

Tamilnadu Petroproducts Limited

Ref: TPL - HCD/ 2025/EC Comp/03

23rd May- 2025

The Director (S) Ministry of Environment, Forest & Climate Change Integrated Regional Office First Floor, Additional Office Block for GPOA Shastri Bhawan, Haddows Road, Nungambakkam, Chennai - 600 006.

Dear Sir,

- Sub: TPL HCD Plant Environmental Clearance (EC) Six Monthly Compliance Report - Oct 2024 to Mar-2025 - reg.
- Ref: F.No. J-11011/20/99-IA-II(I) dated 18.09.2023 *****

This has reference to the Environmental Clearance (EC) obtained from MoEF&CC, New Delhi for Expansion of Caustic Soda production capacity from 150 TPD to 250 TPD by bipolar membrane cell process in the existing Heavy Chemicals Division Plant (HCD Plant) at Manali, Chennai.

We herewith attach the EC compliance status report for the period from October 2024 to March 2025 for your kind reference.

Thanking you,

Yours faithfully. For Tamilnadu Petroproducts Limited

- e thy V.S. Jon V.S. Prakash Kumar







Regd. Office & Factory : Post Box No. 9, Manali Express Highway, Manali, Chennai - 600 068. India. Tel. : (0091) - 44 - 25945500 to 09 Telefax : 044-2594 5588 Website : www.tnpetro.com CIN : L23200TN1984PLC010931 TPL GSTIN: 33AAACT1295M1Z6



TPL-HCD plant -EC Compliance Report

Environmental Clearance Compliance Status Report For the period from Oct-2024 to Mar-2025.

Environment Clearance Compliance Status

Ref: No. J-11011/20/99-IA-II(I) dated 18.09.2023.

(A) Specific Condition

S.No	Condition	Compliance Status
	The directions issued in the Judgement	Being complied
	dated 20.07.2023 by the Hon'ble NGT in	Compliance status of the O.A.No. 256/2020
1	O.A.No. 256/2020 shall be strictly complied	judgement directions by the Hon'ble NGT has
T	and the compliance to each of the direction	been fulfilled and the same has been
	shall be submitted to the IRO, MoEF&CC	submitted to IRO, MoEF&CC along with the
	along with the six-monthly reports	six-monthly reports
	Adequate stack height as per CPCB/SPCB	Complied
	guidelines shall be provided. Stack	Adequate stack height of all point sources
2	emission levels shall be stringent than the	of emissions ensured as per CPCB/SPCB
	existing standards in terms of the identified	guidelines and emission levels being
	critical pollutants	maintained within the existing standards.
	CEMS shall be installed and connected to	Complied
	SPCB/CPCB Server.	Continuous Emission Monitoring System
3		already installed. And OCEMS data is being
		uploaded continuously in TNPCB / CPCI
		server.
4	Effective fugitive emission control	Being complied
	measures shall be adopted in the process,	The following measures are being taken by
	transportation, packing etc.	the industry to control the fugitive emissions
		 Regular preventive maintenance o
		equipment, effective plant operation and
		continuous monitoring are being carried
		out. Records are being maintained.
		Chlorine detectors are installed a
		chlorine handling areas for monitoring
		and to take immediate corrective and
		preventive actions.
		 Chemicals used in the manufacturing
		process are stored in closed shed.
		Preventive maintenance of pumps
		valves, pipelines is being carried ou
		periodically.
		• To eliminate leakage & to ensure
		maximum sealing safety, double
		maximum seaming salety, double



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5	Fuel (R - LNG) shall be transferred through pipeline from IOCL. Raw material and products shall be transported through dedicated road tankers, Raw material Common salt shall be shipped and transported by sea, and majority quantity of gaseous chlorine shall be transferred through pipeline	from I transp Raw m and t	ied R - LNG) is recei OCL. Raw mate orted through d naterial Common the gaseous cl gh pipeline.	erial an edicate n salt is	id prod ed road shippe	ucts are tankers. d by sea
6	Regasified Liquefied Natural Gas / Hydrogen shall be used as fuel in Boiler.		witched over f er fuels for Boile			
7	The best available technology shall be used and as committed by the PP, Caustic soda shall be manufactured through latest energy efficient bipolar membrane cell technology	The m to be efficie	Complied anufacturing of carried out us nt bipolar meml	ing the	e latest	energy
	The PP shall develop greenbelt over an area of at least 14 acres (42.18% of total land		complied belt developme	ent deta	ails	
	area/by planting approx. 7000 numbers of saplings within a year of grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft. The	SI.No	Green belt details	Area in Acres	% of green belt area	No of trees
8	budget earmarked for the plantation shall be kept in a separate account and should be audited annually. The PP should annually submit the audited statement	1	Green belt within the plant premises	5.00	15.06	5000
8			Green belt			
8	along with proof of activities viz. photographs (before & after with geo- location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional	2	adjacent to the premises – *Polymer plant	9.00*	27.11	9000



	year for the activities carried out during previous year	 * The total Green Belt area is 14 Acres (42.18% of Total Land Area), Green Belt area of 5 Acres (15.06%) was developed inside the plant premises and 9 Acres (27.11%) was developed outside the plant premises at TPL-Polymer Plant which is located 250m from the project site. Additionally, we have developed a green belt area of around 15.14 acres outside the plant premises at Morai Village, Pandeswaram Village and Grandlyon village, Thiruvallur District during 2022 – 2023. (No. of tree sapling planted – 15000). GB development spent audited statement along with proof of activities have been prepared as auditor certificate has also been submitted to the Regional Office of MoEF&CC as Annexure-1
9	1400 Nos. of avenue plantation shall develop in highway median nearby plant.	Complied Avenue plantation was developed in highway median.
10	The transportation load on roads shall be within their carrying capacity and adequate width of roads shall be maintained inside the industrial premises.	Sufficient road space is available within the
11	Entire liquid Effluent generated shall neutralized with Acid / Alkali and treated effluent shall be utilized in ECH – PO Process. Sludge shall be used as manure for Greenbelt.	Complied We have an adequate effluent treatment plant to treat the effluent and the treated
12	As committed by the PP, zero liquid discharge shall be ensured.	
13	Online continuous effluent monitoring system (OCEMS) shall be provided for pH,	



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TPL-HCD plant -EC Compliance Report

	TSS and Flow for Effluent treated water shall be connected to TNPCB and CPCB	pH, TSS and flow of treated effluent and it is connected to TNPCB & CPCB.
14	The roof top rainwater shall be collected in the existing Rain water harvesting pits is 2 Nos and 2 Nos of water reservoir 3000 KL (72m x 25m x 1.7m) & 2000 KL (26m x 36m x 2.1m) shall be maintained and used for process purpose. Rain water percolation pit shallbe provided to collect rain water from Canteen building for ground water recharge. The PP also proposed to provide roof rain water harvesting facility for 4000 sq.m. which shall be collected in the existing reservoir and will be utilized for process purpose	Being complied The existing rainwater Harvesting facility has been maintained and is being ensured that the rain water is collected in 2 Nos of water reservoir 3000 KL (72m x 25m x 1.7m) & 2000 KL (26m x 36mx 2.1m) and it is utilized for process purpose. Rain water percolation pit is also provided to collect the rainwater from the canteen to ensure ground water recharge. We proposed to provide roof rain water harvesting facility for 4000 sq.m. which shall be collected in the existing reservoir and will be utilized for process purpose.
15	4 KLD of sewage shall be treated in Common STP of capacity 160 KLD. Sewage after treatment in STP shall be used for Green Belt.	Complied. The proposed additional sewage effluent can be treated in the existing combined STP which is adequate to treat the additional load, treated sewage effluent being utilized for green belt.
16	As committed by the PP, no Fly ash, slag, red mud, etc., shall be generated from the plant.	Complied Ensured that no fly ash, slag, red mud, etc., shall be generated from the plant.
17	All the hazardous wastes generated from HCD plant shall be handled and disposed, as perthe Authorization obtained from TNPCB	Complied All the hazardous waste generated from the HCD process is being stored at temporary storage area and is transported to approved TSDF/recycler.
18	Monitoring of the compliance of EC conditions shall be submitted with third party audit every year.	Complied Compliance of EC conditions was audited by Third party.
19	As proposed, an amount of ₹2.5 crore shall be allocated towards CER in nearby communities	Being complied. An amount of ₹2.5 crore has been allocated towards CER in nearby communities.
20	As committed by the PP, industry shall use renewable energy of 8MW from wind energyand 2MW from solar energy within	Shall be complied.



	18 months from the date of EC of the	
	project.	
21	As committed by the PP, industry shall use organic waste for the manure preparation and the same shall be used for Greenbelt development	Being complied. A dedicated space for manure preparation facility has been installed.
	As committed by the PP, industry shall	Being complied.
22	install roof top solar panel and the power from thesame shall be utilized for the plant to facilitate the renewable energy utilisation	Solar panels have been procured, and installation and commission shall be planned
23	As committed by the PP, Industry shall proceed long term feasibility study for the green hydrogen generation	Shall be complied.
24	A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area)equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. PP shall engage whole time director operations- DGM operations- Head Environment- HOD- Tech service- HOD quality Assurance. In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1 st July of every year for the activities carried out during previous year.	 Being complied A separate Environmental Management cell is available with qualified environmental science personnel. Full-fledged laboratory is available to carryour Environmental Management and Monitoring functions. Safety & health officer as per the qualification given in Factories Act 1948 has been engaged EMC budget annual allocation and spen details have been prepared and audito certification has also been submitted to the Regional Office of MoEF&CC as Annexure-2
25	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management,	Being complied All the environmental protection measure and safeguards proposed in the document submitted to the Ministry is being complied.



	and risk mitigation measures relating to the project shall be implemented. The budget propose under EMP is ₹285 Lakh (Capital cost) and ₹23.5lakhs per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported byphotographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1 st July of every year for the activities carried out during previous year.	All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures being implemented. Being complied EMP budget annual allocation and spent details have been prepared and auditor certification also has been submitted along with proof of implementation to the Regional Office of MoEF&CC as Annexure-3
26	The total water requirement is 1710 m3/day (Existing 1170 m3/day & Proposed 540 m3/day) of which fresh water requirement of 1690 m3/day (Existing 1154 m3/day & Proposed 536 m3/day) will be met from CMWSSB-City Sewage TTRO. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st	Being compliedThe proposed water demand will be metthrough CMWSSB-City Sewage TTRO, we haveestablished the agreement with CMWSSB andcommitted to use the water within theconsented quantity, The TTRO waterutilization detail have been submitted.YearWater utilization2023-24607 KLD2024-25683 KLD
27	July of every year for the activities carried out during the previous year. No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.	Complied No banned chemicals/raw materials used in manufacturing process and always ensured the adherence of notifications/guidelines issued by Government in this regard.
28	The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.	Being complied Carbon sequestration has been achieved by the greenbelt development. Carbon sequestration and Carbon footprint study was conducted by the NABL accredited lab.

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NA

29	The PP shall comply with the environment norms for synthetic organic chemical as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 608(E), dated 21.7.2010 under the provisions of the Environment (Protection) Rules, 1986	Vide GSR 608(E), dated 21.7.2010 under the provisions of the Environment (Protection) Rules, 1986 is meant for Emission standards for organic chemicals manufacturing Industry. TPL-HCD plant is under category of Chlor- Alkali industry, have complied the chlorine and Hydrochloric acid emission as per the applicable standard.
30	All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed underthe rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996	Complied We have taken all necessary precautions to avoid accidents and we have adequate Onsite emergency plan which is approved by the Directorate of Industrial Health and Safety dept. We have been conducting mock drill once in three months to verify the effectiveness of on-site plan as prescribed underthe rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996
31	The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carriedout.	Organic compounds (VOCs)/Fugitive emissions are meant for organic chemicals manufacturing Industry. TPL-HCD plant is under category of Chlor- Alkali industry However we have complied the chlorine and Hydrochloric acid emission as per the applicable standard.
32	The PP shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.	Being complied We shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal
33	The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.	Being complied The storage of toxic/hazardous raw material being maintained at bare minimum with respect to quantity and inventory as per Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 The inventory quantity and days of storage shall submit to the Regional Office of Ministry and SPCB along with the compliance report.



TPL-HCD plant -EC Compliance Report

		As on Mar-25 Liquid Chlorine inventory is 159.5 MT And Hydrochloric Acid Inventory is 182.025 MT
34	An occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.	Complied Occupational health centre is available in the site with the following facility. • Doctor • Nurse, round the clock. • Ambulance Periodic medical check-up for all employees is being done at regular interval. Records are maintained. The health data is being used in deploying the duties of the employees. Primary Health Care Centres (PHCC) and mobile clinic are provided at nearby villages (Vichoor, Sadayankuppam, Periyasekkadu, Kannampalayam and Seemavaram) to cater to the primary health care needs of the peoples residing nearby areas. Required Personal Protective Equipment (PPEs) are being given to all employees &
35	Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.	contractors. Being complied Training are being imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training also provided through periodic refresh/demonstration kind of programme.
36	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms	Complied Firefighting system is provided as per the Tamilnadu Factories Rules. Fire hydrant system along with hydrants, fire monitors, portable fire extinguishers, foam pourers, sprinkler system, and flame detectors, etc are provided in the process as well as in the storage areas for protection of possible fire hazards during manufacturing process in material handling.Fire license



		obtained from Tamilnadu Fire & Rescue services, Govt. of Tamilnadu. Govt. of Tamil Nadu. (Renewal Fire license validity is up to (03.09.2025).
37	The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electricalequipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation	Complied TPL-HCD plant is under category of Chlor- Alkali industry. we don't have solvents stock/ solvent handling equipment. However, we have provided Proper earthing for all the electrical equipment as we are handling Hydrogen gas in the caustic soda manufacturing.
38	The PP shall undertake waste minimization measures as below. (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize	Being complied We have been initiated waste minimization measures by reusing the wastewater generated from the water treatment plant (DM plant)
50	 (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure-hoses for equipmen cleaning to reduce wastewater generation. 	



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TPL-HCD plant -EC Compliance Report

Environmental Clearance – General Condition

S. No	Condition	Compliance Status
1	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.,	Complied. No further expansion or modification in the plant will be carried out without prior approval of the Ministry of Environment, Forests & Climate Change. in case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference will be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.,
2	The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.	Complied. We have complied with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans- Boundary Movement) Rules, 2016.
3	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	Complied Energy efficient LED bulbs are being used for lighting purpose to conserve energy and environment betterment.
4	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment	complied Acoustic hoods, silencers, enclosures, etc. are provided at DG sets to keep the noise level within the prescribed standards. All machineries like blowers, compresson are being maintained properly and preventive maintenance are taken as pe the schedule to control the noise levels.



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	(Protection) Act, 1986 Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	Ambient noise levels are being monitored periodically through in-house laboratory and TNPCB laboratory.
5	The company shall undertake all relevant measures for improving the socio- economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	 Being complied All relevant measures will be taken towards the improvement of socio-economic conditions of the surrounding area. Action plan is prepared to undertake eco- developmental measures including community welfare measures under Corporate Environmental Responsibility (CER) involving local villages and administration in the project area for the overall improvement of the environment. Following community welfare measures are taken under CSR/CER activities. Primary Health Care Centre (PHCC) is provided at following location in Manali area to cater to the primary health care needs of the peoples residing nearby areas. Sadayankuppam, Vichoor, Periyasekkadu, Kannampalayam, Seemavaram, Mobile Primary Health Care Centre (Dr. Mobile). Smart classroom facility provided to Sadayankuppam village school Constructed rest rooms in Government schools at following location in, Manali. Government high school at Manali New Town Government high school at Redhill Government high school at Vichoor. &Near Sathankadu police station
6	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along	Being complied Sufficient funds are earmarked towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State



TPL-HCD plant -EC Compliance Report

	with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Government and implementation schedule is prepared and being followed. Funds earmarked for environmental management / pollution control measures will not be diverted for any other purpose.
7	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Complied No suggestion was received from Panchayat / Municipal corporation urban local body and local NGO while processing the proposal.
8	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.	Being complied Six monthly reports on the status of the compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) has been submitted to MOEF Regional Office/ the Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six- monthly compliance status report are uploaded in our company's website (www.tnpetro.com) and will be updated periodically.
9	The environmental statement for each financial year ending 31st March in Form- V as is mandated shall be submitted 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 environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	Complied The environmental statement (Form V) is being submitted to TNPCB once in a yea before 30 th Sep every year. Environmental statement (Form V) for the year 2023 – 2024 was submitted to TNPCE on 20.09.2024.



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	The project exception that inform the	clearance conditions were uploaded in the company's website. (www.tnpetro.com)
10	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	
11	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	obtained from TNPCB CONSENT ORDER NO.2406155711448,2406255711448,
12	This Environmental clearance is granted subject to outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted and shall be complied.







District Environmental Laboratory, Manali

From

To

D. Balasubramanian, M.Sc.,B.Ed.,, Deputy Chief Scientific Officer, District Environmental Laboratory, Manali Tamil Nadu Pollution Control Board, 950/1, Poonamallee High Road, Arumbakkam, Chennai-106

M/s. TPL (HCD), Manali Express Highway, Manali, Chennai – 600 068.

Lr.No.TNPC Bd/DEL-MNL/Air Survey/F. No.73/2024-25, Dt. 19.08.2024

Sir,

Sub: Furnishing of Report of Analysis of Ambient Air Quality / Stack Monitoring / Ambient Noise Level Survey – Reg.

Ref: 1. This office Lr.No. TNPCB/DEL/MNL/AAQS/SM/NLS/F.No.73/2024-25 dt. 17.04.2024

2. Your Lr.No.TPL/Payment-AAQ monitoring 24-25/HCD dt:29.05.2024

3. Cash Receipt No.160 dt.29.05.2024 Rs.1,27,200/-

I am herewith sending the Report of Analysis of Ambient Air Quality / Stack Monitoring / Ambient Noise Level Survey conducted in the vicinity of your industry on **M/s. TPL (HCD)**, Manali Express Highway, Manali, Chennai – 68 on **25.07.2024** with invoice for Rs.1,27,200/- (Rupees One lakh Twenty Seven Thousand and Two Hundred only) towards the above survey / analytical charges, and the same has been adjusted vide reference (3) cited.

Kindly acknowledge the receipt of the above without fail.

Deputy Chief Scientific Officer District Environmental Laboratory Tamil Nadu Pollution Control Board Manali

Encl.: As above.

Copy submitted to:

The Joint Chief Environmental Engineer (M), TNPC Bd, Chennai for favour of kind information please.
 The District Environmental Engineer, TNPC Bd, Ambattur for favour of kind information please.
 Copy to file.



District Environmental Laboratory, Manali

AMBIENT AIR QUALITY SURVEY – Report of Analysis

Report No. 29/AAQS/2024-25 Date:

1. Name of the Industry	:	M/s. TPL (HCD),
2. Address of the Industry	:	Manali Express Highway, Manali, Chennai - 68.
3. Date of Survey		25.07.2024
4. Duration of Survey	:	<u>8 Hours</u> / 24 hours
5. Category	:	Red / Orange / Green – Large / Medium / Small
6. Land use classification	:	Industrial / Commercial / Residential / Sensitive

Thereof of Great Conditions						
Ambient	Min	Max	Relative	Min	Max	
Temperature (^{0}C)	29	34	Humidity (%)	58	72	
Weather Condition	Partiall	y Cloudy	Rain Fall (mm)	N	il	
Predominant Wind Direction	WSV	V-ENE	Mean Wind Speed (km/hr)	13	3.2	

	An	idient Air	Quanty	Survey Re	suits				
Sl.	Location	ion	ee	GL	Pollutants Concentration (microgram / m ³)				
No.		Direction *	Distance (m)*	Height Form GL (m)	PM 2.5	PM 10	SO ₂	NO 2	Cl ₂
1	On top of platform adjacent to Canteen	NE	100	2.0	38	88	17	23	<0.1
2	On top of platform near CPP	E	50	2.0		78	15	20	< 0.1
3	On top of platform near salt yard (Gate No 5)	SE	100	2.0	-	72	13	18	< 0.1
4	On top of CP station – platform near scarp yard	SW	100	2.0	26	68	11	14	< 0.1
5	On top of platform near NaOH Tank	W	75	2.0		70	12	15	< 0.1
6	On top of the fire hydrant pump house	NW	100	2.0		74	14	19	< 0.1

Note: * With respect to major emission sources. The analytical results are restricted to the sampling period of 8 hrs/24hrs

Deputy Chief Scientific Officer District Environmental Laboratory Tamil Nadu Pollution Control Board Manali

Test Performed	Test Method		
PM10	IS 5182 : (Part 23) – 2006		
SO2	Modified West - Gaeke / IS 5182 : (Part 2) - 2001 RA: 2012		
NO2	Jacobs - Hochheiser / IS 5182 : (Part 6) - 2006 RA:2012		

Ambient Air Quality Survey Results

Meteorological Conditions



TAMILNADU POLLUTION CONTROL BOARD District Environmental Laboratory, Manali AMBIENT AIR QUALITY SURVEY

Schematic Diagram Showing Location of Sampling

Report No. 29/AAQ/SM/2024-25

Name and Address of the Industry

: M/s. TPL (HCD)

Manali Express Highway, Manali, Chennai - 68.

Date of Survey

: 25.07.2024



Note: All the values are expressed in $\mu g/m^3$ and restricted to sampling period of 8 hrs/24hrs

Meteorologica	al Conditions:
Predominant Wind Direction	WSW – ENE
Wind Speed (Km/hr)	13.2
Weather Condition	Partially Cloudy
Rainfall	Nil

Deputy Chief Scientific Officer District Environmental Laboratory Tamil Nadu Pollution Control Board Manali



District Environmental Laboratory, Manali

STACK MONITORING SURVEY – Report of Analysis

Report No. 29/ SM/2024-2.	5	Date: 19.08.2024
1. Name of the Industry	:	M/s. TPL (HCD),
2. Address of the Industry	:	Manali Express Highway, Manali, Chennai – 68
3. Date of Survey	:	25.07.2024
4. Type of Industry	:	Coal/Chemical/Sugar/Paper & Pulp/

Power plant / Textile Processing

Stack Monitoring Survey Results

S1.		p	du	in (rate 1r	Pollutants (mg / Nm ³)				
No.	Stack attached to	Fuel used	Stack .Temp ⁰ K	Velocity in (m/ sec)	Discharge rate In Nm ³ /hr	PM	SO ₂	NO _x	Cl ₂	HC1
1	DG-500 KVA	Diesel	527	23.3	855	26	26	311		
2	Boiler Thermax	LNG	486	17.6	44801	2	BDL	74		
3	Waste Air Dechlorination Plant		309	18.1	4514	2			4	
4	HCl Scrubber		311	17.9	1113	2				3

Test Method		
IS 5182 : (Part 23) – 2006		
Modified West - Gaeke / IS 5182 : (Part 2) - 2001 RA: 2012		
Jacobs - Hochheiser / IS 5182 : (Part 6) - 2006 RA:2012		

FILP 10 **Deputy Chief Scientific Officer District Environmental Laboratory** Tamil Nadu Pollution Control Board Manali

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District Environmental Laboratory, Manali

Stack Details

Report No.29/AAQ/SM/2024-25

1. Name and Address of the Industry :

M/s. TPL (HCD)

Manali Express Highway, Manali, Chennai - 68

2. Date of Survey

25.07.2024

:

SI. No.	Particulars	1	2
1.	Stack attached to	DG	Boiler
2.	Details of process stack	DG 500 KVA	Boiler
3.	Height from G Level in (m)	8	33
4.	Diameter in (m)	0.15	1.2
5.	Port hole height from Ground Level or bends or ducts in (m)	7	20
6.	Fuel Used (with % Sulphur content)	Diesel	LNG
7.	Fuel Consumption rate per hr (mention units)	80 Litre / hr	97.22 m ³ /hr
8.	Type of Stack and capacity	Round	Round
9.	Production on 25.07.2024	Caustic soda Lye-126.5 MT, HCL-90 N Bottled Hydrogen-0.334 MT	
10.	APC Measures provided	Stack provided	Stack provided
11.	APC functional status	Functioning	Functioning
12.	Ambient temp in °K	304	304
13.	Temp of flue gas in °K	527	486
14.	Velocity of flue gas in m/sec	23.3	17.6
15.	Volume of flue gas sampled in m ³	1.017	1.003
16.	Gaseous Discharge rate per day in Nm ³ /hr	855	44801

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Deputy Chief Scientific Officer District Environmental Laboratory Tamil Nadu Pollution Control Board Manali



District Environmental Laboratory, Manali

Stack Details

Report No.29/AAQ/SM/2024-25

1. Name and Address of the Industry :

M/s. TPL (HCD) Manali Express Highway, Manali, Chennai – 68

2. Date of Survey

25.07.2024

:

SI. No.	Particulars	3	4	
1.	Stack attached to	Chlorine Scrubber	HCl Scrubber	
2.	Details of process stack	Waste Air Dechlorination Plant	HCI	
3.	Height from G Level in (m)	16	18	
4.	Diameter in (m)	0.3	0.15	
5.	Port hole height from Ground Level or bends or ducts in (m)	14	16	
6.	Fuel Used (with % Sulphur content)			
7.	Fuel Consumption rate per day (mention units)			
8.	Type of Stack and capacity	Round	Round	
9.	Production on 25.07.2024	Caustic soda Lye-126.5 MT, HCL-90 MT Bottled Hydrogen-0.334 MT		
10.	APC Measures provided	Scrubber	Scrubber	
12.	APC functional status	Functioning	Functioning	
13.	Ambient temp in °K	303	304	
14.	Temp of flue gas in °K	309	311	
15.	Velocity of flue gas in m/sec	18.1	17.9	
16.	Volume of flue gas sampled in m ³	1.021	1.000	
17.	Gaseous Discharge rate per day in Nm ³ /hr	4514	1113	

Deputy Chief Scientific Officer

District Environmental Laboratory Tamil Nadu Pollution Control Board Manali



District Environmental Laboratory, Manali

STACK MONITORING SURVEY – Additional details Report No. 29/ SM/2024-25 Date: 19.08.2024

stoport i tor ast sin a cart ac		Dute. 19:00.2021
1. Name of the Industry	:	M/s. TPL (HCD)
2. Address of the Industry	:	Manali Express Highway, Manali, Chennai – 68
3. Date of Survey	:	25.07.2024
4. Type of Industry	:	Coal/ Chemical /Sugar/Paper & Pulp/ Power plant / Textile Processing

Stack Monitoring Additional details

Sl. No.	Details of stack mentioned in the Air Consent order	Details of stack available and in working condition	Details of stack for which stack Emission sampling have been done	Justification for the left out of stack Emission Sampling
1.	DG-500 KVA	Working	Sampling Done	
2.	Boiler Thermax	Working	Sampling Done	
3.	Waste Air Dechlorination Plant	Working	Sampling Done	
4.	HCl Scrubber	Working	Sampling Done	

Deputy Chief Scientific Officer District Environmental Laboratory Tamil Nadu Pollution Control Board Manali



District Environmental Laboratory, Manali

AMBIENT/SOURCE NOISE LEVEL SURVEY - Report of Analysis

Report No. 29/ NLS/2024-25

Date: 19.08.2024

1.	Name of the Industry M/s.		TPL (HCD)				
2.	Address of	Address of the Industry		Manali Express Highway, Manali, Chennai - 68			
3.	Date of St	urvey	25.07	.2024			
Cate	gory	RL	1	Land use Classification	Industrial		
Type of Survey		vey Ambient/Source		Time of Survey	Day		
Mete	eorological co	onditions		Calm/Windy/Rainy	Windy		

			Logg	ging	Parameters	
Instrument U	sed C	ESVA Model SC3	10	Se	erial No	T243103
Logging Inter	val	10 Minutes each p	oint	M	easuring Range	50-110 dB(A)
Weighting	" A"	Peak Weighting	"C	(99	Time Weighting	FAST
Sound Incide	nce	RANDON	1		Time in hrs	14.00 - 15.30

	Rep	oort of Noise I	Level Moni	itoring				
SI	Location	u	Distance (M)	u	Sound Level – dB (A)			
No		Duration (min)		Direction	Leq	Min	Max	
1	Near Canteen	10	180	NE	58.8	56.2	71.4	
2	Near CPP	10	60	Е	57.6	54.5	68.8	
3	Near Salt Yard (Gate No.5)	10	120	SE	60.7	56.1	72.6	
4	Near Scarp Yard	10	120	SW	59.1	56.3	71.9	
5	Near Pump Room	10	100	NW	67.6	60.3	75.2	

Note: Leq value is the average energy for the measured period.

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Deputy Chief Scientific Officer District Environmental Laboratory Tamil Nadu Pollution Control Board Manali



District Environmental Laboratory, Manali

INFERENCE REPORT ON A.A.Q.S./ S.M.

1. Name of Industry	: M/s. TPL (HCD)
2. Pollution Category	: Red Large
3. Date of A.A.Q. Survey	: 25.07.2024
4. Predominant Wind Direction	: WSW - ENE
5. Weather condition	: Partially Cloudy
	STATUS OF POLLUTANTS LEVEL

I. <u>AMBIENT AIR QUALITY :-</u>

1. Total No. of A.A.Q. stations monitored : 6

 No. of A.A.Q. stations in which Pollutants Level exceeded the Boards standards : Nil

Maximum and Minimum values of Pollutants Level observed:

S1.		Values in m	nicrogram/m ³	BOARD's STANDARD
No.	POLLUTANT		(As per consent order)	
1. 2.	PM ₁₀ PM.2.5 <u>GASEOUS</u> <u>POLLUTANTS:-</u>	88 38	68 26	100 60
	(i) SO2	17	11	80
	(ii) NO2	23	14	80

II. STACK MONITORING:-

1. Total No. of Stacks Monitored

: 4

2. No. of Stacks in which Pollutants level Exceeded the Boards standards

: Nil

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Deputy Chief Scientific Officer District Environmental Laboratory Tamil Nadu Pollution Control Board Manali



District Environmental Laboratory, Manali

BILL

Report No. 29/AAQ/SM/2024-25

Bill No.	29/2024-25	
Date	19.08.2024	

То

M/s. TPL (HCD), Manali Express Highway Manali, Chennai - 600 068

Ref: 1. B.PMs.No.6 Dt.31.03.2009.

2. This office Lr.No. TNPCB/DEL/MNL/AAQS/SM/NLS/F.No.73/2024-25 dt. 17.04.2024

3. Your Lr.No.TPL/Payment-AAQ monitoring 24-25/HCD dt:29.05.2024

4. Cash Receipt No.160 dt.29.05.2024 Rs.1,27,200/-

Sl. No.	Description	Rate (Rs.)	No. of Stations/ Stacks	Amount (Rs.)
1.	SAMPLING CHARGES:		Stacks	
	(i) Ambient Air Quality monitoring PM ₁₀	3500	6	21,000
	(ii) Source Emission Monitoring (PM, SO ₂ , NO _x etc.,)	13,100	4	52,400
	(iii) Ambient Air Quality monitoring PM _{2.5}	3500	2	7,000
2.	 ANALYTICAL CHARGES: (i) Ambient Air Samples PM₁₀, SO₂, NO₂ & Cl₂ (each Rs. 1050/-) 	4200	6	25,200
	(ii) Ambient Air Samples PM _{2.5}	1800	2	3,600
	 (iii) Source Emission Samples PM, SO₂, NO_x, Cl₂ & HCl (each Rs.1050/-) 	3150	2	6.300
	(iv) Source Emission sample (PM & Cl ₂ Only)	2100	2	4,200
3.	AMBIENT NOISE MONITORING CHARGES: (i) For first 5 stations	1400	5	7,000
	Transportation cha	arges		500
	Total			1,27,200
Vide (O/o. DEE/AMB Our CR.No. 160 dated : 2	.9.05.2024		1,27,200
	Balance	1		- Nil

Deputy Chief Scientific Officer District Environmental Laboratory Tamil Nadu Pollution Control Board Manali

<u>Annexure</u>

HCD GB INSIDE THE PLANT AREA (5 ACRES)

BEFORE





<u>AFTER</u>











<u>Annexure</u>

GB FOR TPL-HCD PLANT (Outside- 9Acres)

While Developing GB





As on date -May'25











TPL-HCD APC MEASURES





ERECTION OF NEW WAD ABSORPTION TOWER



Installation of NEW WAD ABSORPTION TOWER



New Hypo blowers and Hypo product receiver erected in Field



Boiler Stack gas analyser



chlorine analyser in WAD





HCl Analyser

HCl Analyser Monitoring

ETP REFURBISHMENT



Before Refurbishment



After Refurbishment





GREENEX ENVIRO LABORATORY PVT LTD

K P Periaswami - Head of the Laboratory

ISO 9001:2015 Certified Laboratory NABL (ISO / IEC 17025:2017) Accredited & (A CONSTITUENT BOARD OF QUALITY COUNCIL OF INDIA)

TEST REPORT

	NAME OF INDUSTRY ADDRESS	Manali Express	: TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT) Manali Express Highway, Manali, Chennai - 600 068.			
	Sample Ref No : GEL/AS/ Sample Ref No : 516/03 Sampling Location Sample Description	516/03 Date of Samplin Reporting Date : Boiler House : Ambient Air Mo	ig : 27.03.20 : 05.04.20			
	Sample Drawn By /Date Received On	: GEL/27.03.202 27.03.2025				
	Analysis Commenced On Analysis Completed on Sampling Method	: 27.03.2025 : 05.04.2025 : IS 5182 (Part V	/) and (Part X	V)	x	
	Sampling Time Ambient Temperature Relative Humidity	: 8 Hrs - : 38°C : 59%				
SI.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*	
1	Particulate Matter (PM 2.5)	IS 5182 Part 24-2019	µg / m ³	33.80	60	
2	Respirable Particulate Matter (PM10) -	IS 5182 Part 23-2012	µg / m ³	68.90	100	
3	Sulphur Dioxide (SO ₂)	IS 5182 Part 2 -212	µg / m ³	11.20	80	
4	Nitrogen Dioxide (NO ₂)	IS 5182 Part 6-2012	µg / m ³	15.40	80	
5	Ozone (O ₃)	IS 5182 Part 9-1974 R.2009	µg / m ³	18.65	180	
6	Ammonia (NH ₃)	IS 5182 Part 25-2018	μg / m ³	17.80	400	
BDL-E	elow Detectable Limit ; DL - Detection Lin	nit	1.1.5		400	
Remark	s: The above results meet the *National An	nbient Air Quality Standards - CP	СВ			
		End of Report				
A. Ver	for GR	EENEX ENVIRO LABORATORY	PVT LTD	PAL	thorized By	

A.Kaviyarasi- Technical Manager

NOTE:

1. Test results shown in this test report relate only to the items tested. 2. This test report shall not be reproduce anywhere except in full and in same format without the approval of the laboratory.

NO. 102, First Floor GST Road, Pallavaram, Chennai - 600043 PH - 044-22642325/ MOB - 9444411583 EMAIL ID: info@greenexenvirolab.com GSTIN : 33AALCG0655K1ZI | CIN NO : U71200TN2024PTC167899



GREENEX ENVIRO LABORATORY PVT LTD

ISO 9001:2015 Certified Laboratory

TEST REPORT

NAME OF INDUSTRY ADDRESS	: TAMILNADU P Manali Express Manali, Chenna	Highway,	JCTS LIMITED (I	HCD PLANT)
Sample Ref No : GEL/AS/51 Sample Ref No : 516/03 Sampling Location	16/03 Date of Sampling Reporting Date : Boiler House	: 27.03.20 : 05.04.20		
Sample Description	: Ambient Air Mo	nitoring		
Sample Drawn By /Date	: GEL/27.03.202	5		
Received On	: 27.03.2025			
Analysis Commenced On	: 27.03.2025			
Analysis Completed on	: 05.04.2025			
Sampling Method	: IS 5182 (Part V)	and (Part X	\sim	
Sampling Time	: 8 Hrs		-/	
Ambient Temperature Relative Humidity	: 38°C : 59%			
PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
b)	IS 5182 Part 22-2009	ug / m ³	BDL	1

1	Lead (Pb)	IS 5182 Part 22-2009	µg / m ³	BDL (DL=0.1)	1
2	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m ³	BDL (DL=1.15)	4
3	Arsenic (As)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=1.0)	6
4	Nickel (Ni)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=0.1)	20
5	Benzene (C ₆ H ₆)	IS 5182 Part 11-2012	µg / m ³	BDL (DL=0.1)	5
6	Benzo (a) Pyrene Below Detectable Limit ; DL – Detection L	IS 5182 Part 12-2009	ng / m ³	BDL (DL=0.1)	1

Remarks: The above results meet the *National Ambient Air Quality Standards -CPCB

enfied By

SI.No

A.Kaviyarasi- Technical Manager

End of Report for GREENEX ENVIRO LABORATORY PVT LTD CHENNAL 600 043

Authorized By K P Periaswami – Head of the Laboratory

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uthorized By

K P Periaswami - Head of the Laboratory

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TEST REPORT

NAME OF INDUSTRY ADDRESS

Sample Ref No	: GEL/AS/517/03
Sample Ref No	: 517/03
Sampling Locat	tion
Sample Descript	ion
Sample Drawn B	By /Date
Received On	n ₩ 20 un la terrement a servarita con
Analysis Comme	enced On
Analysis Comple	eted on
Sampling Metho	d
Sampling Time	
Ambient Temper	ature
Relative Humidit	v

: TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT) Manali Express Highway, Manali, Chennai - 600 068.
Date of Sampling : 27.03.2025
Reporting Date : 05.04.2025
: Near Fabrication Yard
: Ambient Air Monitoring
: GEL/27.03.2025
: 27.03.2025
: 27.03.2025
: 05.04.2025
: IS 5182 (Part V) and (Part XIV)
: 8 Hrs
: 38°C
: 59%

SI.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter (PM 2.5)	IS 5182 Part 24-2019	µg / m ³	31.20	60
2	Respirable Particulate Matter (PM10)	IS 5182 Part 23-2012	µg / m ³	60.20	100
3	Sulphur Dioxide (SO ₂)	IS 5182 Part 2 -212	µg / m ³	9.60	80
4	Nitrogen Dioxide (NO2)	IS 5182 Part 6-2012	µg / m ³	10.80	80
5	Ozone (O ₃)	IS 5182 Part 9-1974 R.2009	µg / m³	18.50	180
6	Ammonia (NH ₃)	IS 5182 Part 25-2018	µg / m ³	17.70	400

End of Report for GREENEX ENVIRE LABORATORY PVT LTD

600 043

erified By

A.Kaviyarasi- Technical Manager

NOTE;

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TEST REPORT

NAME OF INDUSTRY ADDRESS

Sample Ref No : GEL/AS/517/03 Sample Ref No : 517/03 Sampling Location Sample Description Sample Drawn By /Date Received On Analysis Commenced On Analysis Completed on Sampling Method Sampling Time Ambient Temperature Relative Humidity

TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT) Manali Express Highway, Manali, Chennai - 600 068.
Date of Sampling : 27.03.2025
Reporting Date : 05.04.2025
: Near Fabrication Yard
: Ambient Air Monitoring
: GEL/27.03.2025
: 27.03.2025
: 27.03.2025
: 05.04.2025
: IS 5182 (Part V) and (Part XIV)
: 8 Hrs
: 38°C
: 59%

SI.No	PARAMETERS	· PROTOCOL	UNIT	RESULT	NAAQS*
1	Lead (Pb)	IS 5182 Part 22-2009	µg / m ³	BDL (DL=0.1)	1
2	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m ³	BDL (DL=1.15)	4
3	Arsenic (As)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=1.0)	6
4	Nickel (Ni)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=0.1)	20
5	Benzene (C ₆ H ₆₎	IS 5182 Part 11-2012	µg / m ³	BDL (DL=0.1)	5
6	Benzo (a) Pyrene	IS 5182 Part 12-2009	ng / m ³	BDL (DL=0.1)	1

Remarks: The above results meet the *National Ambient Air Quality Standards -CPCB

erified By A Kaviyarasi- Technical Manager

End of Report for GREENEX ENVIROLABORATORY PVT LTD CHENNAL 600 043

Authorized By K P Periaswami - Head of the Laboratory

NOTE; 1. Test results shown in this test report relate only to the items tested.

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TEST REPORT

	NAME OF INDUSTRY ADDRESS	: TAMILNADU PETROPRO Manali Express Highway, Manali, Chennai - 600 068		MITED (HCD PLA	NT)
	Sample Ref No : GEL/AS/518/03	Date of Sampling : 27.03			
	Sample Ref No : 518/03	Reporting Date : 05.04	.2025		
	Sampling Location	: Near WAD			
	Sample Description	: Ambient Air Monitoring			
	Sample Drawn By /Date	: GEL/27.03.2025			
	Received On	: 27.03.2025			
	Analysis Commenced On	: 27.03.2025			
	Analysis Completed on	: 05.04.2025			
	Sampling Method	: IS 5182 (Part V) and (Par	rt XIV)		
	Sampling Time	: 8 Hrs			
	Ambient Temperature	: 38°C			
	Relative Humidity	: 59%	111117	DEQUIT	NAAOO*
SI.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter (PM 2.5)	IS 5182 Part 24-2019	µg / m ³	35.40	60
2	Respirable Particulate Matter (PM10) -	IS 5182 Part 23-2012	µg / m ³	67.80	100
3	Sulphur Dioxide (SO ₂)	IS 5182 Part 2 -212	µg / m ³	11.50	80
4	Nitrogen Dioxide (NO ₂)	IS 5182 Part 6-2012	µg / m ³	13.60	80
5	Ozone (O ₃)	IS 5182 Part 9-1974 R.2009	µg / m ³	18.90	180
6	Ammonia (NH ₃)	IS 5182 Part 25-2018	µg / m ³	17.60	400
BDL-	Below Detectable Limit ; DL - Detection Li	mit			
Remar	ks: The above results meet the *National Ar	mbient Air Quality Standards - CPC	B		
1.01.001	*	End of Report			
		FENEY ENVIRONABORATORY	PVT LTD		
A	Hand erified By	CHENNAI AND CHENNAI 800 043		PA AL	thorized By
	arasi- Technical Manager	10 0544		K P Periaswami –	Head of the Laboratory

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TEST REPORT

	NAME OF INDUSTRY ADDRESS	: TAMILNADU PETROPRO Manali Express Highway, Manali, Chennai - 600 068		ITED (HCD PLA	NT)
	Sample Ref No : GEL/AS/518/03 Sample Ref No : 518/03	Date of Sampling : 27.03. Reporting Date : 05.04			
	Sampling Location	: Near WAD			
	Sample Description	: Ambient Air Monitoring			
	Sample Drawn By /Date	: GEL/27.03.2025			
	Received On.	: 27.03.2025			
	Analysis Commenced On	: 27.03.2025			
	Analysis Completed on	: 05.04.2025			
	Sampling Method	: IS 5182 (Part V) and (Par	(ΛV)		
	Sampling Time	: 8 Hrs			
	Ambient Temperature	: 38°C			
OLMA	Relative Humidity PARAMETERS	: 59% PROTOCOL	UNIT	RESULT	NAAQS*
SI.No		•		BDL	1
1	Lead (Pb)	IS 5182 Part 22-2009	µg / m ³	(DL=0.1)	1.
2	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m ³	BDL (DL=1.15)	4
3	Arsenic (As)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=1.0)	6
4	Nickel (Ni)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=0.1)	20
5	Benzene (C ₆ H ₆₎	IS 5182 Part 11-2012	µg / m ³	BDL (DL=0.1)	5
6	Benzo (a) Pyrene	IS 5182 Part 12-2009	ng / m ³	BDL (DL=0.1)	1
BDL-	Below Detectable Limit ; DL - Detection Li	mit			
Remar	ks: The above results meet the *National A	mbient Air Quality Standards - CPC	В		
14415 1762 2010 1010					

End of Report for GREENEX ENVIRO LABORATORY PVT LTD OLABOR CHENNAL 600 043 enfied By

Authorized By K P Periaswami - Head of the Laboratory

A.Kaviyarasi- Technical Manager

NOTE;

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TEST REPORT

	Sample Ref No : GEL/AS/519/03	Manali, Chennai - 600 068	8		
		Date of Sampling : 27.03	.2025		
	Sample Ref No. : 519/03	Reporting Date : 05.04	4.2025		
	Sampling Location	: Near CPP			
	Sample Description	: Ambient Air Monitoring			
	Sample Drawn By /Date	: GEL/27.03.2025			
	Received On	: 27.03.2025			
	Analysis Commenced On	: 27.03.2025			
	Analysis Completed on	: 05.04.2025			
	Sampling Method	- IS 5182 (Part V) and (Part XIV)			
	Sampling Time	: 8 Hrs			
	Ambient Temperature	: 38°C			
SI.No	Relative Humidity	: 59%			
100,000,000,000	PARAMETERS Particulate Matter (PM 2.5)	PROTOCOL	UNIT	RESULT	NAAQS*
		IS 5182 Part 24-2019	µg / m ³	29.80	60
1995	Respirable Particulate Matter (PM10)	IS 5182 Part 23-2012	µg / m ³	60.50	100
	Sulphur Dioxide (SO ₂)	IS 5182 Part 2 -212	µg / m ³	9.20	80
	Nitrogen Dioxide (NO ₂) -	IS 5182 Part 6-2012	µg / m ³	11.50	80
5	Ozone (O ₃)	IS 5182 Part 9-1974 R.2009	µg / m ³	17.65	180
	Ammonia (NH3)	IS 5182 Part 25-2018	µg / m ³	17.50	400
BDL – Be	elow Detectable Limit ; DL - Detection Lir	nit			
Remarks:	: The above results meet the *National An	nbient Air Quality Standards - CPC	B		
		End of Report		-	
	for GR	EENEX ENVIRO LABORATORY	PVT LTD	10	1
6		ROCKERA		~ 0	
\wedge		CHENNAL PR		(DA-	MA.
17	Kang				1 - 1
	fled By	BU 600 043		Auth	horized By 💦 🔪
.Kaviyara	asi- Technical Manager	Ten bell	K	P Periaswami - H	lead of the Laborato

approval of the laboratory.



ISO 9001:2015 Certified Laboratory

TEST REPORT

NAME OF INDUSTRY ADDRESS

Sample Ref No : GEL/AS/519/03 Sample Ref No : 519/03 Sampling Location Sample Description Sample Drawn By /Date Received On Analysis Commenced On Analysis Completed on Sampling Method Sampling Time Ambient Temperature Relative Humidity

: TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT)	
Manali Express Highway,	
Manali, Chennai - 600 068.	
Date of Sampling : 27.03.2025	
Reporting Date : 05.04.2025	
: Near CPP	
: Ambient Air Monitoring	
: GEL/27.03.2025	
: 27.03.2025	
: 27.03.2025	
: 05.04.2025	
: IS 5182 (Part V) and (Part XIV)	
: 8 Hrs	
: 38°C	

SI.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Lead (Pb)	IS 5182 Part 22-2009	µg / m ³	BDL	1
2	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m ³	(DL=0.1) BDL (DL=1.15)	4
3	Arsenic (As)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=1.0)	6
4	Nickel (Ni)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=0.1)	20
5	Benzene (C ₆ H ₆)	IS 5182 Part 11-2012	µg / m ³	BDL (DL=0.1)	5
6	Benzo (a) Pyrene Below Detectable Limit [¥] DL – Detection L	IS 5182 Part 12-2009	ng / m ³	BDL (DL=0.1)	1

Remarks: The above results meet the *National Ambient Air Quality Standards -CPCB

erified By

A.Kaviyarasi- Technical Manager

for GREENEX ENVIRO LABORATORY PVT LTD LABOR CHENNAI 600 043

End of Report

Authorized By K P Periaswami - Head of the Laboratory

NOTE:

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TEST REPORT

NAME OF INDUSTRY ADDRESS	: TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT) Manali Express Highway, Manali, Chennai - 600 068.
Sample Ref No : GEL/AS/520/03 Sample Ref No : 520/03	Date of Sampling : 27.03.2025 Reporting Date : 05.04.2025
Sampling Location	: Near Salt Yard
Sample Description	: Ambient Air Monitoring
Sample Drawn By /Date	: GEL/27.03.2025
Received On	: 27.03.2025
Analysis Commenced On	: 27.03.2025
Analysis Completed on	: 05.04.2025
Sampling Method	: IS 5182 (Part V) and (Part XIV)
Sampling Time	: 8 Hrs
Ambient Temperature	: 38°C
Relative Humidity	: 59%

SI.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter (PM 2.5)	IS 5182 Part 24-2019	µg / m ³	35.20	60
2	Respirable Particulate Matter (PM10)	IS 5182 Part 23-2012	μ g / m ³	69.60	100
3	Sulphur Dioxide (SO ₂)	IS 5182 Part 2 -212	µg / m ³	11.80	80
4	Nitrogen Dioxide (NO ₂)	IS 5182 Part 6-2012	µg / m³	14.40	80
5	Ozone (O3)	IS 5182 Part 9-1974 R.2009	µg / m ³	19.65	180
6	Ammonia (NH ₃)	IS 5182 Part 25-2018	µg / m ³	17.50	400
BDL-I	Below Detectable Limit ; DL – Detection Li	mit			
Remark	s: The above results meet the *National A	mbient Air Quality Standards -CPC	В		
		End of Report			
	for GI	REENEX ENVIRO LABORATORY	PVT LTD	Ĩ.	

erified By

A.Kaviyarasi- Technical Manager

CHENNA 600 043

Authorized By K P Periaswami - Head of the Laboratory

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NAME OF INDUSTRY

GREENEX ENVIRO LABORATORY PVT LTD

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TEST REPORT

: TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT) ADDRESS Manali Express Highway, Manali, Chennai - 600 068. Sample Ref No : GEL/AS/520/03 Date of Sampling : 27.03.2025 Sample Ref No : 520/03 Reporting Date : 05.04.2025 Sampling Location : Near Salt Yard Sample Description : Ambient Air Monitoring Sample Drawn By /Date : GEL/27.03.2025 Received On-: 27.03.2025 Analysis Commenced On : 27.03.2025 Analysis Completed on : 05.04.2025 Sampling Method : IS 5182 (Part V) and (Part XIV) Sampling Time : 8 Hrs Ambient Temperature : 38°C Relative Humidity : 59%

SI.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Lead (Pb)	IS 5182 Part 22-2009	µg / m ³	BDL (DL=0.1)	1
2	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m ³	(DL=0.1) BDL (DL=1.15)	4
3	Arsenic (As)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=1.0)	6
4	Nickel (Ni) -	IS 5182 Part 22-2009	ng / m ³	BDL (DL=0.1)	20
5	Benzene (C ₆ H ₆₎	IS 5182 Part 11-2012	µg / m ³	BDL (DL=0.1)	5
6	Benzo (a) Pyrene Below Detectable Limit ; DL – Detect	IS 5182 Part 12-2009	ng / m ³	BDL (DL=0.1)	1
Remark		nal Ambient Air Quality Standards –CPC End of Report r GREENEX ENVIRO LABORATORY P		ł	
	rified By rasi- Technical Manager	CHENNAL 600 043		PJ.	horized By

NOTE; 1. Test results shown in this test report relate only to the items tested.

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Authorized By

K P Periaswami - Head of the Laboratory

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TEST REPORT

NAME OF INDUSTRY ADDRESS

Sample Ref No : GEL/AS/521/03 Sample Ref No : 521/03 Sampling Location Sample Description Sample Drawn By /Date Received On Analysis Commenced On Analysis Completed on Sampling Method Sampling Time Ambient Temperature Relative Humidity

: TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT) Manali Express Highway, Manali, Chennai - 600 068. Date of Sampling : 27.03.2025 Reporting Date : 05.04.2025 : Near Main Gate : Ambient Air Monitoring : GEL/27.03.2025 : 27.03.2025 : 27.03.2025 : 05.04.2025 : IS 5182 (Part V) and (Part XIV) : 8 Hrs : 38°C : 59%

	2 Respirable Particulate Matter (PM ₁₀)* IS 5182 Part 23-2012 µg / m³ 71.40 3 Sulphur Dioxide (SO ₂) IS 5182 Part 2 -212 µg / m³ 12.80	60 100 80
3 Sulphur Dioxide (SO2) IS 5182 Part 2 -212 μg / m³ 12.80 4 Nitrogen Dioxide (NO2) IS 5182 Part 6-2012 μg / m³ 15.90 5 Ozone (O3) IS 5182 Part 9-1974 R.2009 μg / m³ 19.60 6 Ammonia (NH3) IS 5182 Part 25-2018 μg / m³ 17.20 BDL – Below Detectable Limit ; DL – Detection Limit V V V V	3 Sulphur Dioxide (SO ₂) IS 5182 Part 2 -212 μg / m ³ 12.80	
4 Nitrogen Dioxide (NO2) IS 5182 Part 6-2012 μg / m³ 15.90 5 Ozone (O3) IS 5182 Part 9-1974 R.2009 μg / m³ 19.60 6 Ammonia (NH3) IS 5182 Part 25-2018 μg / m³ 17.20 BDL – Below Detectable Limit ; DL – Detection Limit V V V V		80
5 Ozone (O ₃) IS 5182 Part 9-1974 R.2009 µg / m ³ 19.60 6 Ammonia (NH ₃) IS 5182 Part 25-2018 µg / m ³ 17.20 BDL – Below Detectable Limit ; DL – Detection Limit Image: Construction of the second sec	4 Nitrogen Dioxide (NO2) IS 5182 Part 6 2012 us / m ³ 15 00	00
6 Ammonia (NH ₃) IS 5182 Part 25-2018 μg / m ³ 17.20 BDL – Below Detectable Limit ; DL – Detection Limit	13 5162 Part 6-2012 µg / m ² 15.90	80
BDL – Below Detectable Limit ; DL – Detection Limit	5 Ozone (O ₃) IS 5182 Part 9-1974 R.2009 µg / m ³ 19.60	180
BDL – Below Detectable Limit ; DL – Detection Limit	6 Ammonia (NH ₃) IS 5182 Part 25-2018 µg / m ³ 17.20	400
Remarks: The above results meet the *National Ambient Air Quality Standards CRCR	DL – Below Detectable Limit ; DL – Detection Limit	
Memarks. The above results meet the Mational Ampient All Quality Standards -CPCB	emarks: The above results meet the *National Ambient Air Quality Standards -CPCB	
End of Report	End of Report	

Verified By A.Kaviyarasi- Technical Manager

NOTE;

1. Test results shown in this test report relate only to the items tested.

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TEST REPORT

	NAME OF INDUSTRY ADDRESS	: TAMILNADU PETROPRO Manali Express Highway, Manali, Chennai - 600 068		NITED (HCD P	LANT)	
	Sample Ref No : GEL/AS/521/03 Sample Ref No : 521/03 Sampling Location Sample Description Sample Drawn By /Date Received On Analysis Commenced On Analysis Completed on Sampling Method	Date of Sampling : 27.03 Reporting Date : 05.04 : Near Main Gate : Ambient Air Monitoring : GEL/27.03.2025 : 27.03.2025 : 27.03.2025 : 05.04.2025 : 1S 5182 (Part V) and (Par	.2025 4.2025			
	Sampling Time	: 8 Hrs				
	Ambient Temperature Relative Humidity	: 38°C : 59%				
SI.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*	
1	Lead (Pb)	IS 5182 Part 22-2009	μg / m ³	BDL (DL=0.1)	1	
2	Carbon Monoxide (CO) (1 Hour)	. IS 5182 Part 10-1999 R.2009	mg/m ³	BDL (DL=1.15)	4	
3	Arsenic (As)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=1.0)	6	
4	Nickel (Ni)	IS 5182 Part 22-2009	ng / m ³	BDL (DL=0.1)	20	
5	Benzene (C ₆ H ₆₎	IS 5182 Part 11-2012	µg / m ³	BDL (DL=0.1)	5	
6	Benzo (a) Pyrene Below Detectable Limit ; DL – Detection Liu	IS 5182 Part 12-2009 ng / m ³ BDL (DL=0.1) 1				
nioseosio e				<u>-</u> Y		
Reman	ks: The above results meet the *National Ar	End of Report	В			
	for GRE	ENEX ENVIRO LABORATORY P	VTITD			
Az	And By rrasi- Technical Manager	CHENNAI BOO 043	т.		uthorized By	

approval of the laboratory.





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	NAME OF INDUSTRY ADDRESS	Ma	<u>TEST REF</u> ILNADU PETF Inali Express Hi nali, Chennai - (COPRODUCTS LIMITED (HCD ghway,	PLANT)
	Sample Ref No : GEL/AS/522/0	3 Dat	e Of Sampling	: 27.03.2025	
	Sample Rep No : 522/03	Re	porting Date	: 05.04.2025	
	SAMPLED ON	: 27.	.03.2025		
	STACK IDENTIFICATION NO	: Bo	iler Chimney	2	
	PITOT TUBE CONSTANT	: 0.1			
	AMBIENT TEMPERATURE	: 38°			
	GAS VOLUME SAMPLED) liters		
SI.No	PARAMETERS	RESULT	UNIT	Limit as per Ministry Of Environment and Forests Notification, 09.06.2002 (MOEF) (mg/Nm ³)	PROTOCOL
1	Flue Gas Temperature	195	°C		IS:11255
2	Flue Gas Pressure	3.60	mm Hg		IS:11255
3	Flue Gas Velocity	8.0	m/s		IS:11255
4	Volume of Gas Discharged	12,310	Nm ³ / hr		IS:11255
5	Particulate Matter (PM)	7.0	mg / Nm ³	10(MAX)	IS:11255
6	Sulphur- di- oxide (SO ₂)	28.0	mg / Nm ³	50(MAX)	IS:11255
7	Nitrogen Dioxide (NO2) -	187	mg / Nm ³	350(MAX)	IS:11255
8	Carbon – di - oxide (CO ₂)	5.17	%	•	IS:13270
9	Carbon Monoxide (CO)	1.40	mg / Nm ³	150 (MAX)	IS:13270
10	Oxygen (O ₂)	1.80	%		IS:13270
	Below Detectable Limit ; DL – Dete t Opinion: The above results meet There is no limit for stac	s the MOEF not	er TNPCB Stand	dards.	12
			End of Report		
A.Kavi	Verified By yarasi- Technical Manager	OF GREENEX EN	CHENNAI 600 043	~//	horized By – Head of the Laboratory
9	2. This test repo	nown in this test re ort shall not be repr he laboratory		the items tested. except in full and in same format wit	hout the



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12

TEST REPORT

NAME OF INDUSTRY ADDRESS

Sample Ref No : GEL/AS/522/03 Sample Rep No : 522/03 SAMPLED ON STACK IDENTIFICATION NO PITOT TUBE CONSTANT AMBIENT TEMPERATURE GAS VOLUME SAMPLED

: TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT) Manali Express Highway, Manali, Chennai - 600 068. Date Of Sampling : 27.03.2025 Reporting Date : 05.04.2025 : 27.03.2025 : Boiler Chimney : 0.1951 : 38° C : 400 liters

Discipline- Chemical SLNo PARAMETERS

SI.No	PARAMETERS	RESULT	UNIT	PROTOCOL
1	Non Methane Hydrocarbons	BDL(DL : 0.2)	Mg/Nm3	SOP-GEL-009:2024
2	Hydrocarbons	BDL(DL: 0.1)	µg/Nm ³	SCP-GEL-010:2024
	Active 19	E	A OL REPORT	
A	Kant Verified By	for GREENEX EN	CHENNAI BY P	PVT LTD PAuthorized By
	yarasi- Technical Manager		TIO * CUE	K P Periaswami – Head of the Laboratory





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	NAME OF INDUSTRY ADDRESS Sample Ref No : GEL/AS Sample Rep No : 523/03 SAMPLED ON STACK IDENTIFICATION PITOT TUBE CONSTANT AMBIENT TEMPERATURE GAS VOLUME SAMPLED	5/523/03 NO	TAMILNADU F Manali Expres Manali, Chenn	ai - 600 068. ing : 27.03.2025 e : 05.04.2025	HCD PLANT)
SI. No	PARAMETERS	RESULT	UNIT	Limit as per CPCB emission limits for new diesel engine up to 800kw for generator set.	PROTOCOL
1	Flue Gas Temperature	106	°C	-	IS:11255
2	Flue Gas Pressure	5.20	mm Hg	-	IS:11255
3	Flue Gas Velocity	8.66	m / s		IS:11255
4	Volume of Gas Discharged	1680	Nm ³ / hr		IS:11255
5	Particulate Matter (PM)	BDL(DL =5.0)	g/Kw-hr	<0.2	IS:11255
6	Sulphur- di- oxide (SO ₂)	0.3	mg / Nm ³	-	IS:11255
7	Nitrogen Dioxide (NO ₂)	BDL(DL =1.0)	g/Kw-hr	<4.0	IS:11255
8	Carbon – di - oxide (CO2)	- 2.68	%		IS:13270
9	Carbon Monoxide (CO)	0.002	g/Kw-hr	<3.5	IS:13270
10	Oxygen (O ₂)	15.30	%	-	IS:13270
	- Below Detectable Limit ; D ort Opinion: The above resu There is no limi		EF notification		à.
A.1	2. This test i	er s shown in this test re	CHENN 600 04	3 THE K P Periaswami – H	lead of the Laboratory



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NAME OF	INDUSTRY
ADDRESS	

Sample Ref No : GEL/AS/523/03 Sample Rep No : 523/03 SAMPLED ON STACK IDENTIFICATION NO PITOT TUBE CONSTANT AMBIENT TEMPERATURE GAS VOLUME SAMPLED TEST REPORT : TAMILNADU PETROPRODUCTS LIMITED (HCD PLANT) Manali Express Highway, Manali, Chennai - 600 068. Date Of Sampling : 27.03.2025 Reporting Date : 05.04.2025 : 27.03.2025 : DG Stack- 500KVA : 0.1951

- : 38° C
- : 400 liters

SI. No	PARAMETERS	RESULT	UNIT	Limit as per Ministry Of Environment and Forests Notification, 09.06.2002 (MOEF) (mg/m ³)	Limit as per TNPCB	PROTOCOL
1	Non Methane Hydrocarbons	BDL (DL:0.1)	Mg/Nm3	-	-	SOP-GEL-009:2024
2	Hydrocarbons	BDL (DL: 0.1)	Mg/Nm3		-	SOP-GEL-010:2024
3	Olefins	BDL (DL:0.1)	µg/Nm ³	-	-	SOP-GEL-011:2024
			End of F	Report		
/ .Kav	A . Longer Verified By Viyarasi- Technical Manager	for GREE	NEX ENGO	43	P	uthorized By - Head of the Laborato

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GREENEX ENVIRO LABORATORY PVT LTD ISO 9001:2015 Certified Laboratory

	NAME OF INDUSTRY ADDRESS Sample Ref No : GEL/A Sample Rep No : 524/03 SAMPLED ON STACK IDENTIFICATION PITOT TUBE CONSTANT AMBIENT TEMPERATURE GAS VOLUME SAMPLED	NO	TEST REPORTTAMILNADU PETROPRODUCTManali Express Highway, Manali, Chennai - 600 068.Date Of Sampling27.03.2029Reporting Date: 05.04.202: 27.03.2025:: CI Scrubber - WAD: 0.1951: 38° C: 400 liters	5
SI.No	PARAMETERS	UNIT	RESULT	Test Method
1	Chlorine Below Detectable Limit ; DL De	Mg/Nm ³	7.20	SOP-GEL-014:2024
			End of Report	
	erified By yarasi- Technical Manager	for GREENE	CHENNAI	PArthorized By
	NOTE: 1. Test results s 2. This test rep	ort shall not be repr	port relate only to the items tested. oduce anywhere except in full and in sa	K P Periaswami - Head of the Laboratory
	approval of t	he laboratory		

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> ized K P Periaswami Head of the Laboratory

TEST REPORT

SI.No	NAME OF INDUSTRY ADDRESS Sample Ref No : GEL/AS Sample Rep No : 525/03 SAMPLED ON STACK IDENTIFICATION I PITOT TUBE CONSTANT AMBIENT TEMPERATURE GAS VOLUME SAMPLED	NO	 TAMILNADU PETROPRODUC Manali Express Highway, Manali, Chennai - 600 068. Date Of Sampling ': 27.03.2029 Reporting Date : 05.04.202 27.03.2025 Hcl Scrubber – Hcl Plant 0.1951 38° C 400 liters 	5
01.110	PARAMETERS	UNIT	RESULT	Test Method
1	HCL Vapour	Mg/Nm ³ ·	17.0	
BDL - F	Below Detectable Limit ; DL – De		17.0	SOP-GEL-014:2024
Δ			End of Report X ENVIRO LABORATORY PVT L	TD O

Verified By A.Kaviyarasi- Technical Manager

NOTE:

1.

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ISO 9001:2015 Certified Laboratory

S Mana Mana escription :Efflu	LNADU PETROPI ali Express Highway ali, Chennai - 600 0	RODUCTS LIMITED	Report No.	:526/03
S Mana Mana escription :Efflu	ali Express Highway		Depend Date	05.04.0005
Mana escription :Efflu		1	Report Date Page: 1 of 5	: 05.04.2025
escription :Efflu	an, onernar - 000 0		Fage. 1015	
	ent Water	00.	Received On	: 27.03.2025
	/27.03.2025		Commenced On	: 27.03.2025
	er dated on 27.03.2	025	Completed On	: 05.04.2025
	- Iniet		e e comprese e com	
				TEST METHOD
PARAMETERS	Unit	RESULTS		
e: Chemical				
S				
achlor	mg/l	BDL		SOP/GEL/ 012/2024
		(DL:0.0001)		en sentit i stand stand stand i 1993 (1995) (1997)
drin	mg/l	BDL		SOP/GEL/ 012/2024
		(DL:0.0001)		
pha BHC	mg/l	BDL		SOP/GEL/ 012/2024
		(DL:0.0001)		
razine	mg/l			SOP/GEL/ 012/2024
	*			
eta BHC	mg/l	BDL		SOP/GEL/ 012/2024
utachlor	mg/l			SOP/GEL/ 012/2024
1. Sec. 2. Sec	in Restor			
nloropyrifos	mg/l			SOP/GEL/ 012/2024
elta BHC	mg/l			SOP/GEL/ 012/2024
*	-			
eldrin	mg/l			SOP/GEL/ 012/2024
altamethrin	mall			SOD/CEL/ 012/2024
sitametinin	тул			SOP/GEL/ 012/2024
udosulfan alnha	ma/l			SOP/GEL/ 012/2024
accounter alpha	ing/i			GOT/GEL/ 012/2024
ndosulfan Beta	mg/l	BDL		SOP/GEL/ 012/2024
	ingri	(DL:0.0001)		001/01/01/2024
	PARAMETERS	PARAMETERSUnite: Chemicalsachlormg/ldrinmg/ldrinmg/lpha BHCmg/lrazinemg/leta BHCmg/lutachlormg/latachlormg/lutachlormg/lelda BHCmg/lelta BHCmg/lachloropyrifosmg/lelta BHCmg/lelta BHCmg/lelta BHCmg/leldrinmg/lmdosulfan alphamg/l	PARAMETERSUnitRESULTSe: Chemicalsachlormg/lBDL (DL:0.0001)drinmg/lBDL (DL:0.0001)drinmg/lBDL (DL:0.0001)pha BHCmg/lBDL (DL:0.0001)razinemg/lBDL (DL:0.0001)eta BHCmg/lBDL (DL:0.0001)utachlormg/lBDL (DL:0.0001)horopyrifosmg/lBDL (DL:0.0001)eldrinmg/lBDL (DL:0.0001)eldrinmg/lBDL (DL:0.0001)eldrinmg/lBDL (DL:0.0001)eldrinmg/lBDL (DL:0.0001)eldrinmg/lBDL (DL:0.0001)eldrinmg/lBDL (DL:0.0001)eldrinmg/lBDL (DL:0.0001)eldrin alphamg/lBDL (DL:0.0001)	PARAMETERS Unit RESULTS e: Chemical s s achlor mg/l BDL (DL:0.0001) (DL:0.001) drin mg/l BDL (DL:0.0001) (DL:0.0001) pha BHC mg/l BDL (DL:0.0001) (DL:0.0001) razine mg/l BDL (DL:0.0001) (DL:0.0001) eta BHC mg/l BDL (DL:0.0001) (DL:0.0001) itachlor mg/l BDL (DL:0.0001) (DL:0.0001) eta BHC mg/l BDL (DL:0.0001) (DL:0.0001) identifies mg/l BDL (DL:0.0001) (DL:0.0001) eta BHC mg/l BDL (DL:0.0001) (DL:0.0001)



		TES	T REPORT-ADDITION	NAL SHEET
	le Ref No: GEL/W/526/03			Report No :526/03 Report Date:05.04.2025 Page of 2 of 5
SI. No	PARAMETERS	Unit	RESULTS	. TEST METHOD
13	Endosulfan Sulfate	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
14	Ethion .	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
15	Gamma BHC	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
16	Malathion	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
17	o,p'-DDD	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
18	o,p'-DDE	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
19	o,p'-DDT	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
20	p,p'-DDD	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
21	p,p'-DDE	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
22	p,p'-DDT	- mg/l	BDL- (DL:0.0001)	SOP/GEL/ 012/2024
23	Parathion-methyl	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
24	Phorate	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024
A.Kav	Verified By iyarasi- Technical Manager	for GREE	X	ATORY PVT LTD PAUthorized By K P Periaswami – Head of the Laboratory

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- Unless informed by the customer the test items will not be retained for more than 10 days from The date of issue of test report (exceptional for Microbiology and wastewater for which retaining time 7 days.)



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		TES	T REPORT-ADDITION	AL SHEET	
Sample Ref No: GEL/W/526/03				Report No :526/03 Report Date:05.04.2025 Page of 3 of 5	
SI. No	PARAMETERS	Unit	RESULTS	TEST METHOD	
25	2,4-D	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024	
26	Isoproturon	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024	
27	Malaoxon	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024	
28	Methyl Paraoxon	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024	
29	Methyl Parathion	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024	
30	Monocrotophos	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024	
31	Phorate Sulfone	mg/l	BDL (DL:0.0001)	SOP/GEL/ 012/2024	
32	Phorate Sulfoxide	mġ∕l ∙	BDL (DL:0.0001)	SOP/GEL/ 012/2024	
33	Arsenic	mg/l	BDL (DL:0.005)	USEPA 200.8 Revision 5.4:1994	
34	Cadmium	mg/l	BDL (DL:0.01)	USEPA 200.8 Revision 5.4:1994	
35	Chromium	mg/l	BDL (DL:0.1)	USEPA 200.8 Revision 5.4:1994	
36	Copper	mg/l	BDL (DL:0.01)	USEPA 200.8 Revision 5.4:1994	
			End of Page 3	A	
A.Kav	Verified By iyarasi- Technical Manager	for GREE	NEX ENVIRO LABOR CHENNAI 600 043		

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Authorized By

K P Periaswami - Head of the Laboratory

ISO 9001:2015 Certified Laboratory

		TEST	REPORT-ADDITI	ONAL SHEET
Samp	e Ref No: GEL/W/526/03		Report No :526/03 Report Date:05.04.2025 Page of 4 of 5	
SI. No	PARAMETERS	Unit	RESULTS	TEST METHOD
37	Nickel	mg/l	BDL (DL:0, 1)	USEPA 200.8 Revision 5.4:1994
38	Selenium	mg/l	BDL (DL:0.005)	USEPA 200.8 Revision 5.4:1994
39	Zinc	mg/l	BDL (DL:0.1)	USEPA 200.8 Revision 5.4:1994
40	Ammonia as NH3	mg/l	BDL (DL:0.1)	IS:3025 P.34 1988 R.2009
41	Ammonical Nitrogen as NH3-N	mg/l	BDL (DL:0.1)	IS:3025 P.34 1988 R.2009
42	Bio-Chemical Oxygen Demand (BOD) 3 days @ 27°C	mg/l	NIL	IS: 3025 P. 44 1993 R. 2009
43	Boron as B	mg/l	BDL (DL:0.1))	IS: 3025 P. 57 2021
44	Sodium as Na	mg/l ·	5.0	IS 3025 P.45 1993
45	Chemical Oxygen Demand(COD)	mg/l	18.0	IS 3025 P.58. 2006
46	Chloride as Cl	mg/l	20,480	IS 3025 P.32. 1988
47	Cyanide as CN	mg/l	BDL (DL:0.01)	IS 3025 P.27. 1986
48	Fluorides as F	mg/l	1.20	APHA 24 th Edn :2023 4500 D`F

for GREENEX ENVIRO LABORATORY PVT LTD OLABOR

CHENNAL

600 043

erified By

A.Kaviyarasi- Technical Manager

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		TEST	REPORT-ADDITI	ONAL SHEET	
Sample Ref No: GEL/W/526/03				Report No :526/03 Report Date:05.04.2025 Page of 5 of 5	
SI. No	PARAMETERS	Unit	RESULTS	TEST METHOD	
49	Free Residual Chlorine	mg/l	BDL (DL:0.1)	IS 3025 P.26 2021	
50	Hexavalent Chromium as Cr6+	mg/l	BDL (DL:0.05)	IS 3025 P.52 2003	
51	Oil and grease	mg/l	<1.0	IS 3025 P.39 2021	
52	pH value @25°C	mg/l	2.0	IS:3025: P.11:2022	
53	Phenolic Compound	mg/l	BDL (DL:0.01)	IS 3025:P.43:1992	
54	Dissolved Phosphate as P	mg/l	BDL (DL:0.1)	APHA 24 th Edn :2023 4500 P-B,D	
55	Residual Sodium Carbonate	• mEq/L	BDL (DL:0.1)	IS: 11624 1986	
56	Sulphate as SO4	mg/l	BDL (DL:0.1)	IS 3025 P.24 1986	
57	Sulphide as S2	mg/l	BDL (DL:1.0)	IS 3025 P.29 1986	
58	Temperature	°C	27.0 -	IS 3025 P.09 1984	
59	Total dissolved solids @ 180°C	mg/l	61,121	IS 3025 P.16 1984	
60	Total Kjeldahl Nitrogen as N	mg/l	18.0	IS:3025 P.34 1988 R.2009	
61	Total suspended Solids @105°C	mg/l	12.0	IS 3025 P.17 1984	
		(- ODEEN	End of Page		
A.Kav	Verified By iyarasi- Technical Manager	TOF GREEN	GHENN 600 04	Authorized By K P Periaswami – Head of the Laboratory	

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Samp	le Ref No. :GEL/W/526/03			Report No. :526/03	3
ADDR	ESS Manali E Manali,	ADU PETROP Express Highwa Chennai - 600 (Report Date : 05.04 Page: 1 of 5	
Samp Custo		.03.2025 lated on 27.03.2	Received On : 27.03.2025 Commenced On : 27.03.2025 Completed On : 05.04.2025		
SI. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
	oline: Chemical		•		
Pestic		1		1	
1	Alphamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
2	Cypermethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
3	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
4	Permethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
5	Mercury	mg/l	BDL (DL:0.01)	0.01	USEPA 200.08 REV 1994
6	Lead -	mg/l	BDL (DL:0.1)	0.1	USEPA 200.08 REV 1994
7	Alpha Emitters	Microcurie/ ml	BDL (DL:0.000000001)	0.0000001	IS 14194(Part 2) 1994
8	Beta Emitters	Microcurie/ ml	BDL (DL:0.000000001)	0.0000001	IS 14194(Part 1) 1994
			End of Page 1		
ŀ	Verified By	for GREE	CHENNAI 600 043		Authorized By

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Samp	e Ref No. :GEL/W/527/03			Report No. :527/03	
ADDR	ESS Manali E	ADU PETROP xpress Highway Chennai - 600 0		Report Date : 05.04.202 Page: 1 of 5	5
Sample Description :Effluent Water Sample Drawn By /Date :GEL/27.03.2025 Customer's Reference :Letter dated on 27.03.2025 Sample Mark : ETP - Outlet			Received On : 27.03.2025 Commenced On : 27.03.2025 Completed On : 05.04.2025		
SI. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
Discip	line: Chemical			1	
Pestic	ides				
1.	Alachlor	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
2	Aldrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
3	Alpha BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
4	Atrazine	, mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
5	Beta BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
6	Butachlor	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
7	Chloropyrifos	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
8	Delta BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
9	Dieldrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
10	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
11	Endosulfan alpha	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
12	Endosulfan Beta	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
F	Verified By	for GREE	End of Page 1 NEX ENVIROLABOR CHENNAL 600 043	CATORY PVT LTD	Authorized By rami – Head of the Laborat

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K P Periaswami – Head of the Laboratory

amp	le Ref No: GEL/W/527/03				
SI. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
13	Endosulfan Sulfate	mg/l	BDL (DL:0.0001)	Absent .	SOP/GEL/ 012/2024
14	Ethion	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
15	Gamma BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
16	Malathion	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
17	o,p'-DDD	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
18	o,p'-DDE	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
19	o,p'-DDT	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
20	p,p'-DDD	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
21	p,p'-DDE	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
22	p,p'-DDT	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
23	Parathion-methyl	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
24	Phorate	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
		(ODEE	End of Page 2	TODY DUT I TD	-
-	1: Kant	TOT GREE	CHENNAI 600 043		A PZ

A.Kaviyarasi- Technical Manager

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K P Periaswami - Head of the Laboratory

		TES	T REPORT-ADDITIO		
	e Ref No: GEL/W/527/03		Report No :527/03 Report Date:05.04.2025 Page of 3 of 5		
SI. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
25	2,4-D	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
26	Isoproturon	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
27	Malaoxon	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
28	Methyl Paraoxon	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
29	Methyl Parathion	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
30	Monocrotophos	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
31	Phorate Sulfone	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
32	Phorate Sulfoxide	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
33	Arsenic 😪	- mg/l	BDL (DL:0.005)	0.2	USEPA 200.8 Revision 5.4:1994
34	Cadmium	mg/l	BDL (DL:0.01)	2.0	USEPA 200.8 Revision 5.4:1994
35	Chromium	mg/l	BDL (DL:0.1)	2.0	USEPA 200.8 Revision 5.4:1994
36	Copper	mg/l	BDL (DL:0.01)	3.0	USEPA 200.8 Revision 5.4:1994
		for GREE	End of Page	3 RATORY PVT LTD	

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A.Kaviyarasi- Technical Manager

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		TES	T REPORT-ADDITIC	DNAL SHEET	
Sampl	e Ref No: GEL/W/527/03		Report No :527/03 Report Date:05.04.2025 Page of 4 of 5		
SI. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
37	Nickel	mg/l	BDL (DL:0. 1)	3.0	USEPA 200.8 Revision 5.4:1994
38	Selenium	mg/l	BDL (DL:0.005)	0.05	USEPA 200.8 Revision 5.4:1994
39	Zinc	mg/l	BDL (DL:0.1)	1.0	USEPA 200.8 Revision 5.4:1994
40	Ammonia as NH3	mg/l	BDL (DL:0.1)	5.0	IS:3025 P.34 1988 R.2009
41	Ammonical Nitrogen as NH3-N	mg/l	8.0	50	IS:3025 P.34 1988 R.2009
42	Bio-Chemical Oxygen Demand (BOD) 3 days @ 27°C	mg/l	BDL(DL : 2.0)	30	IS: 3025 P. 44 1993 R. 200
43	Boron as B	mg/l	0.50	2	IS: 3025 P. 57 2021
44	Sodium as Na	mg/l	680	-	IS 3025 P.45 1993
45	Chemical Oxygen Demand(COD)	mg/l	12.0	250	IS 3025 P.58. 2006
46	Chloride as Cl	mg/l	4200	-	IS 3025 P.32. 1988
47	Cyanide as CN	mg/l	BDL (DL:0.01)	0.2	IS 3025 P.27. 1986
48	Fluorides as F	mg/l	0.10	15.0	APHA 24 th Edn :2023 4500 D F

End of Page 4 for GREENEX ENVIRO LABORATORY PVT LTD

enfied By

A.Kaviyarasi- Technical Manager

CHENNAI CHENNAI 600 043 CHENNAI 600 043 CHENNAI 600 043 CHENNAI

Authorized By

K P Periaswami - Head of the Laboratory

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		TEST	REPORT-ADDITIO	DNAL SHEET	
Sampl	e Ref No: GEL/W/527/03		Report No :527/03 Report Date:05.04.2025 Page of 5 of 5		
SI. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
49	Free Residual Chlorine	mg/l	BDL (DL:0.1)	1	IS 3025 P.26 2021
50	Hexavalent Chromium as Cr6+	mg/l	BDL (DL:0.05)	0.1	IS 3025 P 52 2003
51	Oil and grease	mg/l	<1.0	10	IS 3025 P 39 2021
52	pH value @25°C	mg/l	8.60	5.5 to 9.0	IS:3025: P.11:2022
53	Phenolic Compound	mg/l	BDL (DL:0.01)	1.0	IS 3025:P.43:1992
54	Dissolved Phosphate as P	, mg/l	BDL (DL:0.1)	5.0	APHA 24 th Edn :2023 4500 P-B,D
55	Residual Sodium Carbonate	mEq/L	BDL (DL:0.1)		IS: 11624 1986
56	Sulphate as SO4	mg/l	880	1000	IS 3025 P.24 1986
57	Sulphide as S2	mg/l	BDL (DL:1.0)	2.0	IS 3025 P.29 1986
58	Temperature	°C	27.0	40° C at the point of discharge	IS 3025 P 09 1984
59	Total dissolved solids @ 180°C	mg/l	16,700	-	IS 3025 P.16 1984
60	Total Kjeldahl Nitrogen as N	mg/l	12.0	100	IS:3025 P.34 1988 R.2009
61	Total suspended Solids @105°C	mg/l	8.0	100	IS 3025 P.17 1984

End of Page 5

for GREENEX EN ARO LABORATORY PVT LTD CHENNAL 600 043 /enified By norized By * 66 K P Periaswami - Head of the Laboratory A.Kaviyarasi-Technical Manager

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			TEST REPORT		
Sampl	e Ref No. :GEL/W/527/03			Report No. :527/03	
CUST ADDR	ESS Manali	IADU PETROPI Express Highway , Chennai - 600 0		Report Date : 05.04.20 Page: 1 of 5	25
Sample Description :Effluent Water Sample Drawn By /Date :GEL/27.03.2025 Customer's Reference :Letter dated on 27.03.2025 Sample Mark :ETP - Outlet				Received On27.03.20Commenced On27.03.20Completed On05.04.20	025
SI. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
Discip	oline: Chemical				
Pestic	ides				
1	Alphamethrin	, mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
2	Cypermethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
3	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
4	Permethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/GEL/ 012/2024
5	Mercury	mg/l	BDL (DL:0.01)	0.01	USEPA 200.08 REV 199
6	Lead	mg/l	BDL (DL:0.1)	0.1	USEPA 200.08 REV 199
7	Alpha Emitters	Microcurie/ ml	BDL (DL:0.000000001)	0.0000001	IS 14194(Part 2) 1994
8	Beta Emitters	Microcurie/ mi	BDL (DL:0.000000001)	0.0000001	IS 14194(Part 1) 1994
A Kay	Venfied By	for GREE	NEX ENVIRO LABOR	ORY PUL	Authorized By Swami – Head of the Laborato

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Sampl	le Ref No. :GEL/W/528/03	Report No. :528/03	3	
A	OF INDUSTRY TAMILNADU PETROPRO	DUCTS LIMITED	Report Date :05.04.1	2025
ADDR			Page: 1 of 3	we had her had .
	Manali Chennai-600068			
Sampl	le Description Water		Received On :27.03	3.2025
10 million (* 10 million)	le Drawn By/ Date : GEL/27.03.2025	343	Commenced On :27.03	3.2025
	mer's Reference : Letter Dated on 27.0	03.2025	Completed On :05.04	4.2025
Sampl	e Mark : Test Bore Water -	1		
SI. No	PARAMETERS	RESULTS	TES	T METHOD
1	Mercury(mg/l)	BDL (DL=0.0005)	APHA 24 th E	Edn :2023 3500-Hg
	N	ICROBIOLOGICAL EXA	AMINATION	Acceptable Limits (Max
1	Faecal Coliform (MPN/100ml)	Absent	IS 1622 : 1981	Absent/100ml
2	Total Coliform (MPN/100ml)	Absent	IS 1622 : 1981	Absent/100ml
ŀ	- MPN-Most Propable Number, <2 is consi for C Verified By viyarasi- Technical Manager	CHENNAI 600 043	CP	uthorized By
A.Ka	viyarasi- Technical Manager	End of Page	K P Perias	wami – Head of the Labora

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Sama	le Ref No. :GEL/W/529/03	TEST REPO	Report No. :529/03	
				0.0 5
	OF INDUSTRY : TAMILNADU PETROPE		Report Date :05.04.2	025
ADDH	RESS Manali Express Highv		Page: 1 of 3	
	Manali Chennai-6000			
Samp	le Description : Water		Received On :27.03.	2025
	le Drawn By/ Date : GEL/20.02.2025		Commenced On :27.03	.2025
	mer's Reference . Letter Dated on 2	7.03.2025	Completed On :05.04	.2025
Samp	le Mark : Test Bore Water	-2	a second a second s	
SI.	PARAMETERS	RESULTS	TEST	METHOD
No	PARAMETERS	RESULTS	1201	METHOD
1	Mercury(mg/l)	BDL	APHA 24 th Ec	In :2023 3500-Hg
		(DL=0.0005)		
	F (MICROBIOLOGICAL EXA		Acceptable Limits (Max
1	Faecal Coliform (MPN/100ml)	Absent	IS 1622 : 1981	Absent/100ml
2	Total Coliform (MPN/100ml)	Absent	IS 1622 : 1981	Absent/100ml
lote :	- MPN-Most Propable Number, <2 is cor			<u> </u>
	for	GREENEX ENVIRODABO	RATORY PVT LTD	0.0
		CHEN	NAI 같	· 1-7
/	tikant	(m) 600 0	43 2	
l	Verified By		121	Authorized By
A.Ka	viyarasi- Technical Manager	* CPA	K P Periasw	ami - Head of the Laborator
		End of Page	. 4	

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		TEST REPO	RT		
Sample Ref No. :GEL/W/530/03			Report No. :530/03		
NAME OF INDUSTRY : TAMILNADU PETROPRODUCTS LIMITED			Report Date :05.04.2	2025	
ADDR	RESS Manali Express Highv Manali Chennai-6000	*/	Page: 1 of 3		
Samp	le Description : Water		Received On :27.03	3.2025	
	le Drawn By/ Date : GEL/20.02.2025		Commenced On :27.03		
7.07.07.07.0	mer's Reference : Letter Dated on 2 le Mark : Test Bore Water	Completed On :05.04	Completed On :05.04.2025		
SI. No	PARAMETERS	RESULTS	TEST	TEST METHOD	
1	Mercury(mg/l)	BDL - (DL=0.0005)		APHA 24 th Edn :2023 3500-Hg	
	and the second sec	MICROBIOLOGICAL EXA		Acceptable Limits (Max	
1	Faecal Coliform (MPN/100ml)	Absent	IS 1622 : 1981	Absent/100ml	
2	Total Coliform (MPN/100ml)	Absent	IS 1622 : 1981	Absent/100ml	
k	- MPN-Most Propable Number, <2 is con for Verified By viyarasi- Technical Manager	GREENEX ENTRADOR	K P Perias	Authorized By wami – Head of the Laboratory	
		End of Page			

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Sample Ref No. :GEL/W/531/03			Report No. :531/03		
NAME OF INDUSTRY : TAMILNADU PETROPRODUCTS LIMITED			Report Date :05.04.2025		
ADDRESS Manali Express Highway, Manali Chennai-600068			Page: 1 of 1		
Samp	le Description : Water		Received On :27.03.2025		
Samp	le Drawn By/ Date : GEL/20.02.2025		Commenced On :27.03.2025		
Customer's Reference : Letter Dated on 27.03.2025 Sample Mark Test Bore Water -4			Completed On :05.04.2025		
SI. No	PARAMETERS	RESULTS	TEST	TEST METHOD	
1	Mercury(mg/l)	BDL (DL=0.0005)	APHA 24 th Edn :2023 3500-Hg		
	E O VI	MICROBIOLOGICAL EXA	AMINATION	Acceptable Limits (Max)	
1	Faecal Coliform (1111/100ml)	Absent	IS 1622 : 1981	Absent/100ml	
2	Total Collierm (Mi 100ml)	Absent	IS 1622 : 1981	Absent/100ml	
1	- MPN-Most Propable Number, <2 is con for (Verified By Verified By iyarasi- Technical Manager	GREENEX ENVIROLABO	Por Prize	Authorized By yami – Head of the Laborato	

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ample Ref No. :GEL/W/532/03 AME OF INDUSTRY : TAMILNADU PETROPRODUCTS LIMITED .DDRESS Manali Express Highway, .DDRESS Manali Chennai-600068 ample Description : Water ample Drawn By/ Date : GEL/20.02.2025 customer's Reference : Letter Dated on 27.03.2025 ample Mark : Test Bore Water -5 SI. PARAMETERS No 1 1 Mercury(mg/l) BDL (DL=0.0005) MICROBIOLOGICAL EXAMINA 1 Faecal Coliform (MPN/100ml)	APHA 24 th Edn	2025 .2025 .2025 METHOD	
ADDRESS Manali Express Highway, Manali Chennai-600068 ample Description Water ample Drawn By/ Date GEL/20.02.2025 customer's Reference Letter Dated on 27.03.2025 ample Mark Test Bore Water -5 SI. PARAMETERS RESULTS No BDL (DL=0.0005) (DL=0.0005)	Page: 1 of 1 Received On :27.03. Commenced On :27.03. Completed On :05.04. TEST M APHA 24 th Edn	2025 .2025 .2025 METHOD	
ample Drawn By/ Date : GEL/20.02.2025 Customer's Reference : Letter Dated on 27.03.2025 Cample Mark : Test Bore Water -5 SI. PARAMETERS RESULTS No 1 Mercury(mg/l) BDL (DL=0.0005) MICROBIOLOGICAL EXAMINA	Commenced On :27.03. Completed On :05.04. TEST M APHA 24 th Edn	.2025 .2025 METHOD	
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Si. PARAMETERS RESULTS 1 Mercury(mg/l) BDL (DL=0.0005) MICROBIOLOGICAL EXAMINA	TEST M APHA 24 th Edn	METHOD	
No 1 Mercury(mg/l) BDL (DL=0.0005) MICROBIOLOGICAL EXAMINA	APHA 24 th Edn		
(DL=0.0005) MICROBIOLOGICAL EXAMINA		1 :2023 3500-Hg	
	TION	APHA 24 th Edn :2023 3500-Hg	
1 Encoral Caliform (MPN/100ml) Abcont		Acceptable Limits (Max)	
Absent	IS 1622 : 1981	Absent/100ml	
2 Total Coliform (MPN/100ml) Absent	IS 1622 : 1981	Absent/100ml	
Iote :- MPN-Most Probable Number, <2 is considered as Absent for GREENEX ENTRO LABORATOR Verified By A.Kaviyarasi- Technical Manager End of Page 1	P	Authorized By mi – Head of the Laborator	

2. This test report shall not be reproduce anywhere except in full and in same format without the Approval of the laboratory

3. Unless informed by the customer the test items will not be retained for more than 10 days



Tamilnadu Petroproducts Limited

Ref: TPL – HCD/EC/2023

05th Oct- 2023

То

The Director Integrated Regional Office Ministry of Environment, Forest & Climate Change First Floor, Additional Office Block Shastri Bhavan, Haddows Road Nungambakkam, Chennai – 600 006.

Dear Sir

Sub: TPL-HCD Plant - Intimation of EC granted – Newspaper publication – Reg.
 Ref: EC Identification No: EC23A013TN173796 - File No. J-11011/20/99-IA-II(I) dated 18.09.2023.

We wish to inform you that the Ministry of Environment, Forest & Climate Change (MOEFCC) has granted Environmental Clearance (EC) for the Expansion of Caustic Soda production capacity from 150 TPD to 250 TPD by bipolar membrane cell process in the existing Heavy Chemicals Division Plant (HCD Plant), Manali, Chennai - 600068 vide EC Identification No: EC23A013TN173796; File No. J-11011/20/99-IA-II(I) dated 18.09.2023.

To comply with one of conditions stated in the EC, Public Notice advertisements in English & Tamil were published in the two local newspapers viz 'The Financial Express' and 'Makkal Kurai' on 26.09.2023.

Copies of the EC and Public Notice advertisements (English & Tamil) are attached as Annexure for your kind reference and record.

Thanking you

Yours faithfully For Tamilnadu Petroproducts Limited

D. Senthikumar Whole Time Director Concernation

> Regd. Office & Factory : Post Box No. 9, Manali Express Highway, Manali, Chennai - 600 068. India. Tel. : (0091) - 44 - 25945500 to 09 Telefax : 044-2594 5588 Website : www.tnpetro.com CIN : L23200TN1984PLC010931 TPL GSTIN : 33AAACT1295M1Z6

TPL-HCD Plant Environmental Clearance -Newspaper Advertisement



SYENNAL

TPL-CER Activities: Smart classroom provided to Village's School







TPL-CER Activities: Rest room & waiting shed provided at Sathankadu







CORPORATE SOCIAL RESPONSIBILITY

Primary Health Care Centre is provided at Sadayankuppam Village, Kannampalayam & Seemavaram, Manali by AM Foundation on behalf of **Tamilnadu Petroproducts Limited** under its CSR project and Inaugurated.























