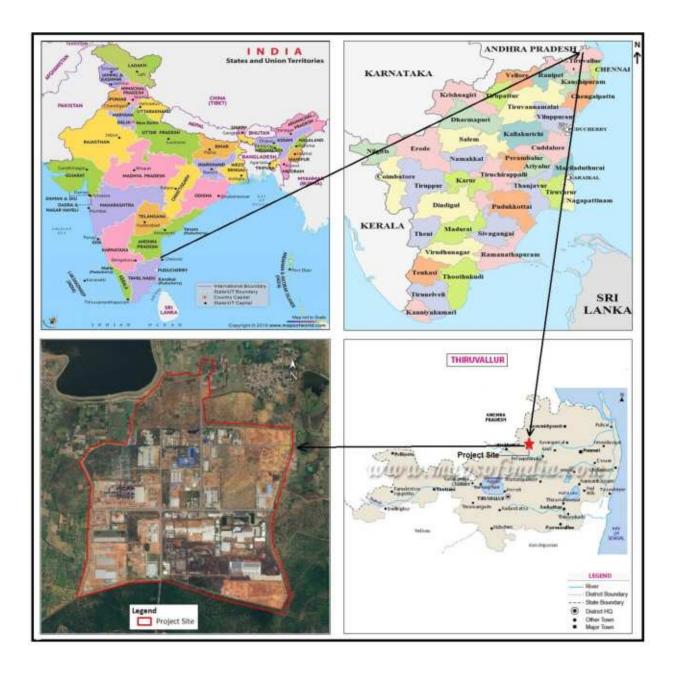
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# 1. PROJECT DETAILS

Name of the Project	SIPCOT Thervoy Kandigai Industrial Park
Name of the Proponent	M/S. State Industries Promotion Corporation of Tamil Nadu Ltd.
Location	Thervoy Kandigai, Gummidipoondi Taluk, Thiruvallur  District, Tamil Nadu.
EC. No.	No. 21-41/2009-IA.III (Enclosed as Annexure 1)
Area Details	456.27 Hectares
Water Requirement	4.5 MLD  Source: CMWSSB (Enclosed as Annexure 2)
Project Cost	Rs.240 Crore

#### 2. LOCATION MAP



#### 3. SITE PHOTOGRAPHS

**SIPCOT PROJECT OFFICE** 





#### PHOTOGRAPHS OF THERVOYKANDIGAI LAYOUT DISPLAYED IN PROJECT OFFICE



#### **Photographs of Industries units**



# 4. SIX MONTHLY ENVIRONMENTAL CLEARANCE COMPLIANCE STATEMENT

#### **PART A- SPECIFIC CONDITIONS**

#### I. Construction Phase

Construction Phase	Not applicable since construction was completed

Consent to Establishment (CTE) has been obtained from TNPCB and CTE copy is enclosed as **Annexure-3.**Individual Industries are mandated to obtain CTE & CTO.

#### **II. Operation Phase**

S.NO	CONDITIONS	STATUS OF COMPLIANCE
i.	The installation of the Sewage Treatment	Condition is being complied.
	Plant (STP) should be certified by an	SIPCOT has not proposed any STP within the
	independent expert and a report in this	industrial park. However, the individual
	regard should be submitted to the	member industries have established their own
	Ministry before the project is	STPs and ETPs, and are reusing the treated
	commissioned for operation. Treated	water for their processes and utilities in
	effluent emanating from STP shall be	compliance with applicable norms.
	recycled/ reused to the maximum extent	
	possible. Treatment of 100% grey water	STP Photograph of the member industries is
	by decentralized treatment should be	enclosed as <b>Annexure – 16</b>
	done. Discharge of unused treated	Water supply sumps photograph is enclosed as
	effluent shall conform to the norms and	annexure - 18
	standards of the Tamil Nadu State	
	Pollution Control Board. Necessary	
	measures should be made to mitigate the	
	odour problem from STP.	

ii.	The solid waste generated should be	Condition is being complied.
	properly collected and segregated. Wet	Solid waste generation is being collected and
	garbage should be composted and dry /	segregated as Wet and dry waste within the
	inert solid waste should be disposed off to	premises.
	the approved sites for land filling after	Further, individual industries have their own
	recovering recyclable material.	solid waste management area within their own
		premises.
		Photographs of the Solid Waste Management
		area are enclosed as Annexure - 11.
iii.		SIPCOT has not proposed any DG sets within
	source of backup power for elevators and	the project site / common amenities.
	common area illumination during	Industrial DG set photographs is enclosed as
	type and conform to rules made under the	Annexure -17
	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 low Sulphur diesel. The	
	location of the DG sets may be decided	
	with in consultation with Tamil Nadu	
	State Pollution Control Board.	
iv.	Noise should be controlled to ensure	Condition is being complied
14.		Noise levels are being monitored periodically.
	_	The ambient noise level monitoring reports and
		photographs are enclosed as <b>Annexure-12 &amp; 4</b>
	building shall be restricted to the	
	permissible levels to comply with the	ensuring that noise generated from their
	prevalent regulations.	operations remains within the prescribed
		standards. Each industry obtains Consent to
		Establish and Consent to Operate from the
		TNPCB, which includes specific conditions
		related to noise control. TNPCB also conducts
		regular inspections and monitoring to ensure
		compliance.

v.	The green belt of the adequate width and	Condition complied.
	density preferably with local species	The greenbelt with 40m width along the
	along the periphery of the complex shall	periphery of the Industrial Park has been
	be raised so as to provide protection	developed with local species. Photograph of the
	against particulates and noise.	greenbelt is enclosed as <b>Annexure - 7.</b>
vi.	Weep holes in the compound walls	Condition complied.
	shall be provided to ensure natural	Weep holes are provided for natural drainage of
	drainage of rain water in the catchment	rain water in the catchment area during the
	area during the monsoon period.	monsoon period and photographs of weep holes
		are enclosed as Annexure - 10.
vii.	Rain water harvesting for roof, surface	Condition is being complied.
	run- off, as proposed should be	Rain water harvesting for SIPCOT project
	implemented. Before recharging the	office has been provided.
	surface run off, pre- treatment must be	Further, Individual industries have provided
	done to remove suspended matter, oil and	rainwater harvesting system within their
	grease. The bore well for rainwater	premises.
	recharging should be kept at least 5 mts.	Photograph of rainwater harvesting, systems
	above the highest ground water table.	are enclosed as Annexure-10.
viii.	The ground water level and its quality	Condition is being complied.
, ===-		The ground water quality is being monitored
	consultation with Central Ground Water	
	Authority.	The ground water quality monitoring report and
		monitoring photos is enclosed as <b>Annexure-12</b>
		& 4
ix.	Traffic congestion near the entry and exit	Condition complied.
	points from the roads adjoining the	No traffic congestion near the entry and exit
	proposed project site must be avoided.	points from the roads adjoining the proposed
	Parking loading and unloading facility	project site. Parking loading and unloading
	should be fully internalized and no public	facility are fully internalized. No public space
	space should be utilized.	is utilized.
		Photographs of Parking facility provided by
		SIPCOT is enclosed as <b>Annexure - 9</b> .

х.	Energy conservation measures like	Condition is being complied.
	installation of CFLs/TFLs for the lighting	SIPCOT has installed energy-efficient LED
	the common areas should be integral part	lights in all common areas within the industrial
	of the project design and should be in	park as part of its sustainable infrastructure
	place before project commissioning. Use	initiative. It will be ensured that any lighting
	CFLs and TFLs should be properly	waste generated is handled and disposed of in
	collected and disposed off/sent for	accordance with the prevailing regulatory
	recycling as per the prevailing guidelines/	guidelines. Further, the use of renewable energy
	rules of the regulatory authority to avoid	sources such as solar power will be explored and
	mercury contamination. Use of solar	implemented to the extent possible Photographs
	panels may be done to the extent possible.	of LED street lights and solar energy utilization
		by industries are enclosed as <b>Annexure - 8</b> .
xi.	Efforts may be made to use solar energy	The use of solar energy sources will be explored
	to the maximum extent possible.	and implemented to the extent possible
		Photographs of solar energy utilization by
		industries are enclosed as <b>Annexure</b> - 8
xii.	Adequate measures should be taken to	SIPCOT has allocated the Solid Waste
	prevent odour problem from Solid waste	Management (SWM) area at a corner plot of
	processing plant and STP.	the industrial park, to minimize any potential
		odour impact on surrounding areas. SIPCOT
		have not proposed any STP. However, the
		individual industries operate their STPs in
		accordance with TNPCB norms, ensuring
		proper treatment and management to prevent
		odour issues.
		Photographs of solid waste management are
		enclosed as Annexure – 11.

#### Part - B. General Conditions

S.NO	CONDITIONS	STATUS OF COMPLIANCE
i.	The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.	

		Condition is being complied.
ii.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Six Monthly compliance report is being submitted periodically with the monitored data to MoEF, CPCB & SPCB and also uploaded in PARIVESH portal.  Proof of submission of six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data is enclosed as <b>Annexure</b> -15.
4.	Officials from the Regional Office of MoEF, Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the projects, proponents during their inspection. A complete set of all the documents, submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bangalore.	Condition noted.
5.	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	
6.	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory.	Condition noted.
7.	All other statutory clearances such as the approvals for storage of diesel from Chief	

8.	Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.  These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	Condition is being complied.  CTE copy is enclosed as Annexure 3
9.	and copies of clearance letters are available with the Tamil Nadu Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at	Condition complied.  We, SIPCOT have advertised in two local newspapers in Tamil and English that we have obtained Environmental clearance from SEIAA /TN along with the details of SEIAA website where it is displayed  Newspaper advertisement is enclosed as Annexure – 5
10.	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	Condition Noted.

11.	Any appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	Condition noted.  No appeal lies against this environmental clearance, till date.
12.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation; Urban Local Body and the Local NGO, if any, from whom suggestions/ representations. if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Condition complied.  A copy of the Environmental clearance letter has been submitted to the local Panchayat, Zilla Parisad/Municipal Corporation by the SIPCOT and Environmental clearance letter has been uploaded on website. Same is enclosed as Annexure -14.
13.	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, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NOx, (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient, location near the main gate of the company in the public domain.	Condition is being complied.  Six Monthly compliance report is being submitted periodically with the monitored data to MoEF, CPCB & SPCB and also uploaded in PARIVESH portal.  Proof of submission of six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data is enclosed as Annexure - 15  The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NOx, (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project is monitored and displayed at a convenient, location near the main gate of the company in the public domain

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 along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

**14.** 

#### Condition is being complied.

Environmental statement for each financial year ending 31st March in Form-V is submitted to TNPCB and copy of same is submitted to MoEF Regional Offices along with Six monthly compliance report, same is enclosed as Annexure -13 & 15.

#### 5. ENVIRONMENTAL MONITORING DETAILS

It is mandatory to submit six month compliance report of EC conditions to MoEF & CC Regional Office by the project proponent. For the purpose of submitting Six-Monthly Compliance report, the environmental monitoring was carried out by M/s. Hubert Enviro Care Systems Pvt. Ltd an NABL Accredited Laboratory for the period of October 2024 to March 2025.

#### **5.1** Ambient air quality monitoring

During operation phase, particulate matter and gaseous emissions are likely to arise from the site due to movement of vehicles, operation of DG sets etc., the ambient air quality parameters such as suspended Particulate matter (PM10), Respirable Particulate matter (PM 2.5), Sulphur dioxide, Oxides of Nitrogen (NOx)and Carbon monoxide were monitored. The test report of ambient air quality for the period of October 2024 to March 2025 is enclosed as **Annexure - 12** 

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

Ambient noise level monitoring reports recorded during the period of October 2024 to March 2025 is enclosed in **Annexure - 12**.

#### 5.3 Soil quality monitoring

The Soil samples were collected and analyzed for nutrients and heavy metals. The test report of soil samples collected and analyzed during October 2024 to March 2025 is enclosed as **Annexure - 12.** 

#### 5.4 Ground water quality monitoring

Ground water was tested for various water quality parameters during October 2024 to March 2025. The test report of bore well water collected and analyzed is enclosed as **Annexure - 12.** 

#### 5.5 Surface water quality monitoring

Surface water is collected for various water quality parameters during October 2024 to March 2025. The test reports of surface water collected and analyzed is enclosed as **Annexure - 12** 

Environmental Monitoring photographs are enclosed as **Annexure -4** 

#### **6.0 CONCLUSION**

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

Dr. RAJKUMAR SAMUEL Director Technical

Name: Dr. Rajkumar Samuel

Designation: Director Technical

Company Name: Hubert Enviro Care

Systems Private Limited

No. 21-41/2009-IA.III
Government of India
Ministry of Environment & Forests

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Paryavaran Bhawaran CGO Complex, Lodhi Road, New Delhi-110 008

Dated: 9th August, 2010

The Chairman & Managing Director,
M/s. State Industries Promotion Corporation of Tamil Nadu,
(A Government of Tamil Nadu Undertaking)
19-A Rukmani Lakshmipathy Road,
Egmore, Chennai – 600 008.

Subject:

Environmental Clearance for the development of Industrial Park at SIPCOT, Thervoy Kandigal, Thirvallum District, Tamil Nadu by M/s. State Industries Promotional Corporation of Tamil Nadu Ltd.(SIPCOT) - Reg.

Dear Sir,

This has reference to your application No. P& SP/SIP-TK/2009 dated 6.10.2010 and subsequent letter dated 04.05.2010 seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 20th November, 2009 and 28th – 29th June, 2010.

2. It is, interalia, noted that the project involves the development of a Industrial Park on a plot area of 456.27 ha at Latitude 13 ° 21'33'N to 13 ° 22'80"N and Longitude 79 °58'41" E to 79 °59'49"E. The developed plots will be allotted to set up industries like Synthetic rubber (tubes / tyres, industrial products), Engineering fabrication / manufacturing units and Glass industries, etc. The total area under industrial plots will be 369.83 ha (81.05%). The total water requirement proposed is 4.5 MLD, which will be met by Chennai Metropolitan Water Supply and Sewage Board (Metro water) through the desalination plant. No industry will be permitted to discharge waste water and solid waste from outside the industrial park. The Hazardous wastes will be disposed at Common Hazardous Wastes Management facility at Gummidipponda. A 40 m wide green belt is proposed around the boundary of industrial park and both sides of major roads. The total cost of the project is 240 crores.

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The TOR for the project was issued on 14.12.2009 and the publication was conducted on 30.04.2010.

3. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental Clearance for the project. Accordingly, the Ministry hereby accord necessary Environmental Clearance for the above project as per the provisions of Environmental Clearance for the above project as per the provisions of Environmental Impact Assessment Notification – 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

## PART A - SPECIFIC CONDITIONS

#### Construction Phase

- (i) "Consent for Establishment" shall be obtained from Tamil Nadu.
  State Pollution Control Board under Air and Water Act and at
  copy shall be submitted to the Ministry before start of any
  construction work at the site.
- (ii) Possibility shall be explored for providing a Common Scwage treatment Plant of modular form instead of individual STPs.
- (iii) . Sewage conveyance shall be through the closed pipeline.
- (iv) Ensure zero discharge by the member industries.
- (v) Transportation and disposal of Hazardous Wastes shall be as per Rules.
- (vi) All the assurance made during Public hearing especiallyproviding grassland for cattles shall be complied.
- (vii) The storm water drainage shall be worked out after analyzing the contour levels of the site and the surrounding area and the capacity of storm water drainage.
- (viii) 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, creche etc. The housing may be in the form of temporary structures to be removed after the completions of the project.
- (ix) A First Aid Room will be provided in the project both during construction/development of the project.

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- (x) All the topsoil excavated during the development activities should be stored for use in horticulture/landscape development within the project site.
- (xi) Disposal of muck during the development phase should 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.
- (xii) Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- (xiii) The diesel generator sets if used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- (xiv) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- (xv) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during nonpeak hours.
- (xvi) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ TNSPCB.
- (xvii) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100 Km of Thermal Power Stations).
- (xviii) Storm water control and its re-use as per CGWB and BIS stendards for various applications.
- (xix) Water demand during construction phase should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

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- (xx) Permission to draw ground water shall be obtained from the competent Authority prior to development of the project.
- (xxi) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- (xxii) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.
- (xxiii) Regular supervision of the above and other measures formonitoring should be in place all through the development phase, so as to avoid disturbance to the surroundings.
- (xxiv) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.

#### II. Operation Phase

- i) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the Tamil Nadu State Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.
- ii) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry / inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- iii) Diesel power generating sets proposed as source of back up power for elevators and common area illumination 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. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Tamil Nadu State Pollution Control Board.
- iv) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured

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at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

- v) The green belt of the adequate width and density preferably with local species along the periphery of the complex shall be raised so as to provide protection against particulates and noise.
- vi) Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- vii) Rain water harvesting for roof surface run- off, as proposed should be implemented. Before recharging the surface run off, pretreatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts. above the highest ground water table.
- viii) The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- ix) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking loading and unloading facility should be fully internalized and no public space should be utilized.
- Energy conservation measures like installation of CFLs/TFLs for the lighting the common areas should be integral part of the project design and should be in place before project commissioning. Use 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. Use of solar panels may be done to the extent possible.
- xi) Efforts may be made to use solar energy to the maximum extent possible.
- xii) Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.

#### PART - B. GENERAL CONDITIONS

- i) The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.
- ii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail)

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to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

- 4. Officials from the Regional Office of MOEF, Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bangalore.
- 5. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
- 6. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- 7. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- 8. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Tamil Nadu Pollution Control Board and may also be seen on the website of the Ministry Environment of and **Forests** http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore.
- 10. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
- 11. Any appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of

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30 days as prescribed under Section 11 of the National Environmer 11 Appellate Act, 1997.

- 12. A copy of the clearance letter shall be sent by the proponent concerned Panchayat, Zilla Parisad/Municipal Corporation. Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- 13. 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, the respective Zonal Office of CPCE3 and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NOinc (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- 14. The environmental statement for each financial year ending 31 to 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 along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

(Bharat Bhusban)
Director (IA)

#### Copy to:

(I) The Secretary, Department of Environment, Government of Tamil Nadu, Chief Secretariate, Chennai.

(2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110 032.

(3) The Chairman, Tamil Nadu State Control Board, Chennai.

- (4) The CCF, Regional Office, Ministry of Environment & Forests(SZ), Kendriya Sadan, IVth floor, E&F wings, 17th Main Road, Koramangala II Block, Bangalore - 560 034.
- (5) JA Division, Monitoring Cell, MOEF, New Delhi 110003.

(6) Guard file.

(Bharat Bhushan) Director (IA)

# MINUTES OF THE 316<sup>th</sup> MEETING OF BOARD OF DIRECTORS OF C.M.W.S.S. BOARD HELD AT 3.00 p.m. ON 09-09-2010.

#### AGENDA ITEM NO.16

RES.NO.168/2010

Engineering - O&M - T&T - RO II - Development of infrastructure facilities at Thervaikandiagai Village, Gummidipoondi Taluk - Providing water supply from Redhills Estimate revised - Subject placed before the Board for approval.

The Board took note of the details putforth in the agenda and the recommendations of the Management Committee and after detailed discussion the Board resolved to accord approval on the following:

- (i) to take up the work of laying pipeline and constructing booster stations for supplying 14 MLD of water to SIPCOT Industrial Park, Thervaikandigai at a tentative cost of Rs.48.80 crores and an annual Operation & Maintenance Cost of Rs.0.70 crore. The expenditure towards this work to be borne by the SIPCOT.
- to supply 14 MLD of water to the SIPCOT Industrial Park, Thervaikandigal from the Redhills Water Treatment Plant.

and

(iii) to collect charges towards supply of water at Rs.80/- per KL with 5% increase every year.

K. ASHOK VARDHAN SHETTY, 14.09.2010 CHAIRMAN.

/t.c.f.b.o./

SECHETARY.

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CONSENT ORDER No:5541 Dated:21.04.2011. PROCEEDINGS NO. T2/TNPCB/F-30016/W/RL/TLR/2011 Dated:21.04.2011.

Consent for Establishment under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988.

> Sub TNPC Board Consent for establishment - Ms.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAL (Extent of 456.27 ha and in which total area under industrial plots of 369.83 ha(81,05%) bearing S Nos.32/2 and 33/2 of Thervoykandigal mentioned in the Consent Applications), Thervoy Kandigai Village, Gummidipoondi Taluk, Tiruvallur 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 53 of 1988).

Ref. 1, MoEF, Gol, EC.No. 21-41/2009-IA-III, Dated 09:08:2010.

- 2. Your application for consent Dated 24 09 2010.
- Hon'ble High Court order in W.P. No.9319 of 2009 and Contempt Petition No.802 of 2009, passed on 16.09 2009.
- 4. Hon'ble Supreme Court order in SLP(Civil)Nos.1386 & 1387 OF 2010, passed on 08.03.2010.
- Sub Committee –TSC II ITEM NO. 60- 11, Dated 08.04 2011.

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 53 of 1988) (hereinafter referred to as 'The Act') and the Rules and Orders made there under to

The Occupier,

M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAL

(hereinafter referred to as 'The Applicant') authorising him to establish or to take steps to establish the industry in the site mentioned below:

(Extent of 456.27 ha and in which total area under industrial plots of 369.83 ha(81.05%) bearing S.Nos.32/2 and 33/2 of Thervoykandigal mentioned in the Consent Applications),

THERVOY KANDIGAI VILLAGE, GUMMIDIPOONDI TALUK.

TIRUVALLUR DISTRICT

POLLUTION PREVENTION PAYS அகம் தூய்மை வாய்மைக்கு! புறம் தூய்மை வாழ்வுக்கு !



This Consent to establish is valid for two years, 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.

Sd/- xxx Member Secretary Tamilnadu Pollution Control Board Chennai

To

The Occupier,
M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAI,
(Extent of 456.27 ha and in which total area under
industrial plots of 369.83 ha(81.05%)
bearing S.Nos.32/2 and 33/2 of Thervoykandigai
mentioned in the Consent Applications),
THERVOY KANDIGAI VILLAGE,
GUMMIDIPOONDI TALUK,
TIRUVALLUR DISTRICT. — 601 20 21

#### Copy to:

- The District Environmental Engineer,
   Tamilnadu Pollution Control Board,
   Thiruvallur for information and necessary action.
  - The Commissioner Thervoy Kandigai Village Panchayat, Thervoy Kandigai.
  - 3. BMS

4-Technical Section

//Forwarded by order//

For Member Secretary.

mrzehn

V# 25411



#### SPECIAL CONDITIONS

#### 1. DETAILS OF THE PRODUCTS MANUFACTURED

SI.No.	Description	Quantity/ Month
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The applicant activity is an Industrial Park to set up Industries like Synthetic Rubber( tubes/tyres, industrial products), Engineering Fabrication/ manufacturing units and Glass industries, etc., and undertaking development, maintenance of the common infrastructure such as roads, water supply, sewage treatment plant, storm water drainage system and sewerage system.

This consent to establish is valid for the manufacture of products and the rate of production mentioned above. Any change in rate of and the quantity or quality of the products has to be brought to the notice of the Board.

- The unit shall install Effluent Treatment Plants as proposed, to ensure that the effluent
  to be discharged shall satisfy the standards prescribed by the Board for disposal of
  effluent into inland surface waters/public sewers/marine coastal areas/on land for
  irrigation, as indicated in the Annexure 1.
- The unit shall install sewage treatment system for the treatment of wastewater arising out of the sanitary facility and waste water generated from canteen as proposed in Annexure – 1.
- 4. The unit shall construct effluent drains/cable drains/storm waster drains separately and provide different colour, sign boards along with alignment of various drains as indicated in the site plan, furnished by the industry.
- Each vessel/reactor should have its own catch pit for the collection of pills and each
  pump in the process section must be mounted on its own catch pit with the suction line
  of the pump connected to pit to empty periodically/regularly/continuously.
- It has to be ensured by the unit that the floors with the expanded metal, slotted angle stool sinks, steel gates shall be built to the maximum possible to avoid floor washings.
- 7. If the plant layout demands that the vessels should be installed in upper floor, it shall provide suitable system to minimise spill/leakages and also to collect and drain the spillages into effluent drain leading to the Effluent Treatment Plant by providing suitable gradient to the properly lined bottom floor.



- The unit shall construct tank or lagoon of adequate capacity with compatible impervious material for the storage of hazardous/solid wastes.
- The unit shall ensure that the corrosion prone areas and construction material liable to atmospheric and process induced corrosion shall be given special attention for immediate replacement with least preventive maintenance.
- 10. The unit has to provide facilities separately outside the main production plant for carrying out detoxification operations if any.
- 11. In order to collect spills from a particular vessel before the spilled materials get a chance for contamination with spills from another vessel, the two vessels must be installed at sufficient distance to ensure that inter contamination cannot take place.
- 12. Flange joints in the pipelines should be avoided wherever possible.
- 13. The unit shall establish laboratory with adequate analytical equipments for analysing the trade effluent/sewage as well as samples of water collected from the wells nearby if any.
- 14. The unit shall construct compound wall around the boundary of the unit, to adequate height from ground level.
- 15. The unit shall appoint an Environmental Engineer with experience of minimum three years in maintenance of waste water treatment plants, before commissioning, along with supporting staff, chemist, technician and operators.
- 16. Following location specific conditions must be satisfied:

(i) - pl. víde Annexure
(ii)

(iii)

17. The following process specific conditions must be satisfied:

- pl. vide Annexure

(ii) (iii)

18. The applicant unit an Industrial Park, M/s. Sipcot Industrial Park - Thervoy Kandigai, (Extent of 456.27 ha and in which total area under industrial plots of 369.83 ha(81.05%) bearing S.Nos.32/2 and 33/2 of Thervoykandigai mentioned in the Consent Applications), Thervoy Kandigai Village, Gummidipoondi Taluk, Tiruvallur

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District, is legally responsible under the provisions of enacted environmental Acts for the setting up of industries like Synthetic Rubber( tubes/tyres, industrial products), Engineering Fabrication/ manufacturing units and Glass industries, etc., and undertaking development, maintenance of the common infrastructure such as roads, water supply, sewage treatment plant, storm water drainage system and sewerage system.

- 19. The unit shall ensure that no industrial activities specified in G.O.Ms.No.213, Environment & Forests Department, Dated:30.03.1989 and G.O.Ms.No.127, Environment & Forests Department, Dated:08.05.1998 should be established in the Industrial Park premises.
- 20. The unit shall ensure that treated/untreated sewage/industrial trade effluents shall not gain access to the water bodies located around the premises and also shall not be discharged either inside or outside the premises.
- 21. The unit has to ensure that development, maintenance of the common infrastructure such as roads, water supply, sewage treatment plant, storm water drainage system, sewerage system, parking facility and solid waste management system to be under taken shall not cause any environmental degradation to the land, water sources and air as a whole.
- 22.No industry in the applicant Industrial Park shall be permitted to carry out establishment works without obtaining CTE of the TNPC Board.
- 23. The applicant unit shall furnish appropriate land use reclassification certificate obtained from the competent authority before applying CTO.
- 24. The quantity of domestic waste water (sewage effluent) discharge shall not exceed 0.50 cu.m./day. Sewage shall be disposed as committed after adequate treatment and confirm to the following standards.

pH	5.5 – 9.0
BOD	Less than 20 mg/l
Suspended Solids	Less than 30 mg/l

25. The applicant—unit—shall have to comply with provisions of Hazardous Waste (Management & Handling) Rules 1989 as amended-from time to time.



- 26. No member\_industry will be permitted to discharge wastewater and Solid waste from outside the Industrial Park and shall ensure zero discharge by the member industries.
- 27. The applicant unit shall establish a laboratory and technical crew comprising of environmental engineers/scientists, chemists, experienced mechanics and electricians with adequate training in (O&M) of the proposed effluent treatment systems / air pollution control measures in order to maintain the wholesomeness of the Industrial Park.
- 28. The applicant unit and its member industries shall obtain ISO 14000 certification for it's environmental compliance.
- 29.25% of the land area acquired by the applicant unit including all beneficiary units shall be developed as a green belt with trees having a thick canopy cover. The applicant unit shall also maintain the trees planted outside the premises. The species of trees should be chosen in consultation with the local DFO and seedlings should be at least 2 mt. tall. If no space is available within the premises, trees shall be planted outside the premises. The unit shall adopt drip irrigation system for green belt development.
- 30. The consent to establish is issued without prejudice to the right of Tamilnadu Pollution Control Board to collect consent fees for this consent order at the rates to be revised by the Government of Tamilnadu.
- 31. The applicant unit must provide Rainwater Harvesting facilities within the premises so as to increase the recharging of ground water in that area. Necessary permission shall be obtained from irrigation department for rainwater harvesting and recharging work. Basic survey of existing contours should be made to study the present natural drainage system. Natural drain/flow should not be obstructed by any kind of work for this. The applicant unit should submit detailed report stating technical aspects and methodology of water harvesting system along with all components and get approval thereof.
- 32. The applicant unit shall furnish the Environmental Statement for the financial year ending the 31<sup>st</sup> March of Tamilnadu Pollution Control Board on or before the thirtieth day of September every year in Form V as per Rule 14 of the Environmental (Protection) Rules, 1986 as amended.
- 33. The premises of the Industrial Park shall both inside and outside should be kept clean.
  Attention should be given to good housekeeping within the premises and the immediate vicinity of the factory. All pipes, valves, sewers and drains shall be leak





proof. Floor washings should be drained into the effluent collection system only and should not be drained into storm water drains or open areas. There should not be any debris, plastic wastes other rubbish etc., lying within or outside the factory.

- 34. The applicant unit and all it's beneficiary activities units should not be commenced without obtaining consent to operate from the Tamilnadu Pollution Control Board.
- 35. The applicant unit shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water Cess Act 1977.
- 36. The solid waste generated in the complex should be segregated, treated and disposed off as per the provisions contained in the Municipal Solid Waste Rules. 2000.
- 37. The applicant unit an Industrial Park, M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAI, shall ensure that its activities have authorization of the Board for waste oil/ used oil generated from the applicant unit, and shall be managed / handled as per Hazardous Waste (Management & Handling) Rules 1989 as amended.
- 38. The applicant unit should obtain prior authorization of the Board for Bio Medical waste generated from health care facility and shall be managed and handled as per Bio Medical Waste Rules 1998.
- 39. The project authorities, as part of their environmental management, shall prepare and implement a scheme for protection of the flora and fauna.
- 40. The services like health and education facilities which may be developed as part of the complex should be accessible to the nearby villagers at an affordable price.
- 41. The project shall resort to solar energy to the extent possible and particularly in the supply of hot water and street lighting.
- 42. A community welfare scheme for improving the socio-economic environment should be worked out and shall be converted into a time bound action plan. A report in this regard shall be submitted to the Board and Government for review.
- 43. If it is established by any competent authority that the damage is caused due to their activities to any person or his property in that case they are obliged to pay the compensation as determined by the competent authority.
- 44. The applicant unit shall have to register the Industrial Park under the provisions of the Factories Act 1948 and shall obtain the necessary Factory License.
- 45. The Environmental Management Unit / Cell shall be setup to ensure implementation and monitoring of Environmental safe guards and other conditions stipulated by



statutory authorities. The Environmental Management Unit / Cell shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing Environmental Issues. This Cell shall also co-ordinate the exercise of Environmental Audit and preparation of Environmental Statements.

- 46. The applicant unit shall have to obtain public liability insurance policy as per PLI Act 1991 and submit the copy of the same to the Board.
- 47. The unit shall have and use only one outlet for the discharge of its effluent and no effluent shall be discharged without requisite treatment and without satisfying with the TNPC Board Norms prescribed. The unit shall not keep any bypass line or system or loose or flexible pipe for discharging effluent outside or even for transporting treated or un-treated effluent within the premises, within effluent treatment plants or in the compound of the park premises.
- 48. The printed log books shall be maintained and get it certificate for a). Energy / Fuel consumption b): Wastewater / gaseous flow at inlet and outlet of STP and Air Pollution Control Measures. c). Quantity of sludge generated d). Laboratory analysis / reports for each of the specified parameters of liquid effluents and sludge samples.
- 49. The ground water quality around the Industrial Park mall should be monitored on a regular basis. The monitored data should be submitted to the TNPC Board once in six months.
- 50. Periodical medical check up of the workers should be done and records maintained as a measure to provide occupational health service to the workers.
- 51. The facilities to be constructed for the project shall not cause any inconvenience or disturbance to the local communities including the farmers.
- 52. The applicant unit, an Industrial Park, M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAL; shall ensure that the topsoil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.
- 53. The applicant unit, an Industrial Park, M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAL, shall ensure that soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- 54. The applicant unit, an Industrial Park, M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAI, shall ensure that fly ash-should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and



amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100 Km of thermal Power Stations.)

- 55. The applicant unit, aπ Industrial Park, M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAI, shall ensure that the approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.
- 56. The applicant unit, an Industrial Park, M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAI, shall comply with the specific conditions imposed under heads in the Environmental Clearance issued by Ministry of Environment and Forests, Government of India, in EC.No: 21-41/2009-IA.III, Dated:09.08.2010, viz., (Part-A) I. Construction Phase, II. Operation Phase and Part-B. General Conditions scrupulously.
- 57. The applicant unit, an Industrial Park, M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAI, shall ensure that there shall be no discharge of effluents on land or any water resources and if the applicant unit / member units fails to achieve the same for any reason, all it's beneficiary units shall stop their production and operations in the process house forthwith and restart the same after ensuring that the discharge of effluents on land or any water resources is restrained.
- 58. The applicant unit, an Industrial Park, M/s.SIPCOT INDUSTRIAL PARK -THERVOY KANDIGAI, shall ensure that all the member/beneficiary units have to apply for consent to establish under the Water & Air Acts and no establishment activities shall be carried out by the member/beneficiary units without obtaining the consent to establish under the Water & Air Acts.
- 59. The unit shall dispose the E-waste from the Industrial Park as well as in their registered offices through the Authorised E-waste recyclers notified in TNPC Board web site.

Sd/- xxx MEMBER SECRETARY TAMIL NADU POLLUTION CONTROL BOARD CHENNAL

//Forwarded by order//

For Member Secretary

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POLLUTION PREVENTION PAYS அகம் தூய்மை வாய்மைக்கு! புறம் தூய்மை வாழ்வுக்கு!



#### TAMILNADU POLLUTION CONTROL BOARD

#### GENERAL CONDITIONS.

- 1. The above Consent to establish cannot be construed as Consent to operate.
- The industry shall make a request for grant of consent to operate atleast sixty days before the commissioning of trail production.
- 3. The applicant shall maintain good house-keeping both within the factory and in the premises. All pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted into the effluent collection system only and shall not be allowed to find their way to storm water drains or open areas.
- The unit has to provide sludge and silt traps and manholes along the effluent drains for periodical desilting and desludging operation.
- All places of storage of solid/liquid material are to be dyked with bunding facilities and the flooring within the dyked and bunding area shall be lined and impervious materials depending upon the nature of the solid/liquid to be stored.
- As the unit proposes to utilise the treated trade effluent on inland for irrigation, the land
  has to be made fit for irrigation in consultation with the agricultural scientist to avoid
  more percolation.
- Samples of water from the wells or any other nearby water sources have to be taken
  by the unit and get them analysed by the Board Laboratory to develop base line data
  to assess the existing water quality.
- The unit shall provide separate power connection for the Effluent Treatment Plant and install separate energy meter for Effluent Treatment Plant as well as for aerators if any.
- The unit shall provide an alternate power source sufficient to operate all the facilities to be installed in Effluent Treatment Plant by the applicant.
- 10. This consent does not authorise or approve the construction of any physical structures or facilities or the undertaking of any work in any natural water course.
- 11. 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.



#### TAMILNADU POLLUTION CONTROL BOARD

- 12. 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.
- 13. Consent to operate will not be issued unless the unit complied with the conditions of Consent to establish, otherwise, the order of Consent to establish already issued will be revoked with immediate effect.

Sd/- xxx

MEMBER SECRETARY

TAMIL NADU POLLUTION CONTROL BOARD
CHENNAI.

//Forwarded by order//

For Member Secretary.

## <u>SIPCOT – THERVOI KANDIGAI</u>

#### MONITORING PHOTOGRAPHS

#### AMBIENT AIR QUALITY MONITORING PHOTOS

#### PROJECT SITE



## KARADIPUDUR



#### **CHINNAPULIYUR**



#### THERVOY VILLAGE



#### **KOLLANUR**



## GROUND WATER SAMPLING PHOTOS



#### **KARADIPUDUR**



#### THERVOY VILLAGE



#### SURFACE WATER SAMPLING PHOTOGRAPH

#### LAKE NEAR PALAVAKKAM



#### LAKE NEAR THERVOY KANDIGAI



## SOIL SAMPLING PHOTOGRAPH

#### PROJECT AREA



#### KARADIPUTHUR











#### KOLLANUR



## NOISE MONITORING PHOTOGRAPH

#### PROJECT AREA



#### KARADIPUDUR



THERVOY VILLAGE



CHINNAPULIYUR





#### KOLLANUR





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## SIPCOT Industrial Park Thervoykandigai, Thiruvallur District

Environmental Clearance has been obtained for the proposed SIPCOT Industrial Park at Thervoykandigai, Thiruvallur District from Ministry of Environment & Forests, New Delhi, vide their letter No. 21-41/2009-IA. III, dated 09.08.2010

The contents of the letter can be viewed in SIPCOT website: www.sipcot.com and also in the MoEF website: www.envfor.nic.in. Further, the copies of the Environmental Clearance could be obtained from the Head Office of Tamil Nadu Pollution Control Board (TNPCB).

Principal Secretary / Chairman & Managing Director, SIPCOT, Visit us ut : www.tn.gov.in 19-A, Rukmani Lakshmipathy Road, Egmore,

DIPR/1082/Display/2010

Chennai - 600 008.

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சிப்காட தொழிற்பூங்கா தேர்வாய் கண்டிகை, தீருவள்ளூர் மாவட்டம்

மத்திய சுற்றுச்சூழல் மற்றும் வனத்துறை அமைச்சகம், கடிதம் எண். 21-41/2009-IA.III தேதி **09.08.2010** வழியாக திருவள்ளூர் மாவட்டம் தேர்வாய் கண்டிகையில் உத்தேசிக்கப்பட்டுள்ள தொழிற் புங்காவிற்கு சுற்றுச்சூழல் இசைவாணை வழங்கியுள்ளது. ுவ்விசைவாணையின் முழு விவரத்தை சிப்காட் இணையதளமான www.sipcot.com மற்றும் மத்திய சுற்றுச்சூழல் மற்றும் வனத்துறை **அமைச்சகத்தின்** இணையதளமான www.envfor.nic.in ஆகீயவற்றில் நாணலாம். மேலும் இசைவாணையி**ன் நகலினை** தமிழ்நாடு மாசு கட்டுப்பாட்டு வாரி**யத் தலைமை** அலுவகைத்தில் பெறலாம்.

முதன்மை செயரை /

தலைவர் மற்றும் மேலாண்மை கியக்குனர். சிப்காட்,

īsit us ut : www.tn.gov.in 19-A. உருக்குமணி கிலட்சுமிபத் சாலை. ு.951. இ./ 1082 /வரைக்கை/2010 சென்னை-600 008.

## Annexure 6

#### **FIRE STATION**



#### Annexure – 7

## **Green Belt Photographs**

#### **SIPCOT Green Belt**



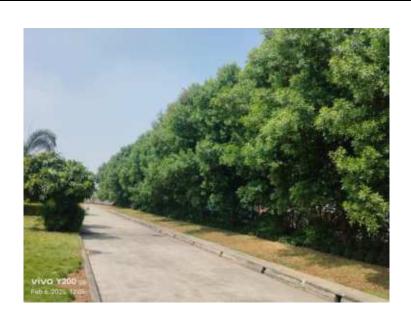


## **Green Belt Photographs of Industries**

## Wheels India







Laulagun Bearings India Pvt Ltd



## <u>Annexure – 8</u>

## **Solar Energy Utilization by industries**

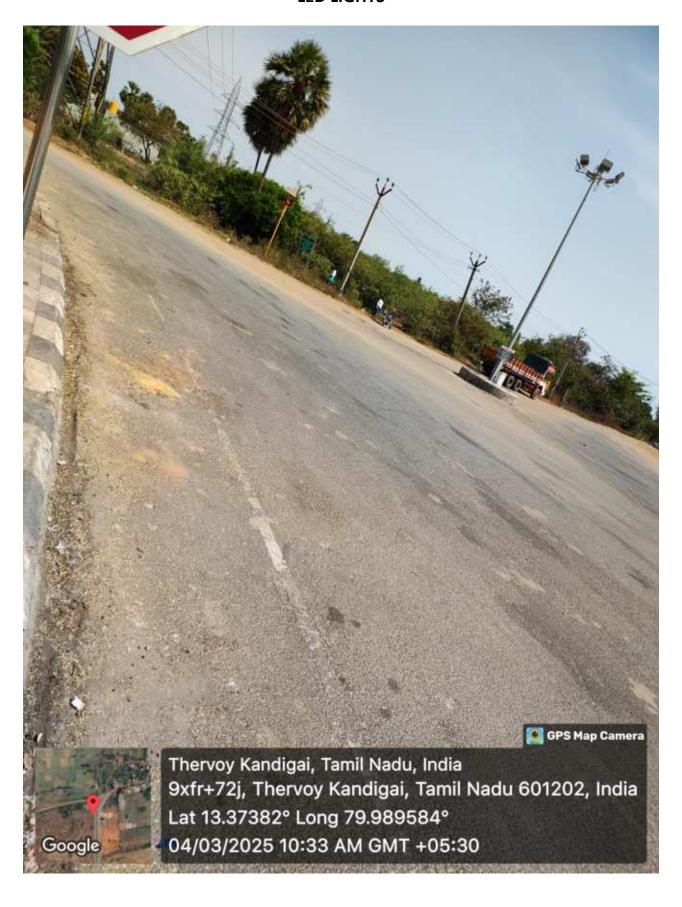
Laulagun Bearings India Pvt Ltd

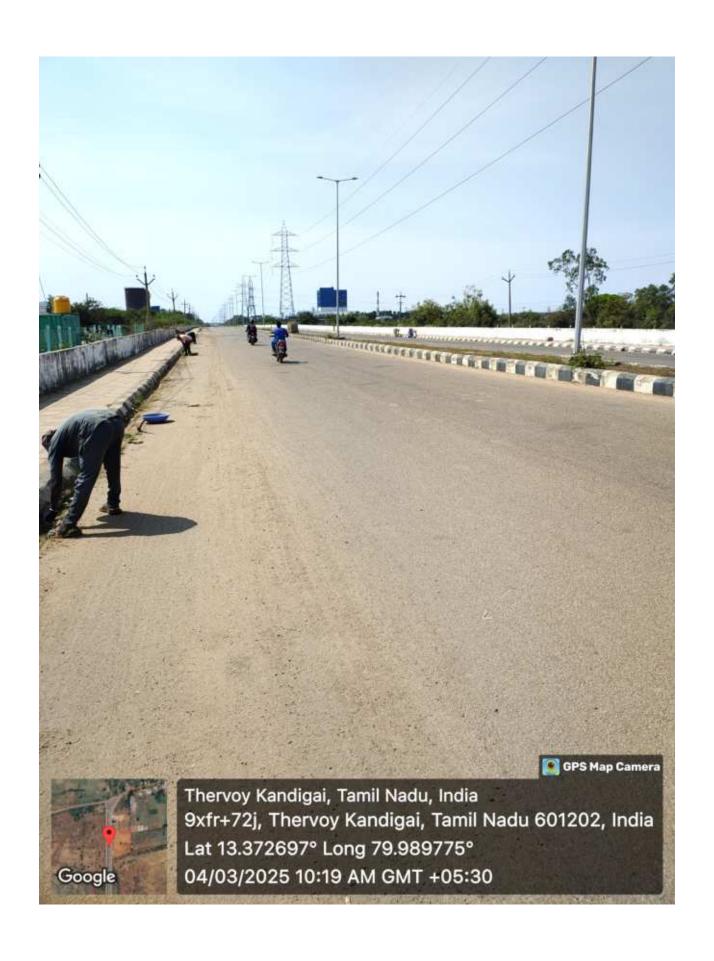


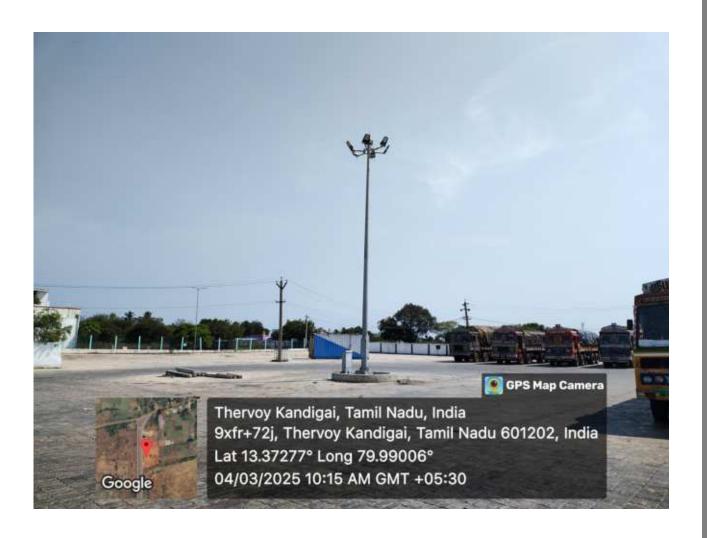
Wheels India



#### **LED LIGHTS**







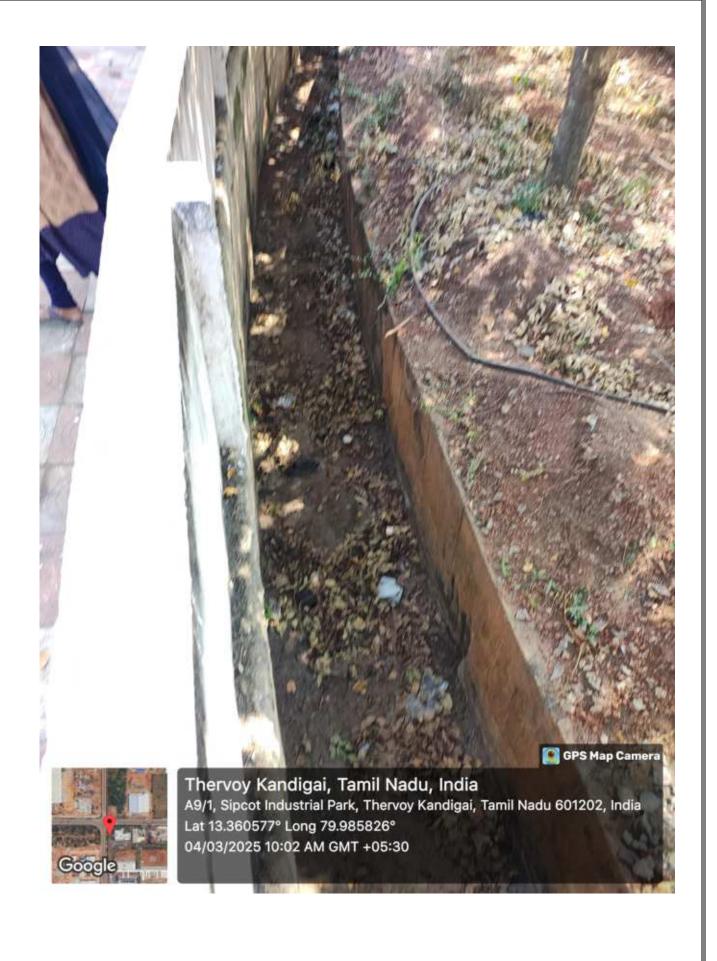
#### **PARKING AREA**

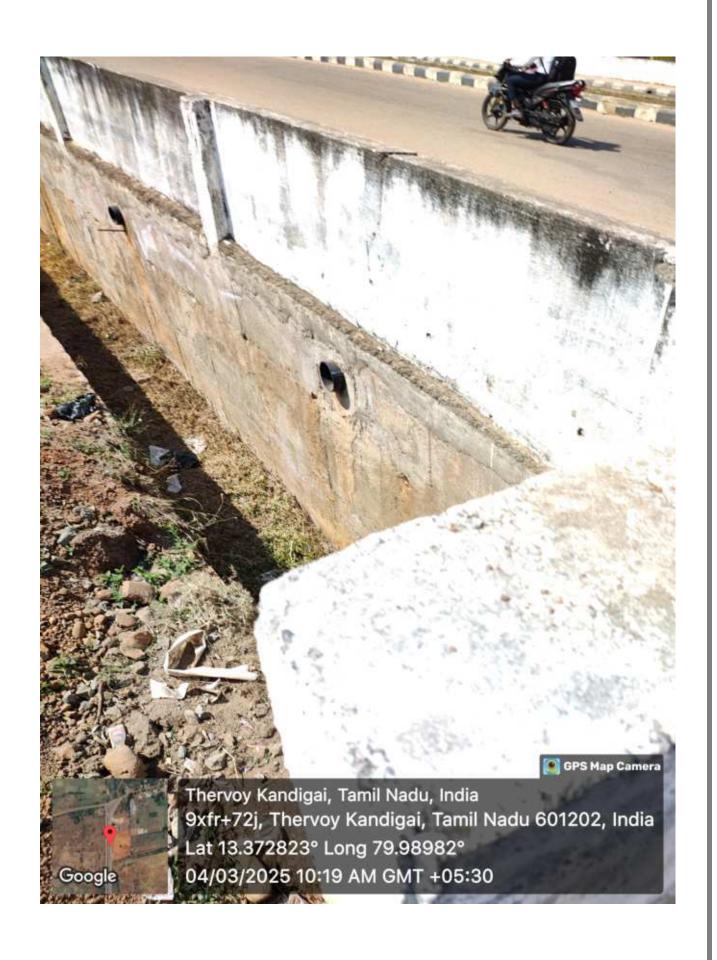




## RAIN WATER HARVESTING, WEEP HOLES & STORM DRAIN









Weep holes

## Annexure - 11

#### **SOLID WASTE MANAGEMENT**







#### Annexure 12

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

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in



#### **Laboratory Services Division**

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



#### TEST REPORT

Page: 1 of 1

HER

: TC1231025000016096F

Report No.

: HECS/AP/056/050325

Sample ID No

: 050325072

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 03/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

: NA

Commenced Date: 05/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

Atmospheric Pollution

Sample Name

: Ambient Air

: NA

Sample Mark Sample Reference

Sample Drawn By

Sample Location

Environmental Condition

: NA

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

: Project Area

: Temperature (°C): 29.0 | Humidity (%): 56.0

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stand	dards : 2009
Discip	oline : Chemical					
1	Arsenic	ng/m³	2.09	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m³	1,81	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene	μg/m³	BLQ (LOQ: 0.1 )	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m³	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammonia as NELS	μg/m²	BLQ(LOQ 5)	IS 5182 (Part 25) 2018	400 (24 bours)	100 (Annual)
b	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	34.98	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	μg/m³	BLQ(LOQ 10)	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours
9	Particulate matter (Size less than 10 $\mu$ m)	µg/m³	98.08	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
0.0	Particulate matter (Size less than 2.5 $\mu m$ )	μg/m¹	41.24	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	11.04	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	1.cad	μg/m³	0.04	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	I (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/m2- Nanograms per cubic meter.

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

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



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

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

Guindy, Chennai - 600 032.

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E-mail: labsales@hecs.in

Laboratory Services Division

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/056/050325/N

Sample ID No Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 050325072 : 03/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

: NA

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

: Atmospheric Pollution

Group

: Ambient Air

Sample Name

Sample Mark Sample Reference

Sample Drawn By

: NA

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

: Project Area

Sample Location Environmental Condition

: Temperature (°C): 29.0 | Humidity (%): 56.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

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

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

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



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

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#### TEST REPORT

Page: I of I

ULR

: TC1231025000016107F

Report No.

: HECS/AP/57/050325

Sample ID No

: 050325073

: 03/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Sampling Date

Group

Atmospheric Pollution

Received Date

: 05/03/2025

Sample Name

: Ambient Air

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 03/04/2025

Sample Reference

: NA

Report Date

: 03/04/2025

Sample Drawn By

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

Sample Qty

Sample Location

Near Karadipudur

: NA

Environmental Condition

: Temperature (°C): 30.0

| Humidity (%): 56.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stand	lards : 2009
Discip	dine : Chemical					
1	Arsenic	ng/m³	2.17	HECS-G/INS/SOP 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m³	2.1	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene	μg/m³	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m <sup>a</sup>	BLQ (LOQ: 0.1)	IS : 5182 Part 12: 2004	1 (Annual)	1 (Annual)
5	Ammoma as NH3	μg/m²	9.57	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/m <sup>*</sup>	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	μg/m³	20.93	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	μg/m³	17.71	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 µm)	μg/m³	130.18	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu m$ )	μg/m³	49.19	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	14.89	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.02	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

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

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

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

D.Anusuya Lab Manager

Authorized Signatory



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

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

Guindy, Chennai - 600 032.

Ph: 42985555 / 43635555 Fax: 42985500

E-mail: labsales@hecs.in

Group

Sample Name

Sample Mark

Sample Reference

Sample Drawn By

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TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/57/050325/N

Sample ID No Sampling Date

Completed On

Report Date

Sample Oty

: 050325073 : 03/03/2025

: 03/04/2025

: 03/04/2025

Received Date : 05/03/2025

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Atmospheric Pollution

: Ambient Air

: NA

: NA

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

Sample Location Environmental Condition

Sampling Method & Plan

: Near Karadipudur

: Temperature (°C): 30.0 | Humidity (%): 56.0 : IS 5182 Part 5 & Part 14

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

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

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



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#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016108F

Report No.

: HECS/AP/58/050325

Sample ID No.

: 050325074

Sampling Date

Received Date

Completed On

Report Date

Sample Oty

: 03/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

: NA

Commenced Date: 05/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

Atmospheric Pollution

Sample Name

Ambient Air

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Near Kollanur

Sample Location Environmental Condition

: Temperature (°C): 28.0

| Humidity (%): 55.0

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

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stand	lards : 2009
Discip	line : Chemical					
1	Arsenic	ng/m³	1.98	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m³	1.4	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene	ug/m³	BLQ (LOQ: 0.1.)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m³	BLQ (LOQ: 0.1)	IS: 5182 Part 12: 2004	l (Annual)	I (Annual)
5	Ammonia as NH3	µg/m³	BLQ(LOQ 5)	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/m³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	μg/m³	8.47	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	μg/m³	BLQ(LOQ 10)	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours)
9	Particulate matter (Size less than 10 μm)	μg/m³	79.43	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu m$ )	μg/m³	30.39	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	7.57	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.009	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	1 (24 hours)	0.5 (Annual)

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

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

"End of Report"



D.Anusuya Lab Manager Authorized Signatory

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HECS-G/O/FMT/049 HECS-G/Q/FMT/049 Hubert Enviro Care Systems (P) Ltd. A-21, III Phase, Thiru Vi Ka Industrial Estate,

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Laboratory Services Division

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/AP/58/050325/N

Sample ID No Sampling Date

Received Date

Completed On

Report Date

Sample Qty

Commenced Date: 05/03/2025

: 050325074 : 04/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

: NA

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

Sample Reference

Sample Drawn By

Sample Location

Environmental Condition

: NA

: NA

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

: Near Kollanur

: Temperature (°C): 28.0 | Humidity (%): 55.0

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

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

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

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



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Address of the Client

#### TEST REPORT

Page: 1 of 1

SLIU

: TC1231025000016109F

Report No.

: HECS/AP/59/050325

Sample ID No

: 050325075

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 04/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

: NA

Commenced Date: 05/03/2025

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By Sample Location

Environmental Condition

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

: Temperature (°C): 29.0

| Humidity (%): 54.0

Sampling Method & Plan : IS 5182 Part 5 & Part 14 Test Parameters S.No. Units Results Test Method NAAQ Standards: 2009 Discipline: Chemical HECS-G/INS/SOP/ 041 Issue Arsenic ng/m3 1.83 6 (Annual) 6 (Annual) No.:01 Issue Date:01.03.2021 Nickel ng/m3 1.34 HECS-G/INS/SOP/ 041 Issue 20 (Annual) 20 (Annual) No.:01 Issue Date:01.03.2021 Benzene BLQ (LOQ. 0.1) IS 5182 Part 11: 2006 5 (Annual) 5 (Annual) my/m Benzo (a) pyrene ng/m³ BLO (LOQ: 0.1) IS - 5182 Part 12: 2004 1 (Annual) t (Annual) Ammonia as NH3 IS 5182 (Part 25) 2018 400 (24 hours) 7.96 100 (Annual) 112/111 Carbon Monoxide (CO) mg/m' BLQ(LOQ 0.05) IS 5182 (Part 10) Clause 4 4 (I hours) 2 (8 hours) 1999 Nitrogen dioxides as NO2 8 62 IS 5182 (Part 6) 2006 80 (24 hours) 40 (Annual) µg/m³ Ozone as O3 µg/m³ 11.03 IS 5182 (Part 9) 1974 180 (1 hours) 100 (8 hours) Particulate matter (Size less than 10 94.41 IS 5182 (Part 23) 2006 100 (24 hours) 60 (Annual) µg/m³ 10 Particulate matter (Size less than 2.5 32.84 IS 5182 (Part 24) 2019 60 (24 hours) µg/m¹ 40 (Annual) jum) 11 Sulphur dioxide as SO2 15.88 IS 5182 (Part 2) 2001 80 (24 hours) 50 (Annual) µg/m³ 12 Lead HECS-G/INS/SOP/ 041 Issue 0.004 1 (24 hours) 0.5 (Annual) No.:01 Issue Date:01.03.2021

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"

Chennai 600 032 D. Anusuya Lab Manager Authorized Signatory

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HECS-C/O/FMT/849 HECS-G/Q/FMT/049 Hubert Enviro Care Systems (P) Ltd. A-21, III Phase, Thiru Vi Ka Industrial Estate,

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E-mail: labsales@hecs.in

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#### TEST REPORT

Page: Lof L

Report No.

: HECS/AP/59/050325/N

Sample ID No Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 050325075 : 04/03/2025

: 05/03/2025

: 03/04/2025

: 03/04/2025

: NA

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

Sample Drawn By

Sample Location

: NA

Sample Reference

: NA

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

: Near Chinna Puliyur

: Temperature (°C): 29.0 | Humidity (%): 54.0

Environmental Condition Sampling Method & Plan

: IS 5182 Part 5 & Part 14

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

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

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



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

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E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016110F

Report No.

: HECS/AP/60/050325

Sample ID No

: 050325076

: 05/03/2025

: 03/04/2025

: 03/04/2025

- NA

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 04/03/2025

Address of the Client

: M/S. SIPCOT., : Thervoy Kandigai

Commenced Date: 05/03/2025

Group

: Atmospheric Pollution

Sample Name

: Ambient Air

Sample Mark

: NA

: NA

Sample Reference Sample Drawn By

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

Sample Location Environmental Condition : Near Thervoy Village

: Temperature (°C): 29.0 | Humidity (%): 54.0

Sampline Method & Plan

: IS 5182 Part 5 & Part 14

S.No.	Test Parameters	Units	Results	Test Method	NAAQ Stand	iards : 2009
Discip	line : Chemical					
1	Arsenic	ng/m³	1.53	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	6 (Annual)	6 (Annual)
2	Nickel	ng/m+	1.22	HECS-G/INS/SOP/ 041 Issue No.:01 Issue Date:01.03.2021	20 (Annual)	20 (Annual)
3	Benzene	μg/m <sup>3</sup>	BLQ (LOQ: 0.1)	IS 5182 Part 11: 2006	5 (Annual)	5 (Annual)
4	Benzo (a) pyrene	ng/m³	BLQ (LOQ: 0.1)	JS: 5182 Part 12: 2004	1 (Annual)	T (Annual)
5	Ammonia as NH3	µg/m³	6.82	IS 5182 (Part 25) 2018	400 (24 hours)	100 (Annual)
6	Carbon Monoxide (CO)	mg/m³	BLQ(LOQ 0.05)	IS 5182 (Part 10) Clause 4 1999	4 (1 hours)	2 (8 hours)
7	Nitrogen dioxides as NO2	μg/m³	10.34	IS 5182 (Part 6) 2006	80 (24 hours)	40 (Annual)
8	Ozone as O3	μg/m³	13.38	IS 5182 (Part 9) 1974	180 (1 hours)	100 (8 hours
9	Particulate matter (Size less than 10 µm)	μg/m³	80.06	IS 5182 (Part 23) 2006	100 (24 hours)	60 (Annual)
10	Particulate matter (Size less than 2.5 $\mu m$ )	μg/m³	36,94	IS 5182 (Part 24) 2019	60 (24 hours)	40 (Annual)
11	Sulphur dioxide as SO2	μg/m³	17.24	IS 5182 (Part 2) 2001	80 (24 hours)	50 (Annual)
12	Lead	μg/m³	0.006	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. A-21, III Phase, Thiru Vi Ka Industrial Estate,

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E-mail: labsales@hecs.in

Laboratory Services Division

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#### TEST REPORT

Page: Lof 1

Report No.

: HECS/AP/60/050325/N

Sample ID No

: 050325076

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Sampling Date

: 04/03/2025

Group

Atmospheric Pollution

Received Date

: 05/03/2025

Sample Name

: Ambient Air

Commenced Date: 05/03/2025 Completed On

: 03/04/2025

Sample Mark

: NA

Report Date

: 03/04/2025

Sample Reference

: NA

Sample Qty

- NA

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

Environmental Condition

: Temperature (°C): 29.0 | Humidity (%): 54.0

Sampling Method & Plan

: IS 5182 Part 5 & Part 14

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

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

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



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Address of the Client

#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000013303F

Report No.

: HECSL/WT/005/050325

Sample ID No.

: 050325078

Sampling Date

: 03/03/2025

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location Environmental Condition : Project Area

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

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

Completed On : 19/03/2025

Report Date : 19/03/2025 Sample Qty

2 Litres

Sampling	Method & Plan : 18	17614(Part-1	):2021	
S.No.	Test Parameters	Units	Results	Test Method

Test Parameters	Units	Results	Test Method	IS 1050	1:2012
				Acceptable Limits (Max)	Permissible Limit (Max)
oline : Chemical					
Bi carbonate	mg/l	91.5	IS 3025 Part 51: 2001	NA	NA
Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
Calcium as Ca	ng/l	34:07	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	7.5	200
Carbonate	mg/I	20.0	IS 3025 Part 51: 2001	NA	NA
Chloride as Cl	mg/l	61.86	IS 3025 Part 32; 1988 ( Argentometric Method)	250	1000
Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1; 2021	0.05	No relaxation
Electrical Conductivity at 25°C	μS/cm	457.0	IS 3025 Part-14; 2013	NA	NA
Fluoride as F	mg/I	0.27	APHA 23rd edition (Method 4500F- B , D): 2017	1.0	1.5
Iron as Fe	mg/l	0.18	IS 3025 (Part 53): 2003	1.0	No relaxation
Magnesium as Mg	mg/l	15.80	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
Nitrate as NO3	mg/l	4.96	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation
	Bi carbonate Boron as B  Catenum as Ca  Carbonate Chloride as Cl  Colour Cyanide as CN  Electrical Conductivity at 25°C Fluoride as F  Iron as Fe  Magnesium as Mg	Bi carbonate mg/l Boron as B mg/l Catenum as Ca mg/l Carbonate mg/l Carbonate mg/l Carbonate mg/l Chloride as Cl mg/l Colour Hazen units Cyanide as CN mg/l Electrical Conductivity at 25°C Fluoride as F mg/l Iron as Fe mg/l Magnesium as Mg mg/l	Discribed   Dis	Bi carbonate   mg/l   91.5   IS 3025 Part 51; 2001	Acceptable Limits (Max)   Acceptable Limits (Max)



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#### TEST REPORT

Page: 2 of 4

ULR

: TC1231025000013303F

Report No.

: HECSL/WT/005/050325

Sample ID No

: 050325078

Sampling Date

Received Date

Completed On

Report Date

Sample Oty

Commenced Date: 05/03/2025

: 03/03/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

2 Litres

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

Sample Drawn By

: NA

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

Sample Location

: Project Area

Environmental Condition Sampling Method & Plan

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

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limit (Max)
13	pH at 25°C		8.21	IS 3025(Part 11) : 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K	mg/l	3.0	IS 3025 Part 45; 1993 ( Fleme emission Photometric Method)	NA	NA
1.5	Sodium as Na	mg/l	25.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	N.A	N.A.
16	Sulphate as SO4	mg/l	34.18	IS 3025 Part 24 Sec 1: 2022( Turbidity Method)( Turbidity Method)	200	400
17	Total dissolved solids	rng/l	242.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	2.0	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	0.021	IS 3025 Part 31 Sec 1; 2022 ( Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	150.0	IS 3025 (Part 21): 2009	200	600
21	Turbidity, NTU	NTU	0.7	IS 3025 (Part 10): 1984	1	5
22	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation



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#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000013303F

Report No.

: HECSL/WT/005/050325

Sample ID No.

: 050325078

: 05/03/2025

: 19/03/2025

: 19/03/2025

2 Litres

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

Commenced Date: 05/03/2025

: 03/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Project Area

Environmental Condition Sampling Method & Plan

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

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limits (Max)
23	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
24	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
25	Copper	rng/I	BLQ (LOQ: 0.01)	USEPA 200.8 = 1994	0.05	1.5
26	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 - 1994	0.01	No relaxation
27	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8: 1994	0.001	No relaxation
28	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	0.02	No relaxation
29	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
30	Phenolic compounds as C6H5OH	mg/I	BLQ(LOQ:0.00 1)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
31	Anionic Surface Active agents as MBAS	mg/I	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
32	Percent Sodium	%	25.98	HECS /WT/SOP/002= 2019	NA	NA
33	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
34	Residual Sodium Carbonate	meq/1	B1.Q(1.OQ:1.0)	IS 11624: 2019	0.2	1.0



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

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Group

Sample Name



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Name of the Client

### TEST REPORT

Page: 4 of 4

ULR : TC1231025000013303F

Report No. : HECSL/WT/005/050325

Sample ID No : 050325078

Sampling Date : 03/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Received Date : 05/03/2025

: Water : Ground Water

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

Sample Mark : NA Sample Reference : NA

Report Date : 19/03/2025

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

Sample Qty 2 Litres

Sample Location : Project Area

Environmental Condition

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

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

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limit (Max)
35	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34:Sec 2: 2021 ( Nesslerization Method)	0.5	No relaxation
36	Sodium Adsorption Ratio(SAR)	Square root of (millimole/ litre)	0.9	IS 11624 : 2019	NA	NA
37	Dissolved oxygen	mg/1	6.3	IS 3025 (Part 38): 1989 ( Titrimetric Method)	NA	NA
38	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2,0)	IS 3025 Part 44, 1993	NA	NA
39	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
40	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
41	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
42	Total alkalinity as CaCO3	mg/l	75.0	IS 3025 (Part 23): 1986	200	600
43	Phosphate as PO4	mg/l	0.067	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA

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



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#### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/005/050325/N

Sample ID No.

: 050325078 : 03/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Sampling Date

: 05/03/2025

Group Sample Name

Name of the Client

: Water

Received Date

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 19/03/2025

Sample Reference

: NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample Qty

2 Litres

Sample Location Environmental Condition : Project Area

Sampling Method & Plan

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

: IS 17614(Part-1):2021

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

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

"End of Report"

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#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000013304F

Report No.

HECSL/WT/006/050325

Sample ID No

: 050325079

Sampling Date

: 03/03/2025

Address of the Client

: M/S. SIPCOT., : Thervoy Kandigai

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 19/03/2025

Sample Reference

: NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample Qty

Sample Location

: Near Karadipudur

2 Litres

Environmental Condition Sampling Method & Plan

: IS 17614(Part-1):2021

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

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limit (Max)
Disci	pline : Chemical					
1.	Bi carbonate	mg/I	128.1	IS 3025 Part 51: 2001	NA	NA
2	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57 -Curcumin Method: 2021	0.5	2.4
3	Calcium as Ca	mg/I	12.06	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	75	200
4	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA	NA.
5	Chloride as Cl	mg/I	51.96	IS 3025 Part 32: 1988 ( Argentometric Method)	250	1000
6	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
7	Cyanide as CN	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
8	Electrical Conductivity at 25°C	μS/cm	430.0	IS 3025 Part-14: 2013	NA	NA
9	Fluoride as F	mg/l	0.25	APHA 23rd edition (Method 4500F- B , D): 2017	1.0	1.5
10	Iron as Fe	mg/l	0.042	IS 3025 (Part 53): 2003	1.0	No relaxation
11	Magnesium as Mg	mg/I	19,44	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
12	Nitrate as NO3	mg/l	13.2	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation



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### TEST REPORT

Page: 2 of 4

ULR

: TC1231025000013304F

Report No.

: HECSL/WT/006/050325

Sample ID No

: 050325079

Sampling Date

: 03/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Ground Water

Commenced Date: 05/03/2025

Completed On

: 19/03/2025

Sample Mark

: NA

Report Date

: 19/03/2025

Sample Reference

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

Sample Drawn By Sample Location

: Near Karadipudur

Sample Qty

2 Litres

Environmental Condition

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

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	1S 1050	0:2012
					Acceptable Limits (Max)	Permissible Limits (Max)
13	pH at 25°C	*	7.06	IS 3025(Part 11) : 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K	mg/l	2.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/!	23.0	15 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA.	NA.
16	Sulphate as SO4	mg/l	23.71	IS 3025 Part 24 Sec 1: 2022( Turbidity Method)( Turbidity Method)	200	400
17	Total dissolved solids	mg/l	246.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/l	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	0.029	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	160.0	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/1	BLQ (LOQ: 0.005)	USEPA 200.8: 1994	0.01	No relaxation



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HECS\_C/O/FMT/0.49 HECS-G/Q/FMT/049

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Name of the Client

### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000013304F

Report No.

: HECSL/WT/006/050325

Sample ID No

: 050325079

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

Commenced Date: 05/03/2025

: Thervoy Kandigai

: 03/03/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

2 Litres

Address of the Client

: M/S. SIPCOT.,

: Water

: Ground Water

Sample Name

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By Sample Location

Environmental Condition

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

: Near Karadipudur

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

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

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limits (Max)
23	Cadmium	mg/I	BLQ (LOQ: 0.001)	USEPA 200.8: 1994	0.003	No relaxation
24	Chromium	mg/I	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.05	No relaxation
25	Copper	mg/1	BLQ (LOQ:	USEPA 200.8 - 1994	0.05	1.5
26	Lead	mg/I	BLO (LOO: 0.005)	USEPA 200.8: 1994	0.01	No relaxation
27	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.001	No relaxation
28	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
29	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	.5	15
30	Total alkalinity as CaCO3	mg/l	105.0	IS 3025 (Part 23): 1986	200	600
31	Selenium	mg/I	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
32	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200,8: 1994	0.1	0.3
33	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
34	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA



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#### TEST REPORT

Page: 4 of 4

ULR

: TC1231025000013304F

Report No.

: HECSL/WT/006/050325

Sample ID No

: 050325079

Sampling Date

: 03/03/2025

Address of the Client

: Thervoy Kandigai

: M/S, SIPCOT.,

Group

: Water

Received Date

: 05/03/2025

Sample Name

Ground Water

Commenced Date: 05/03/2025

Completed On

: 19/03/2025

Sample Mark

: NA

Report Date

: 19/03/2025

Sample Reference

Sample Drawn By

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

Sample Qty

2 Litres

0.5

NA

NA

No relaxation

NA

NA

Sample Location

: Near Karadipudur

IS 3025 Part 34:Sec 2: 2021 (

Nesslerization Method)

IS 11624:2019

IS 3025 Part 31 Sec 1: 2022 (

Stannous Chloride method)

Environmental Condition Sampling Method & Plan

Carbonate

Ratio(SAR)

Ammonia as NH3

Sodium Adsorption

Phosphate as PO4

41

42

43

: IS 17614(Part-1):2021

mg/I

Square root of

(millimole/ litre)

mg/l

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

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limits (Max)
35	Dissolved oxygen	mg/l	6.5	IS 3025 (Part 38): 1989 ( Titrimetric Method)	NA	NA
36	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.00	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
37	Anionic Surface Active agents as MBAS	Type	B1Q(1.0Q.0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	
38	Percent Sodium	%	23.45	HECS /WT/SOP/002:: 2019	NA	NA
39	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.7	No relaxation
40	Residual Sodium	meq/I	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0

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

BLQ(LOQ:0.02)

0.8

0.094



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#### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/006/050325/N

Sample ID No

: 050325079

Sampling Date

: 03/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

: 05/03/2025

Group Sample Name Water

Received Date

Ground Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 19/03/2025

Sample Reference

Report Date

: 19/03/2025

Sample Drawn By

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

Sample Qty

2 Litres

Sample Location Environmental Condition : Near Karadipudur

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

Sampling Method & Plan

: IS 17614(Part-1):2021

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

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

""End of Report"

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

Guindy, Chennai - 600 032.

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### Laboratory Services Division

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Name of the Client

Address of the Client

#### TEST REPORT

Page: 1 of 4

ULR

: TC1231025000013305F

Report No.

: HECSL/WT/007/050325

Sample ID No

: 050325080

Sampling Date

: 04/03/2025

: Thervoy Kandigai

: M/S. SIPCOT.,

: 05/03/2025

Sample Name

: Water Ground Water

Received Date Commenced Date: 05/03/2025

Sample Mark

Completed On

: 19/03/2025

Sample Reference

: NA : NA

Report Date

: 19/03/2025

Sample Drawn By

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

Sample Qty

Sample Location

: Near Thervoy Village

2 Litres

Environmental Condition

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

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limits (Max)
Disci	pline : Chemical					
1	Bi carbonate	mg/l	219.6	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	пц/1	84.17	IS 3025 Part 40: 1991 (EDTA. Titrimetric Method)	75	200
4	Carbonate	mg/l	20.0	1S 3025 Part 51: 2001	NA	NA
5	Chloride as CI	mg/l	217.75	IS 3025 Part 32: 1988 ( Argentometric Method)	250	1000
6.	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 (Part4): 2021	5	15
7	Cyanide as CN	mg/I	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1: 2021	0.05	No relaxation
8	Electrical Conductivity at 25°C	μS/cm	1136.0	IS 3025 Part-14: 2013	NA	NA
9	Fluoride as F	mg/1	0.41	APHA 23rd edition (Method 4500F- B , D): 2017	1.0	1.5
10	Iron as Fe	mg/l	0.053	IS 3025 (Part 53): 2003	1.0	No relaxation
11	Magnesium as Mg	mg/l	31.59	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	30	100
12	Nitrate as NO3	mg/l	29.4	APHA 23rd edition (Method 4500 NO3B): 2017	45	No relaxation



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Address of the Client

#### TEST REPORT

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ULR

: TC1231025000013305F

Report No.

HECSL/WT/007/050325

Sample ID No

: 050325080

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

Commenced Date: 05/03/2025

: 04/03/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

2 Litres

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Sample Name

Ground Water

Sample Mark

: NA

Sample Reference Sample Drawn By Sample Location

Environmental Condition

Sampling Method & Plan

: NA

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

: Near Thervoy Village

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

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
				Acceptable Limits (Max)	Permissible Limits (Max)	
13	pH at 25°C	*	8.31	IS 3025(Part 11) : 2022 ( Electrometric method)	6.5-8.5	No relaxation
14	Potassium as K	mg/I	8.0	IS 3025 Part 45: 1993 ( Fleme emission Photometric Method)	NA	NA
15	Sodium as Na	mg/I	95.0	IS 3025 Part 45: 1903 ( Fleme emission Photometric Method)	NA	NA
16	Sulphate as SO4	mg/l	42.05	IS 3025 Part 24 Sec 1: 2022( Furbidity Method); Turbidity Method)	200	400
17	Total dissolved solids	mg/l	634.0	IS 3025 (Part 16): 1984	500	2000
18	Total Suspended Solids	mg/I	BLQ(LOQ:2.0)	IS 3025 (Part 17): 1984	NA	NA
19	Phosphorous as P	mg/l	0.042	IS 3025 Part 31 Sec 1; 2022 ( Stannous Chloride method)	NA	NA
20	Total hardness as CaCO3	mg/l	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



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#### TEST REPORT

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ULR

: TC1231025000013305F

Report No.

: HECSL/WT/007/050325

Sample ID No

: 050325080

Sampling Date

: 04/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference Sample Drawn By

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

: NA

Sample Location Environmental Condition : Near Thervoy Village

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

Received Date : 05/03/2025

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

Report Date : 19/03/2025

Sample Qty 2 Litres

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

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limits (Max)
23	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	0.003	No relaxation
24	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 ± 1994	0.05	No relaxation
25	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 - 1994	0.05	1.5
26	Lead	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 - 1994	0.01	No relaxation
27	Mercury	mg/i	BLQ (LOQ: 0,0005)	USEPA 200.8 : 1994	0.001	No relaxation
28	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.02	No relaxation
29	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5	15
30	Percent Sodium	%	36.96	HECS /WT/SOP/002:: 2019.	NA	NA
31	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8:1994	0.7	No relaxation
32	Residual Sodium Carbonate	meq/I	BLQ(LOQ:1.0)	IS 11624: 2019	0.2	1.0
33	Ammonia as NH3	mg/l	BLQ(LOQ:0,02)	IS 3025 Part 34:Sec 2: 2021 ( Nesslerization Method)	0.5	No relaxation
34	Sodium Adsorption Ratio(SAR)	Square root of (millimole/ litre)	2.2	IS 11624 ; 2019	NA	NA



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### TEST REPORT

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ULR

: TC1231025000013305F

Report No.

: HECSL/WT/007/050325

Sample ID No

: 050325080

Sampling Date

Received Date

Completed On

Commenced Date: 05/03/2025

: 04/03/2025

: 05/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference Sample Drawn By

Sample Location

Group

: NA

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

Report Date Sample Qty : 19/03/2025 : 19/03/2025 2 Litres

: Near Thervoy Village

Environmental Condition

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

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

S.No.	Test Parameters	Units	Results	Test Method	IS 1050	0:2012
					Acceptable Limits (Max)	Permissible Limits (Max)
35	Dissolved oxygen	mg/I	6.6	IS 3025 (Part 38): 1989 ( Titrimetric Method)	NA	NA
36	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	NA	NA
37	Chemical Oxygen Demand (COD)	mg/l	BLQ(LOQ:4.0)	IS 3025 Part 58: 2006	NA	NA
38	Sclenium	mg/I	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.01	No relaxation
39	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	0.1	0.3
40	Total alkalinity as CaCO3	mg/I	180,0	IS 3025 (Part 23); 1986	200	600
41	Phenolic compounds as C6HSOH	mg/l	BLQ(LOQ:0.00 1)	IS 3025 Part 43 Sec 1: 2022	0.001	0.002
42	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition (Method 5540 B , C): 2017	0.2	1
43	Phosphate as PO4	mg/I	0.345	IS 3025 Part 31 Sec 1: 2022 ( Stannous Chloride method)	NA	NA

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



D. Anusuya Lab Manager **Authorized Signatory** 

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#### TEST REPORT

Page: 1 of 1

Report No.

HECSL/WT/007/050325/N

Sample ID No

: 050325080

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 04/03/2025

: 05/03/2025

: 19/03/2025

: 19/03/2025

2 Litres

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Sample Name

: Ground Water

Sample Mark

: NA

Sample Reference

Sample Drawn By

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

Sample Location

: Near Thervoy Village

Environmental Condition Sampling Method & Plan

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

: IS 17614(Part-1):2021

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

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

""End of Report"



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Group

Sample Name

Sample Mark



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Address of the Client

### TEST REPORT

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ULR

: TC1231025000016234F

Report No.

HECSL/WT/008/050325

Sample ID No

: 050325081

Sampling Date

: 03/03/2025

Received Date

: 05/03/2025

Commenced Date: 05/03/2025 Completed On

Report Date

: 04/04/2025

04/04/2025

Sample Qty

2 Litres

Sample Drawn By Sample Location

Sample Reference

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

: Lake Near Palavakkam

: M/S. SIPCOT.,

: Surface Water

: Water

: NA

: NA

: Thervoy Kandigai

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

Environmental Condition Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discip	oline : Chemical				
1	Bi carbonate	mg/l	97.6	IS 3025 Part 51: 2001	NA.
2	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/l	BLQ(LOQ:2.0)	IS 3025 Part 44: 1993	30
3	Boron as B	mg/l	BLQ(LOQ-0.1)	IS 3025 Part 57: 2021 ( Curcumin Method)	NA.
4	Calcium as Ca	mg/l	22.04	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA
5	Chemical Oxygen Demand (COD)	mg/I	8.0	IS 3025 Part 58: 2006	250
6	Chloride as Cl	mg/l	47.01	IS 3025 Part 32: 1988 ( Argentometric Method)	NA
7	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	NA
8	Dissolved oxygen	mg/l	6.3	IS 3025 Part 38: 1989	NA
9	Electrical Conductivity at 25°C	μS/cm	462.0	IS:3025 Part 14: 2013	NA.
10	Fluoride as F	mg/t	0.25	APHA 23rd edition Method 4500 F -B,D: 2017	2.0
11	Iron as Fe	mg/l	0.102	IS 3025 Part 53: 2003	3.0
12	Nitrate as NO3	mg/i	2.84	APHA 23rd edition Method 4500 NO3B: 2017	NA



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Name of the Client

Address of the Client

#### TEST REPORT

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ULR

: TC1231025000016234F

Report No.

: HECSL/WT/008/050325

Sample ID No

: 050325081

Sampling Date

Received Date

: 03/03/2025

: 05/03/2025

: Thervoy Kandigai

: M/S. SIPCOT.,

Sample Name

: Surface Water

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Lake Near Palavakkam

Environmental Condition Sampling Method & Plan

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

Completed On : 04/04/2025

Commenced Date: 05/03/2025

Report Date

: 04/04/2025

Sample Qty

2 Litres

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
1.3	pH at 25°C	- 3	8.15	IS 3025 Part 11: 2022 ( Electrometric Method)	5.5 - 9.0
14	Total dissolved solids	mg/l	214.0	IS 3025 Part 16: 1984	NA
1.5	Carbonate	mg/l	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
16	Cynnide as CN	mg/t	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.2
17	Magnesium as Mg	mg/l	12.15	IS 3025 Part 46: 1994 ( Valumetric Method using EDTA)	NA
18	Potassium as K.	mg/l	4.0	IS 3025 Part 45: 1993	NA.
19	Sodium as Na	mg/l	31.0	IS 3025 Part 45: 1983	NA
20	Sulphate as SO4	mg/l	32.54	IS 3025 Part 24 Sec 1: 2022	NA
21	Total Hardness as CaCO3	mg/l	105.0	IS 3025 Part 21: 2009	NA
22	Total Phosphorous as P	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 31 Sec 1: 2022	NA
23	Total Suspended Solids	mg/l	2.0	IS 3025 Part 17: 1984	100



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### TEST REPORT

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ULR

: TC1231025000016234F

Report No.

: HECSL/WT/008/050325

Sample ID No

: 050325081

Sampling Date

: 03/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample Qty

2 Litres

Sample Location Environmental Condition : Lake Near Palavakkam

Sampling Method & Plan

: IS 17614(Part-1):2021

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

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
24	Turbidity	NTU	0.9	IS 3025 Part 10: 1984	NA
25	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.2
26	Cadmium	mg/l	BLQ (LOQ: 0.001)	USEPA 200.8: 1994	2.0
27	Chromium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
78	Copper	mg/I	BLO (LOO: 0.01)	USEPA 200.8 1994	3.0
29	Lead	mg/l	BLQ (LOQ: 0,005)	USEPA 200.8 : 1994	0.1
30	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8 : 1994	0.01
31	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0
32	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	5.0
33	Total alkalinity as CaCO3	mg/l	80.0	IS 3025 Part 23: 1986	NA
34	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	2.0
35	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
36	Phosphate as PO4	mg/l	0.066	APHA 23rd edition Method 4500-P B,D: 2017	NA



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### TEST REPORT

Page: 4 of 4

HIR

: TC1231025000016234F

Report No.

HECSL/WT/008/050325

Sample ID No

: 050325081

Address of the Client

: M/S. SIPCOT.,

Sampling Date

: 03/03/2025

: Thervoy Kandigai

: Water

Received Date

: 05/03/2025

Sample Name

Group

: Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample Oty 2 Litres

Sample Location Environmental Condition : Lake Near Palavakkam

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

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
37	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	IS 3025 Part 43:Sec 1: 2022	1.0
38	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B , C: 2017	NA _
39	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 ; 1994	NA
10	Percent Sodium	%	37.81	HECSG /WT/SOP/002 Issue No:01,Issue date 18.12: 2021	NA
41	Residual Sodium Carbonate	mg/l	BLQ(LOQ:1.0)	IS 11624: 2019	NA
42	Ammonia as NH3	l\gm	BLQ(LOQ:0.02)	IS 3025 Part 34 Sec 2: 2021	5.0
43	Sodium Adsorption Ratio(SAR)	Square root of (millimole/ litre)	1.31	IS 11624: 2019	NA

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



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### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/008/050325/N

Sample ID No

: 050325081

Sampling Date

: 03/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Received Date

: 05/03/2025

Sample Name

Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample Qty

2 Litres

Sample Location

: Lake Near Palavakkam

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

Environmental Condition Sampling Method & Plan

: IS 17614(Part-1):2021

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

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



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### TEST REPORT

Page: I of 4

ULR

: TC1231025000016235F

Report No.

: HECSL/WT/009/050325

Sample ID No

: 050325082

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 04/03/2025

: 05/03/2025

: 04/04/2025

: 04/04/2025

2 Litres

Commenced Date: 05/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Sample Name

Surface Water

Sample Mark

: NA

: NA

Sample Reference Sample Drawn By

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

Sample Location

: Lake Near Thervoykandigai

Environmental Condition Sampling Method & Plan

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

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discip	oline : Chemical				
1	Bi carbonate	mg/l	109.8	IS 3025 Part 51: 2001	NA
2	Biological Oxygen Demand (BOD)@ 27°C For 3 days	mg/I	2.0	IS 3025 Part 44: 1993	30
3	Boron as B	mg/l	BLQ(LOQ:0.1)	IS 3025 Part 57: 2021 ( Curcumin Method)	NA.
4	Calcium as Ca	mg/l	26.05	IS 3025 Part 40: 1991(EDTA Titrimetric Method)	NA.
5	Chemical Oxygen Demand (COD)	mg/l	16.0	IS 3025 Part 58: 2006	250
6	Chloride as Cl	mg/l	42.06	IS 3025 Part 32: 1988 ( Argentometric Method)	NA
7	Colour	Hazen units	BLQ(LOQ:1.0)	IS 3025 Part 4: 2021	NA
8	Dissolved oxygen	mg/l	6.1	IS 3025 Part 38: 1989	NA
9	Electrical Conductivity at 25°C	μS/cm	414.0	IS:3025 Part 14: 2013	NA
10	Fluoride as F	mg/l	0.23	APHA 23rd edition Method 4500 F -B,D: 2017	2.0
1.1	Iron as Fe	mg/l	0.13	IS 3025 Part 53; 2003	3.0
12	Nitrate as NO3	mg/l	2.11	APHA 23rd edition Method 4500 NO3B: 2017	NA



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Address of the Client

#### TEST REPORT

Page : 2 of 4

ULR

: TC1231025000016235F

Report No.

: HECSL/WT/009/050325

Sample II) No

: 050325082

Sampling Date

: 04/03/2025

: Water

Received Date

: 05/03/2025

Sample Name

: Surface Water

: M/S. SIPCOT.,

: Thervoy Kandigai

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample Oty

Sample Location

: Lake Near Thervoykandigai

2 Litres

Environmental Condition

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

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
13	pH at 25°C	12	8.23	IS 3025 Part 11: 2022 ( Electrometric Method)	5.5 - 9.0
14	Total dissolved solids	mg/t	206.0	IS 3025 Part 16: 1984	NA
15	Carbonate	mg/i	BLQ(LOQ:1.0)	IS 3025 Part 51: 2001	NA
161	Cyanide as CN	mg/I	BLQ(LOQ:0.01)	IS 3025 Part 27 sec 1: 2021	0.2
17	Magnesium as Mg	mg/1	12.15	IS 3025 Part 46, 1994 ( Valumetric Method using EUTA)	NA
18	Potassium as K	mg/l	3.0	IS 3025 Part 45: 1993	NA
19	Sodium as Na	mg/l	26.0	IS 3025 Part 45; 1983	NA
20	Sulphate as SO4	mg/l	26.58	IS 3025 Part 24 Sec 1: 2022	NA
21	Total Hardness as CaCO3	mg/l	115.0	IS 3025 Part 21: 2009	NA
22	Total Phosphorous as P	mg/l	0.02	IS 3025 Part 31 Sec 1: 2022	NA
23	Total Suspended Solids	mg/l	6.0	IS 3025 Part 17: 1984	100



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Address of the Client

#### TEST REPORT

Page: 3 of 4

ULR

: TC1231025000016235F

Report No.

: HECSL/WT/009/050325

Sample ID No

: 050325082

Sampling Date

: 04/03/2025

: M/S. SIPCOT., : Thervoy Kandigai

Received Date

: 05/03/2025

: Surface Water

Commenced Date: 05/03/2025

Sample Name Sample Mark

Completed On

: NA

: 04/04/2025

Sample Reference

Report Date

: 04/04/2025

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

Sample Qty

Sample Drawn By Sample Location

: Lake Near Thervoykandigai

2 Litres

Environmental Condition

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

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
24	Turbidity	NTU	0.9	IS 3025 Part 10: 1984	NA
25	Arsenic	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.2
26	Cadmium	Pygni	BLQ (LOQ: 0.001)	USEPA 200.8 : 1994	2.0
27	Chromium	ang/i	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	2.0
28	Copper	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	3.0
29	Lead	mg/i	BLQ (LOQ: 0.005)	USEPA 200.8: 1994	0.1
30	Mercury	mg/l	BLQ (LOQ: 0.0005)	USEPA 200.8: 1994	0.01
31	Nickel	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8 : 1994	3.0
32	Zinc	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	5.0
33	Total alkalinity as CaCO3	mg/l	90.0	IS 3025 Part 23: 1986	NA
34	Manganese	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8: 1994	2.0
35	Selenium	mg/l	BLQ (LOQ: 0.005)	USEPA 200.8 : 1994	0.05
36	Phosphate as PO4	mg/l	0.078	APHA 23rd edition Method 4500-P B,D: 2017	NA



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#### TEST REPORT

Page: 4 of 4

ULR

: TC1231025000016235F

Report No

: HECSL/WT/009/050325

Sample ID No.

: 050325082

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 04/03/2025

: 05/03/2025

: 04/04/2025

: 04/04/2025

2 Litres

Commenced Date: 05/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Water

Sample Name

: Surface Water

Sample Name Sample Mark

: NA

Sample Reference

Sample Location

: NA

Sample Drawn By

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

: Lake Near Thervoykandigai

Environmental Condition

: Temperature (°C): 22.0

| Humidity (%) : 45.0

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

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
37	Phenolic compounds as C6H5OH	mg/I	BLQ(LOQ:0.001)	IS 3025 Part 43:Sec 1: 2022	1.0
38	Anionic Surface Active agents as MBAS	mg/l	BLQ(LOQ:0.05)	APHA 23rd edition Method 5540 B , C: 2017	NA
39	Percent Sodium	96	32.09	HECSG /WT/SOP/002 Issue No:01,Issue date 18.12; 2021	NA
40	Barium	mg/l	BLQ (LOQ: 0.01)	USEPA 200.8; 1994	NA
41	Residual Sodium Carbonate	mg/i	BLQ(LOQ:1.0)	IS 11624; 2019	NA
42	Ammonia as NH3	mg/l	BLQ(LOQ:0.02)	IS 3025 Part 34 Sec 2: 2021	5.0
43	Sodium Adsorption Ratio(SAR)	Square root of (millimole/ litre)	1.05	IS 11624: 2019	NA

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

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



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### TEST REPORT

Page: 1 of 1

Report No.

: HECSL/WT/009/050325/N

Sample ID No

: 050325082

Sampling Date

: 04/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S, SIPCOT.,

Group

: Water

Received Date

: 05/03/2025

Sample Name

: Surface Water

Commenced Date: 05/03/2025

Sample Mark

: NA

Completed On

: 04/04/2025

Sample Reference

: NA

Report Date

: 04/04/2025

Sample Drawn By

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

Sample Qty

2 Litres

Sample Location Environmental Condition

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

Sampling Method & Plan

: IS 17614(Part-1):2021

S.No.	Test Parameters	Units	Results	Test Method	Inland Surface water Standards (Schedule -VI)
Discip	oline : Chemical				
1	Hexavalent Chromium as Cr6+	mg/l	BLQ(LOQ:0.01)	1S 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. \*\*\*First of Report\*\*\*



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#### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014790F

Report No.

: HECS/PE/005/050325

Sample ID No

: 050325083

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 03/03/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Commenced Date: 05/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Pollution & Environment

Sample Name

: Soil

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Near Project Area

Environmental Condition Sampling Method & Plan

: ICARDA : 2013

: Temperature (°C): 28.0 | Humidity (%): 54.0

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			
1	Cadmium	mg/kg	0.17	HECS-G/INS/SOP/ 042 Issue No::01 Issue Date:01.03.2021
2	Chromium	mg/kg	40.47	HECS-G/INS/SOP/042 Issue No. 01 Issue Date:01.03.2021
3	Copper	mg/kg	8.23	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	8.64	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	%	30.6	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	45.8	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	9/4	23.6	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)		7.05	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	13.6	IS 14767: 2000



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Name of the Client

#### TEST REPORT

Page: 2 of 2

SLIL

: TC1231025000014790F

**Report No.** 

: HECS/PE/005/050325

Sample ID No

: 050325083

Sampling Date

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

: 03/03/2025

Group

: Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Completed On

: 28/03/2025

Sample Mark

: NA

Report Date

Sample Reference

: NA

Sample Oty

: 28/03/2025

Sample Drawn By

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

Sample Location

: Near Project Area

-1 Kg

Environmental Condition

: Temperature (°C): 28.0 | Humidity (%): 54.0

Sampling Method & Plan

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm³	0.98	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.24	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.43	IS 2720 (Part 22) Section I 1972
14	Available Phosphorous as P	μg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter III 2008
15	Available Potassium	mEq/100g	17.38	FAO of United Nations, Rome Chapter III 2008
16	Boron as B	mg/kg	BLQ(LOQ 0.1)	MECS-G/ENV/SSW/SOP/018 Issue No 01 Issue Date 02-07 2020
17	Total Nitrogen as N	%	0.0119	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	11.6	FAO of United Nations, Rome Chapter III 2008
19	Exchangable Magnesium as Mg	mEq/L	3.87	FAO of United Nations, Rome Chapter III 2008
20	Cation Exchange Capacity	mEq/100g	2.4	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	30.5	IS 14765: 2000
22	Colour		Red	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02:07: 2020

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



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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/005/050325/N

Sample ID No Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 050325083 : 03/03/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

Pollution & Environment

Sample Name

: Soil

Sample Mark

Sample Reference

Sample Drawn By

: NA

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

Sample Location Environmental Condition

: Near Project Area

: Temperature (°C): 28.0 | Humidity (%): 54.0

Sampling Method & Plan.

: ICARDA : 2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	pline : Chemical			
1	Moisture	%	2.25	HECS-G/ENV/SSW/SOP/003 Issue No.01 Issue Date:02:07: 2020
2	Infiltration Rate	-	0.7	Inhouse method
3	iron	mg/kg	12.59	Inhouse method
4	Manganese	mg/kg	78.42	HECS-G/INS/SOP 042

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

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



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Name of the Client

### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014791F

Report No.

: HECS/PE/006/050325

Sample ID No

: 050325084

Sampling Date

: 03/03/2025

Address of the Client

: M/S. SIPCOT., : Thervoy Kandigai

Group

Pollution & Environment

Received Date

: 05/03/2025

Sample Name

: Soil

Commenced Date: 05/03/2025

Completed On

: 28/03/2025

Sample Mark

: NA

: 28/03/2025

Sample Reference

: NA

Report Date Sample Qty

1 Kg

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

: Temperature (°C): 28.0 | Humidity (%): 54.0

Environmental Condition Sampling Method & Plan

: ICARDA : 2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	dine : Chemical			
1	Cadmium	mg/kg	0.17	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date;01.03.2021
2	Chromium	mg/kg	26.34	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Соррег	mg/kg	15.24	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	mg/kg	10.28	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	5%	40.4	FAO of United Nations, Rome Chapter III 2008
7	Soil Texture ii)Silt	%	45.2	FAO of United Nations, Rome Chapter III 2008
8	Soil Texture iii)Clay	%	14.4	FAO of United Nations, Rome Chapter III 2008
9	pH Value @ 25 ° C (1 : 2.5)		6.44	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	µS/cm	70.9	IS 14767: 2000



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#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014791F

Report No.

: HECS/PE/006/050325

Sample ID No

: 050325084

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 03/03/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Commenced Date: 05/03/2025

Address of the Client

: M/S, SIPCOT., : Thervoy Kandigai

Group

Pollution & Environment

Sample Name Sample Mark

: Soil : NA

Sample Reference

: NA

Sample Drawn By

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

Sample Location

: Near Karadipudur

Environmental Condition

: Temperature (°C): 28.0 | Humidity (%): 54.0

Consuling Mathed & Bloo

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm <sup>3</sup>	0.94	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	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter - III 2008
15	Available Potassium	mEq/100g	14.86	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	%	0.0156	IS 14684 Clause 4 1999
18	Exchangable Calcium as Ca	mEq/L	15.46	FAO of United Nations. Rome Chapter- III 2008
19	Exchangable Magnesium as Mg	mEq/L	7.74	FAO of United Nations, Rome Chapter III 2008
20	Cation Exchange Capacity	mEq/100g	2.1	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	29.5	IS 14765: 2000
22	Colour		Brown	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02:07: 2020

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



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### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/006/050325/N

Sample ID No

: 050325084

Address of the Client

Name of the Client

: M/S. SIPCOT.,

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

Commenced Date: 05/03/2025

: 03/03/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Group

Sample Name

Sample Mark

Sample Reference

Sample Drawn By

Sample Location

: Thervoy Kandigai

Pollution & Environment

: Soil

: NA

: NA

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

: Near Karadipudur

: Temperature (°C): 28.0 | Humidity (%): 54.0

Environmental Condition Sampling Method & Plan

: ICARDA: 2013

Test Parameters	Units	Doculto	T N
ine : Chemical	57,575	resuits	Test Method
Moisture	46	3.92	HECS-G/ENV/SSW/SOP/003 Issu No.:01 Issue Date:02:07: 2020
Infiltration Rate		0.8	The state of the s
Iron	mg/kg	2.33	Inhouse method
Manganese	mg/kg		HECS-G/INS/SOP/ 042
	ine: Chemical Moisture Infiltration Rate Iron	ine : Chemical  Moisture  Infiltration Rate  Iron  Ing/kg	

"End of Report"



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### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014792F

Report No.

: HECS/PE/007/050325

Sample ID No

: 050325085

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 03/03/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Sample Name

Group

: Pollution & Environment

: Soil

Sample Mark

: NA

Sample Reference

: NA

Sample Drawn By

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

: Kollanur

Sample Location Environmental Condition

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

Sampling Method & Plan	: ICARDA : 20
country of the state of the sta	. ICARDA : 20

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			rest internou
1	Cadmium	mg/kg	0.25	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/kg	80.73	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/kg	32.48	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01 03:2021
1	Zinc	mg/kg	26.15	HECS-G/INS/SOP 042 feare No 01 feare Date:01.03.2021
5	Soii Texture		Clay	FAO of United Nations, Rome Chapter III 2008
	Soil Texture i)Sand	%	20.6	FAO of United Nations, Rome Chapter III 2008
	Soil Texture ii)Silt	%	30.6	FAO of United Nations, Rome Chapter III 2008
	Soil Texture iii)Clay	%	48.8	FAO of United Nations, Rome Chapter III 2008
	pH Value @ 25 ° C (1:2.5)	-	5.30	IS 2720 (Part 26) 1987
0	Electrical conductivity @ 25 ° C (1:2)	μS/cm	58,4	IS 14767, 2000



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Name of the Client

Address of the Client

### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014792F

Report No.

: HECS/PE/007/050325

Sample ID No

: 050325085

Sampling Date

: 03/03/2025

Group

: Thervoy Kandigai

: M/S. SIPCOT.,

Sample Name

Pollution & Environment

: Soil : NA

Sample Mark

Sample Reference Sample Drawn By

: NA

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

Sample Location Environmental Condition

: Kollanur

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

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

Sample Oty 1 Kg

S.Na	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm1	0.94	FAO of United Nations Rome 2007
12	Organic Carbon	.96	0.38	IS 2720 (Part 22) Section 1 1972
13	Organic Matter	.%	0.57	IS 2720 (Part 22) Section I 1972
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter III 2008
15	Available Potassium	mEq/100g	16.98	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 figue Date:02-07-2020
7	Total Nitrogen as N	No.	0.0144	IS 14684 Clause 4 1999
8	Exchangable Calcium as Ca	mEq/L	3.78	FAO of United Nations, Rome Chapter III 2008
9	Exchangable Magnesium as Mg	mEq/L	11.38	FAO of United Nations, Rome Chapter III 2008
0	Cation Exchange Capacity	mEq/100g	1.7	IS 2720 (Part 24) Clause 5 1976
1	Water Holding capacity	26	18.8	IS 14765: 2000
	Colour  BLQ : Below the Limit of Quantificati		Brown	HECS-G/ENV/SSW/SOP/011 Issue

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



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### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/007/050325/N

Sample ID No

Received Date

Completed On

Report Date

Sample Qty

: 050325085

Sampling Date

: 03/03/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

Pollution & Environment

Sample Name

: Soil

: NA

Sample Mark Sample Reference

Sample Drawn By

Sample Location

: NA

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

Environmental Condition

: Kollanur

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

Sampling Method & Plan

: ICARDA : 2013

S.No	. Test Parameters	Units	Results	Test Method
Disci	ipline : Chemical			
1	Moisture	%	2.76	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
?	Infiltration Rate		0.4	Inhouse method
1	Iron	mg/kg	4.25	Inhouse method
1	Manganese	mg/kg	252.89	HECS-G/INS/SOP/ 042

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

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



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### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014793F

Report No.

: HECS/PE/008/050325

Sample ID No

: 050325086

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

Commenced Date: 05/03/2025

: 04/03/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Address of the Client

: Thervoy Kandigai

: M/S, SIPCOT.,

Sample Name Sample Mark

Sample Reference

Sample Drawn By

Sample Location

Environmental Condition

Group

Pollution & Environment

: Soil

: NA

: NA

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

: Near Chinna Puliyur

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

S.No.	Test Parameters	Units	Results	Test Method
Discip	pline : Chemical			
1	Cadmium	mg/kg	81.0	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/kg	30.21	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Соррег	mg/kg	13.81	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
4	Zinc	tng/kg	9.30	HECS G/INS/SOP: 042 Issue No.,01 Issue Date 01 03 2021
5	Soil Texture	2	Loam	FAO of United Nations, Rome Chapter III 2008
6	Soil Texture i)Sand	%	38.4	FAO of United Nations, Rome Chapter III 2008
7	Soil Texture ii)Silt	%	46.2	FAO of United Nations, Rome Chapter III 2008
8	Soil Texture iii)Clay	%	15.4	FAO of United Nations, Rome Chapter III 2008
)	pH Value @ 25 ° C (1 : 2.5)		8.72	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	62.3	IS 14767: 2000



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#### TEST REPORT

Page : 2 of 2

ULR

: TC1231025000014793F

Report No.

: HECS/PE/008/050325

Sample ID No

: 050325086

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

: 04/03/2025

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: M/S. SIPCOT., : Thervoy Kandigai

Group

· Pollution & Environment : Soil

Sample Name

: NA

Sample Mark Sample Reference

: NA

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

Environmental Condition

: Near Chinna Puliyur

Sampling Method & Plan

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

: ICARDA : 2013

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm³	0.95	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.24	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.42	IS 2720 (Part 22) Section 1 1972
14	Available Phosphorous as P	µg/g	BLQ(LOQ 5.0)	FAO of United Nations, Rome Chapter III 2008
15	Available Potassium	mEq/100g	14.07	FAO of United Nations, Rome Chapter III 2008
16	Boron as B	mg/leg	Brd(rod o i)	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	10.97	FAO of United Nations, Rome Chapter III 2008
19.	Exchangable Magnesium as Mg	mEq/L	3.65	FAO of United Nations, Rome Chapter III 2008
20	Cation Exchange Capacity	mEq/100g	1.5	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 No.:01 Issue Date:02:07: 2020

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



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HECS-C/O/FMT/849 HECS-G/Q/FMT/049

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E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/008/050325/N

Sample ID No Sampling Date

Received Date

Completed On

Report Date

Sample Oty

: 050325086 : 04/03/2025

: 05/03/2025

28/03/2025

: 28/03/2025

1 Kg

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

Pollution & Environment

Sample Name

: Soil

Sample Mark

: NA

Sample Reference

Sample Drawn By

Sample Location

: NA

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

**Environmental Condition** 

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

Sampling Method & Plan

: ICARDA : 2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			
1	Moisture	%	4.20	HECS-G/ENV/SSW/SOP/003 Issue No.:01 Issue Date:02:07: 2020
2	Infiltration Rate		0.7	Inhouse method
3	Iron	mg/kg	7.31	Inhouse method
4	Manganese	mg/kg	57.22	HECS-G/INS/SOP/-042

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

""End of Report""



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Name of the Client

### TEST REPORT

Page: 1 of 2

ULR

: TC1231025000014794F

Report No.

: HECS/PE/009/050325

Sample ID No

: 050325087

Sampling Date

: 04/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

: 05/03/2025

Group Sample Name Pollution & Environment

Received Date

Commenced Date: 05/03/2025

: Soil

: 28/03/2025

Sample Mark

· NA

Completed On Report Date

: 28/03/2025

Sample Reference

: NA

Sample Qty

Sample Drawn By

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

: 1 Kg

Sample Location Environmental Condition : Near Thervoy Village

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

Sampling Method & Plan

: ICARDA: 2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			
1	Cadmium	mg/kg	0.16	HECS-G/INS/SOP/ 042 Issue No.:01 Issue Date:01.03.2021
2	Chromium	mg/kg	46.14	HECS-G/INS/SOP/042 Issue No.:01 Issue Date:01.03.2021
3	Copper	mg/kg	17.15	HECS-G/INS/SOP/ 042 Issue No :01 Issue Date:01.03.2021
4	Zinc	mg/kg	19.27	HECS-G/INS/SOP/ 042 Issue No.:01 Issue (Jate:01.03.2021
5	Soil Texture	*:	Clay	FAO of United Nations, Rome Chapter - III 2008
6	Soil Texture i)Sand	%	19.0	FAO of United Nations, Rome Chapter - III 2008
7	Soil Texture ii)Silt	%	24.6	FAO of United Nations, Rome Chapter - III 2008
8	Soil Texture iii)Clay	%	56.4	FAO of United Nations, Rome Chapter - III 2008
9	pH Value @ 25 ° C (1 : 2.5)	-	6.56	IS 2720 (Part 26) 1987
10	Electrical conductivity @ 25 ° C (1:2)	μS/cm	54.9	IS 14767: 2000



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#### TEST REPORT

Page: 2 of 2

ULR

: TC1231025000014794F

Report No.

: HECS/PE/009/050325

Sample ID No

: 050325087

Sampling Date

Completed On

Report Date

Sample Qty

Received Date : 05/03/2025

Commenced Date: 05/03/2025

: 04/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Pollution & Environment

Sample Name

: Soil

Sample Mark

: NA

Sample Reference Sample Drawn By

Sample Location

: NA

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

: Near Thervoy Village

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

Environmental Condition

S.No.	Test Parameters	Units	Results	Test Method
11	Bulk Density	gm/cm³	0.95	FAO of United Nations Rome 2007
12	Organic Carbon	%	0.26	IS 2720 (Part 22) Section I 1972
13	Organic Matter	%	0.45	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
5	Available Potassium	inEq/100g	13.17	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	%	0.0125	IS 14684 Clause 4 1999
8	Exchangable Calcium as Ca	mEq/L	5.87	FAO of United Nations, Rome Chapter III 2008
19	Exchangable Magnesium as Mg	mEq/L	2.93	FAO of United Nations, Rome Chapter III 2008
20	Cation Exchange Capacity	mEq/100g	1.2	IS 2720 (Part 24) Clause 5 1976
21	Water Holding capacity	%	21.5	IS 14765: 2000
22	Colour		Brown	HECS-G/ENV/SSW/SOP/011 Issue No.:01 Issue Date:02:07: 2020

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



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#### TEST REPORT

Page: 1 of 1

Report No.

: HECS/PE/009/050325/N

Sample ID No

Received Date

Completed On

Report Date

Sample Qty

: 050325087

: 05/03/2025

: 28/03/2025

: 28/03/2025

1 Kg

Sampling Date : 04/03/2025

Commenced Date: 05/03/2025

Address of the Client

Name of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Pollution & Environment

Стоир

Sample Name

: Soil

Sample Mark

Sample Drawn By

: NA

Sample Reference

: NA

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

Sample Location Environmental Condition : Near Thervoy Village

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

Sampling Method & Plan

: ICARDA : 2013

S.No.	Test Parameters	Units	Results	Test Method
Discip	line : Chemical			
1	Moisture	9/6	13.68	HECS-G/ENV/SSW/SOP/003 Issue No.01 Issue Date:02:07: 2020
2	Infiltration Rate		0.6	Inhouse method
3	iron	mg/kg	8.44	Inhouse method
4	Manganese	mg/kg	156.19	HECS-G/INS/SOP/ 042

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

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



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E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 1 of 1

ULR

: TC1231025000016169F

Report No.

: HECS/AP/061/050325

Sample ID No

: 050325077

: 05/03/2025

: 03/04/2025

: 03/04/2025

- NA

Sampling Date

Received Date

Completed On

Report Date

Sample Qty

Commenced Date: 05/03/2025

: 03/03/2025 To 04/03/2025

Address of the Client

: Thervoy Kandigai

: M/S. SIPCOT.,

Group

: Atmospheric Pollution

Sample Name

Noise Levels (Excluding vibration)

Sample Mark

: Ambient Noise

Sample Reference Sample Drawn By

: NA

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

Sample Location Environmental Condition

: Temperature (°C): 30.0

| Humidity (%): 56.0

Sampling Method & Plan · FC 0090-1091

S.No	Sampling Location	Day Noise level in dB (A)	Night Noise level in dB (A)
9	Near Project Site	54.9	43.7
2	Near Karadipudur	54.2	44.1
3	Near Kollamur	52.5	41.8
4	Near Chimapuliyu	53.8	42.5
5	Near Thervoy Village	51.4	42.7

#### Noise Standards - CPCB:

Industrial Area ii. Commercial Area

; Day Time-75 dB (A);

Night Time-70 dB (A).

iii.

Residential Area

: Day Time-65 dB (A); : Day Time-55 dB (A); Night Time-55 dB (A).

iv.

Silence Zone

Night Time-45 dB (A).

: Day Time-50 dB (A);

Night Time-40 dB (A).

Note:

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

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

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

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



I/173596/2024

Date: 26-09-2024

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

Sir,

Sub: SIPCOT Industrial Park, Thervoykandigai - Environmental Statement for the

Financial Year ending 31st March 2024 - Submitted - Reg.

Ref: MoEF&CC EC Letter No. 21-41/2009-IA.III dated 09.08.2010.

\*\*\*\*\*

With reference to the above, we hereby submit the Environmental Statement in Form-V as prescribed under the Environmental (Protection) Rules, 1986 and its subsequent amendment in respect of SIPCOT Industrial Park at Thervoykandigai Village, Thiruvallur District, Tamil Nadu for financial year ending 31st March 2024.

Yours faithfully,

ASSISTANT GENERAL MANAGER (P-VI)

Encl: As above.





110/200

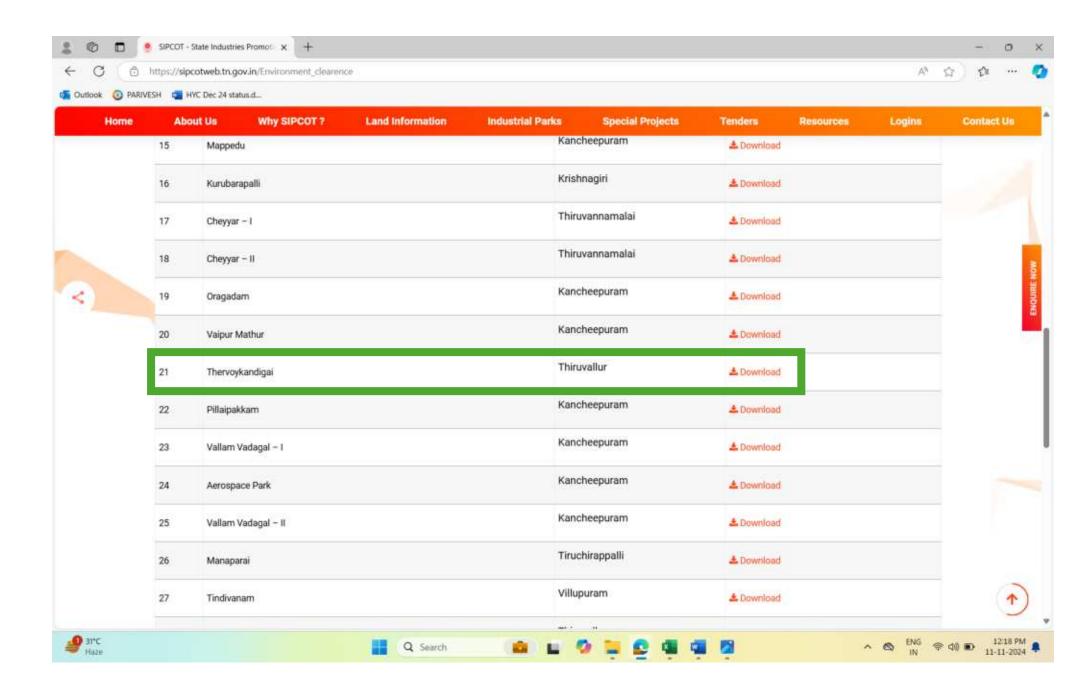
State Industries Promotion Corporation of Tamil Nadu Limited

(A Government of Tamil Nadu Undertaking)
CIN: U74999TN1971SGC005967

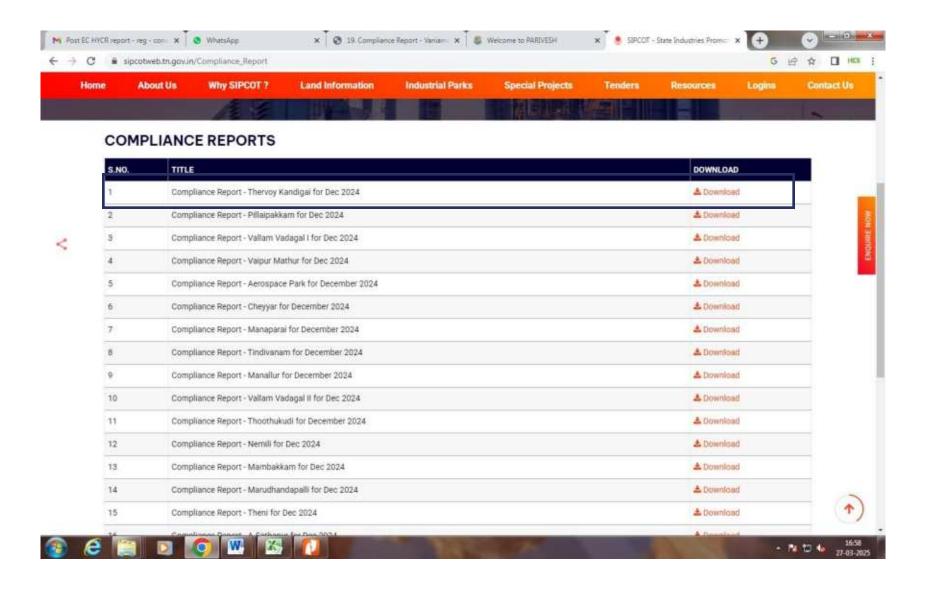
Regd. Office: 19-A, Rukmani Lakshmipathy Road, Post Box No.7223, Egmore, Chennai - 600 008.

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

# Annexure 14



# Annexure 15



# Annexure - 16

# **STP of Industries**

# Laulagun Bearings India Pvt Ltd



# Wheels India



### Annexure – 17

## **DG Set of Industries**

# Laulagun Bearings India Pvt Ltd



# Wheels India



### WATER SUPPLY PHOTOGRAPHS

