Tamilnadu Petroproducts Limited

Ref: TPL – LAB/ 2024/EC Comp/10

13th Nov- 2024

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 – LAB Plant – Environmental Clearance (EC) – Six Monthly Compliance Report – April 2024 to Sep 2024 - reg.

Ref: Ref No: J-11011/469/2021-IA-II(I) dated 28.11.2022

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This has reference to the Environmental Clearance (EC) obtained from MoEF&CC, New Delhi for Expansion of Linear Alkyl Benzene (LAB) production from 1,20,000 TPA to 1,45,000 TPA within the existing plant at Manali Industrial Area, Chennai, Tamil Nadu

We herewith attach the EC compliance status report for the period from April-2024 to Sep-2024 for your kind reference.

Thanking you,

Yours faithfully,
For Tamilnadu Petroproducts Limited

TAMILNADU PETROPRODUCTS LIMITED CHENNAI - 68

N.Murugan
VP – Operations

1984 - 2009 25 Years MOVING AHEAD

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001:2015 MGMT. SYS. RvA C 024
ENVIRONMENTAL SYSTEM CERTIFICATION DNV·GL ISO 14001:2015 MGMT. SYS. RvA C 024
OH & S SYSTEM CERTIFICATION DNV·GL ISO 45001:2018 MGMT. SYS. RvA C 024

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

Environmental Clearance Compliance Status Report

For the period from Apr 2024 to Sep 2024

Ref No: J-11011/469/2021-IA-II(I) dated 28.11.2022

(A) Specific Condition

S.No	Condition	Compliance
1	EC will be subject to the decision of Hon'ble NGT (SZ). The project proponent shall abide by all orders and judicial pronouncements made from time to time in the case filed in Hon'ble NGT.	Shall be complied.
2	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, and risk mitigation measures relating to the project shall be implemented.	Complied All the environmental protection measures and safeguards proposed in the documents submitted to the Ministry will be complied. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures are being implemented.
3	NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.	Complied No ground water withdrawal for the existing & proposed expansion, hence NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority is not envisaged. Tertiary Treatment Reverse Osmosis (TTRO water) from CMWSSB is being used for the existing operation and same will be using for the expansion project.
4	As proposed, 2 Nos (1 No of 3MW & 1 No of 6 MW) of the above HFO based DG sets shall be replaced with 2 Nos of 7 MW each LNG based Gas Engines during this Financial year 2022-23. As committed, PP shall replace the remaining 1 No of HFO based 6 MW DG set with a Gas Engine within 1 year from the date of issue of EC.	Being complied As committed, 2 Nos of HFO based DG sets (1 X 3MW & 1 X 6.6 MW) have been replaced with 2 Nos of 7 MW LNG based Gas Engines. Remaining 1 No of HFO based DG set (1X6.6MW) will be removed or replaced with a Gas Engine.
5	Total freshwater requirement is 1000 m3 /day which will be met from TTRO supply	Complied

TAMILNADU PETROPRODUCTS LIMITED CHENNAI - 68

	from CMWSSB. Necessary permission in this regard shall be obtained from the concerned regulatory authority. The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.	Fresh water requirement of 1000 m3 /day will be met from TTRO supply from CMWSSB. Agreement is executed with CMWSSB, Effluent is treated in the ETP & subsequently in a RO Plant. RO permeate is reused in cooling tower as make up water and RO Reject is reused in TPL - ECH PO Plant process. No waste or treated water is discharged outside the premises.
6	PP shall ensure that effluent shall be treated through existing Effluent Treatment Plant of capacity 300 m^3/day. Domestic wastewater is being/will be treated in existing STP of Capacity 160 KLD. The plant is being/will be based on Zero Liquid discharge system and hence treated effluent water / will not be discharged outside the factory premises.	Complied Effluent is treated through existing Effluent Treatment Plant and subsequently in RO Plant of capacity 300 m^3/day. • RO permeate is reused in cooling tower as make up water and RO Reject is reused in TPL - ECH PO Plant process. • Domestic wastewater is treated in existing STP of Capacity 160 KLD • Treated sewage is utilised for green belt development inside the unit premises. ZLDS is being achieved.
7	3D risk study shall be done including consideration of vertical components and submit to IRO, MOEFCC within 6 months.	Complied 3D risk study including consideration of vertical components was conducted through accredited consultant M/s. Efficaz Consulting Services, Chennai. and report submitted to IRO, MOEF&CC.
8	Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.	Complied. Comprehensive water audit conducted through accredited consultant M/s. Hubert Enviro care system, Chennai and report submitted to IRO, MOEF&CC, Chennai.
9	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Complied Dedicated storm water drains are provided to avoid Process effluent/any wastewater mixing with storm water. Storm water drain is passed through a guard pond & reused by processing through RO plant.
10	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc.	Complied

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	Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.	Hazardous chemicals are stored in dedicated tanks located in tank farms. Necessary safety measures are provided in the tank farm.
11	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.	Complied Hazardous wastes are being disposed as per the authorisation issued by TNPCB. (HWA 22HFC30934995 dated 10/01/2022. Valid up to 31.03.2026). RLNG is used as fuel in boiler hence no generation of ash.
12	Regular VOC monitoring shall be done at vulnerable points.	Complied LDAR survey (VOC Monitoring) is being carried out at vulnerable points periodically. Latest LDAR survey conducted in April'24
13	The oily sludge shall be subjected to melting point for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.	Complied Oil sludge is being disposed to authorised TSDF for incineration as per the Hazardous Waste Authorisation issued by TNPCB. (HWA No. 22HFC30934995 dated 10/01/2022. Valid up to 31.03.2026).
14	Oil catchers / oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.	Complied Oil traps are provided in rain/ storm water drainage system inside the factory premises.
15	The company 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 spillage. d) Use of Close Feed system into batch reactors. e) Venting equipment through vapour recovery system.	Complied a) Flow meters are provided to monitor and control of raw material consumption and to minimise waste. b) Off gas and Slop oil is reused as fuel in heaters. c) Automated filling system with magnetic flow meter is provided for product despatch to avoid spillage. d) All Raw material & products are handled in pipelines. e) Off gas generated are routed through Pilot Gas Balance Drum and reused as fuel in heaters.

TAMILNADU PETROPRODUCTS LIMITED CHENNAI - 600

<table>
<tr><td></td><td>f) Use of high pressure hoses for equipment cleaning etc. to reduce wastewater generation.</td><td>f) High pressure hoses are being used for equipment cleaning etc., to reduce wastewater generation.</td></tr>
<tr><td>16</td><td>The green belt of 5-10 m width shall be developed in 8.76 Ha i.e. nearly 54.12% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Development of Green belt in the 18 Acre land area (at a distance of 0.36 km, NE from the project site) shall be done to compensate for the deficit Green Belt (30.875%) for LAB Project within 1 year. Status of development of greenbelt in this area shall be informed to the IRO, MOEFCC regularly.</td><td>Being complied
• We have developed 3.65 Acres (9.125 %) of green belt area within the premises (No. of Trees – 3800).
• As per the EC condition, we have developed a green belt of 18 Acre (45 %) outside the premises at a distance of 0.36 km, NE from LAB site to achieve 40 % green belt coverage. (No. of tree sapling proposed – 18000).
<table>
<tr><th>Green Belt Detail</th><th>Area Acre</th><th>%</th><th>Trees</th></tr>
<tr><td>Existing GB (inside)</td><td>3.65</td><td>9.125</td><td>3800</td></tr>
<tr><td>GB is under progress near the plant.</td><td>18.00</td><td>45.000</td><td>18000</td></tr>
<tr><td>Total Green Belt</td><td>21.65</td><td>54.125</td><td>21800</td></tr>
</table>
Apart from the above green belt developed, the following green belt areas have been developed outside of the plant.
• Tree & flower plantation has been developed on the banks of Korattur lake and fencing provided under Greater Chennai Corporation Greenery of Chennai city scheme.
• 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).</td></tr>
<tr><td>17</td><td>As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental</td><td>Being complied
As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018, the</td></tr>
</table>

	Responsibility, and as per the action plan proposed by the project proponent of Rs. 3.6 Crores to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centres / support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar streetlights, battery, solar panel etc., in the nearby villages. The action plan shall be completed within time as proposed.	Corporate Environmental Responsibility (CER) allocation for the proposed project is estimated at INR 3.6 Crores. This amount will be dedicated to addressing socio-economic and environmental challenges in the surrounding communities, with a focus on sustainable development and long-term community welfare. Action plan is prepared & funds have been committed to adhere as per the given plan.
18	The project proponent shall ensure 70% of the employment to the local people, as per the applicable law. The project proponent shall set up a skill development centre/provide skill development training to village people.	Being Complied Preference has been given to local people for employment as per the rules & regulation of company and will be ensured. Skill development centre will be provided, and skill development training will be imparted to village people.
19	A separate Environmental Management Cell (having qualified person 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.	Complied A separate Environmental Management cell is available with environmental science qualified personnel. Full-fledged laboratory is available to carryout Environmental Management and Monitoring functions.
20	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting 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. (Renewal Fire license validity is up to 03.09.2025).

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		Onsite emergency plan is maintained to mitigate, in case of any emergency.
21	Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.	Complied Raw materials are stored in closed storage tanks to prevent dust pollution and other fugitive emissions. Storage Tanks are constructed over concrete floor and dykes are provided to trap runoff material. All roads are paved properly, and roads are being cleaned by using industrial vacuum cleaner. The Air Pollution Control Systems will be interlocked with process plant/ machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
22	Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.	Complied <u>Emission Monitoring system</u> Online Continuous Emission Monitoring system (OCEMS) is installed in the following stacks to monitor PM, SO2, NOx and CO parameters and the monitoring data is being transmitted to the CPCB and SPCB server. OCEMS provided at the following locations. 1) Stack attached to Hot oil heater. 2) Stack attached to Hydrotreater heater. 3) Stack attached to PACOL heater. 4) Stack attached to Boiler. 5) Stack attached to CPP DG Sets and 6) Camera installed to view Flare stacks. OCEMS connectivity details attached as <u>Effluents monitoring system</u> Effluents are transferred through pipelines and not through channel/drain and hence online flowmeters are provided at the inlet and outlet of ETP and RO plant. Flow meters are provided at the following locations and connected to TNPCB/CPCB. 1) Inlet & Outlet of the ETP, 2) RO Feed 3) RO Permeate 4) RO Reject and

		5) Combined effluent outlet from LAB - RO Reject & HCD to ECH PO Plant process. Online Continuous Effluent Monitoring system (OCEMS) is installed at the combined effluent outlet from LAB & HCD plants to ECH PO Plant process for monitoring PH, BOD/COD, TSS and the data is being transmitted to the CPCB and SPCB server.
23	PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. 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. 1) Doctor 2) Nurse, round the clock. 3) 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. Required Personal Protective Equipment (PPEs) are being given to all employees & contractors.
24	The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.	Complied The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time, is being followed.
25	Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.	Complied Adequate safety measures are provided to mitigate possible accident. Risk Assessment studies have been conducted for worst case scenarios using latest techniques through accredited consultant and the recommendations given in the risk assessment studies are being implemented. **Existing safety measures:** • TPL – LAB has a well laid individual Fire Water pumping system with Jockey

		pumps, Main motor driven pumps and Diesel engine driven pumps. • Fire hydrant ring header runs throughout the plant, covering the entire LAB plant with sufficient numbers of hydrants and monitors as per the Tamil Nadu Factories Rules requirements. • Sprinkler systems are provided in the storage tanks storing class A chemical. • Nitrogen blanketing system is provided in the benzene storage tanks. • Benzene Online analyzer is provided. • LNG, LPG, Hydrogen, HF and HC detectors are provided at handling areas. • Necessary PPEs are provided. • Hydrant system, Foam pourer, water monitor, are provided. • Fire alarm manual call points provided. • Dyke walls are provided for all storage tanks to contain the liquid in case of any leakages. **Risk assessment study – Recommendations.** • Fixed water spray system is provided to HF handling area to minimize the HF dispersion into surroundings. • Online HF leak detectors are provided in and around HF storage and handling areas. • Chemical Protective suit with dual air system and necessary PPE are provided. • Periodic training is given to all employees using PPEs and handling emergencies. • Periodic thickness survey is being carried out for HF pipelines, storage tank and vessels. • Standard Operating Procedures is available to take care of emergencies.

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		• Operator training and retraining are being carried out continuously and Mock Drills are being carried out regularly on identified scenarios. • Work Permit System is being strictly enforced. • Explosion proof electrical equipment and lighting features are provided in the classified area. • Smoking and carrying smoking accessories are strictly prohibited. • Ensure that safe work practices are followed in premises, including hot work procedures in areas near flammable inventories. • Safety Procedures and Do's and Don'ts is prepared and displayed in handling and storage area. • Periodic inspection of Pipelines and painting are being carried out to avoid corrosion and subsequent leak.
26	PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.	Complied TPL plant premises is declared as 'Plastic Free Zone'. Display board made of metal with pictorial representation of the banned **"one time use and throwaway plastic"** items is provided at the entrance of the industry. Conducted awareness programs on ban on use of **"one time use and throwaway plastic"** and the alternatives for the banned plastics Eco-friendly alternatives such as banana leaf, arecanut palm plate, stainless steel, glass porcelain plants/cups cloth bag, jute bag etc are being encouraged for use.
	General Condition	
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	Complied. No further expansion or modification in the plant will be carried out without prior

TAMILNADU PETROPRODUCTS LIMITED CHENNAI - 68

	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.,	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 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.
3	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 (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	Complied Acoustic hoods, silencers, enclosures, etc., are provided at DG sets to keep the noise level within the prescribed standards. All machineries like blowers, compressors are being maintained properly and preventive maintenance are taken as per the schedule to control the noise levels. Ambient noise levels are being monitored periodically through in-house laboratory and TNPCB laboratory.
4	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 are being taken towards the improvement of socio-economic conditions of the surrounding area. Action plan was 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
5	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 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.	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 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.
6	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 / representation has been received from Panchayat / Municipal corporation urban local body and local NGO while processing the proposal.
7	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	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) will be

TAMILNADU PETROPRODUCTS LIMITED CHENNAI - 68

	SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	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 is being updated periodically.
8	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.	Being Complied The environmental statement (Form V) is being submitted to TNPCB once in a year before 30th Sep every year. Environmental statement (Form V) for the year 2023 – 2024 was submitted to TNPCB on 20.09.2024. The six-monthly compliance status of environmental clearance conditions including results of monitored data is being submitted to MOEF Regional Office through e-mail. A copy of Form V and six-monthly compliance status of environmental clearance conditions were uploaded in the company's website. (www.tnpetro.com)
9	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.	Complied Detail of the Environmental clearance obtained for the project was published in English & Tamil newspapers (The Financial Express on 03.12.2022 and Makkal Kural on 02.12.2022) as public notice advertisements. Advertisements were submitted to the Regional Office, MOEFCC on 27.12.2022.
10	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval	Complied. • The details of date of financial closure: 13th February 2023.

	of the project by the concerned authorities and the date of start of the project.	The consent for establishment (CTE) obtained from TNPCB **CONSENT ORDER NOs. 2306151374029,2306251374029, DATED: 31/08/2023.** • G.O from Tamilnadu Government based on **Site Appraisal Committee** (SAC) recommendation obtained in the month of November-2023 • Date of start of the project : Sep-2023
11	This Environmental clearance is granted subject to final 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.	Shall be complied.

TAMILNADU PETROPRODUCTS LIMITED CHENNAI - 68

GREEN BELT -18 ACRE AREA FOR TPL-LAB PLANT

Google
No. 2 Iyya Solomon Road, Gyanapuspam Nagar TTP, Burma Nagar Main Rd, Sadayankuppam, Manali New Town, Manali, Chennai, Tamil Nadu 600103, India
19/11/2024 11:44
Latitude
13.18007
Longitude
80.28359

TAMILNADU POLLUTION CONTROL BOARD
District Environmental Laboratory, Manali

From

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

To

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

Lr.No.TNPC Bd/DEL-MNL/Air Survey/F. No.74/2024-25, 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.74/2024-25 dt. 17.04.2024
2. Your Lr.No.Nil dt:29.05.2024
3. Cash Receipt No.159 dt.29.05.2024 Rs.1,18,250/-

- - - -

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 (LAB), Manali** Express Highway, Chennai – 68 on **26.07.2024** with invoice for Rs.1,18,250/- (Rupees One Lakh Eighteen thousand Two Hundred and Fifty 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.

19/8/24

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

Encl.: As above.

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

TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

AMBIENT AIR QUALITY SURVEY – Report of Analysis

Report No. 30/AAQS/2024-25 Date: 19.08.2024

1. Name of the Industry : **M/s. TPL (LAB),**
2. Address of the Industry : Manali Express Highway, Chennai - 68.
3. Date of Survey : 26.07.2024
4. Duration of Survey : **8 Hours** / 24 hours
5. Category : **Red** / Orange / Green – **Large** / Medium / Small
6. Land use classification : **Industrial** / Commercial / Residential / Sensitive

Meteorological Conditions

Ambient Temperature (^{0} C)	Min	Max	Relative Humidity (%)	Min	Max
	31	35		54	72
Weather Condition	Partially Cloudy		Rain Fall (mm)	Nil	
Predominant Wind Direction	WSW – ENE		Mean Wind Speed (km/hr)	13.6	

Ambient Air Quality Survey Results

Sl. No.	Location	Direction *	Distance (m) *	Height Form GL (m)	Pollutants Concentration (microgram / m^3)			
					PM 2.5	PM 10	SO_2	NO_2
1	On top of platform adjacent to Raw water pond	NE	100	2.0	32	86	15	26
2	On top of platform near hot oil heater	E	50	2.0	--	82	14	22
3	On top of CP station near flare stack	SE	100	2.0	--	78	13	19
4	On top of CP station – I	SW	100	2.0	24	64	9	13
5	On Top of Drivers rest Room	W	75	2.0	--	68	10	14
6	On top of the weigh bridge office room	NW	150	2.0	--	74	12	16

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

19/8/24

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

TAMILNADU POLLUTION CONTROL BOARD
District Environmental Laboratory, Manali

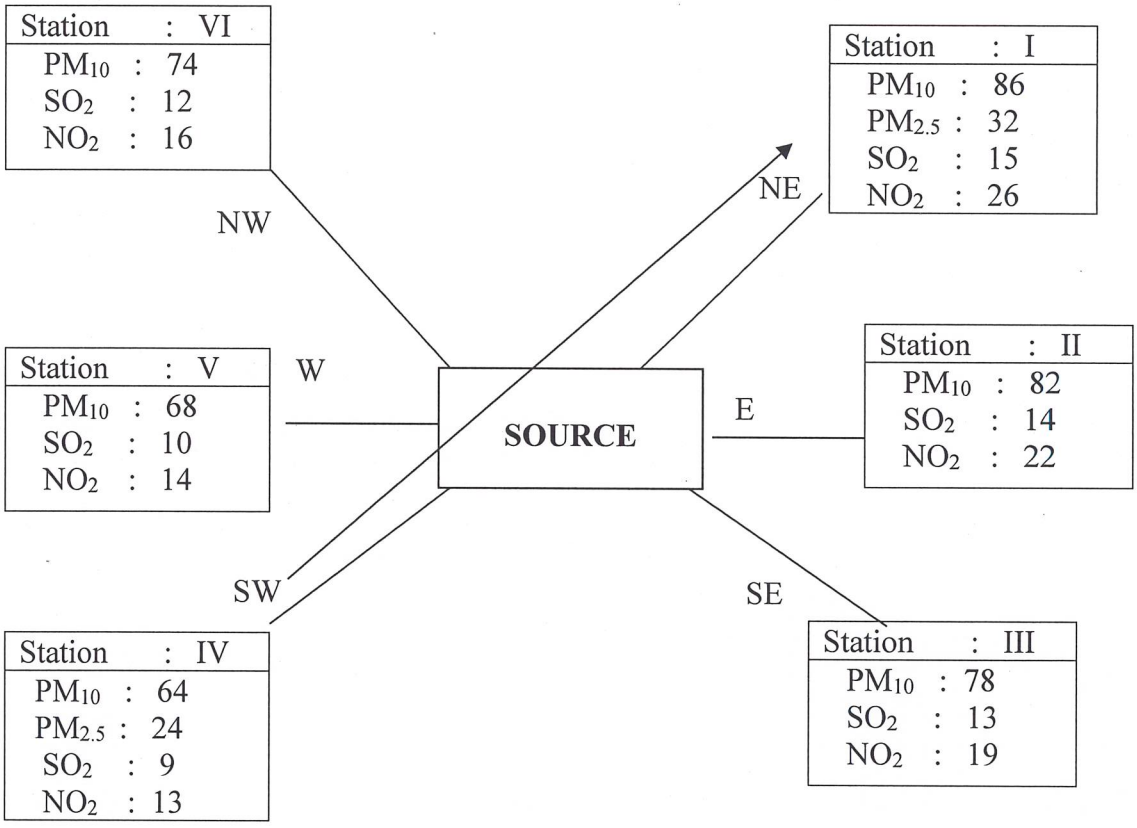
AMBIENT AIR QUALITY SURVEY

Schematic Diagram Showing Location of Sampling

Report No.30 /AAQ/SM/2024-25

Name and Address of the Industry : **M/s. TPL (LAB)**
Manali Express Highway, Chennai – 68.

Date of Survey : 26.07.2024



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

Meteorological Conditions:	
Predominant Wind Direction	WSW – ENE
Wind Speed (Km/hr)	13.6
Weather Condition	Partially Cloudy
Rainfall	Nil

19/8/24

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

TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

STACK MONITORING SURVEY – Report of Analysis

Report No. 30/ SM/2024-25 Date: 19.08.2024

1. Name of the Industry : **M/s. TPL (LAB),**

2. Address of the Industry : Manali Express Highway, Chennai – 68

3. Date of Survey : 26.07.2024

4. Type of Industry : Coal/Chemical/Sugar/Paper & Pulp/ Power plant / Textile Processing/**Petroproducts**

Stack Monitoring Survey Results

Sl. No.	Stack attached to	Fuel used	Stack .Temp ^0K	Velocity in (m/ sec)	Discharge rate In Nm^3/hr	Pollutants (mg / Nm^3)		
						PM	SO_2	NO_x
1	Boiler – 8T	LNG	453	11.1	41395	5	2	52
2	PACOL Heater	LNG	379	19.8	54664	8	BDL	42
3	Hydrobon Heater	LNG	443	16.8	15562	8	BDL	81
4	CPP-II	FO	425	20.3	59090	32	513	195
5	Hot Oil Heater	LNG	432	16.6	381617	6	3	59

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

19/8/24

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

TAMILNADU POLLUTION CONTROL BOARD
District Environmental Laboratory, Manali

Stack Details

Report No.30/AAQ/SM/2024-25

1. Name and Address of the Industry : **M/s. TPL (LAB)**
Manali Express Highway, Chennai – 68

2. Date of Survey : 26.07.2024

Sl. No.	Particulars	1	2	3
1.	Stack attached to	Boiler	Heater	Heater
2.	Details of process stack	**Boiler- 8T**	**PACOL**	**Hydrobon**
3.	Height from G Level in (m)	30	30	30
4.	Diameter in (m)	1.4	1.1	0.69
5.	Port hole height from Ground Level or bends or ducts in (m)	16.7	40.0	20.0
6.	Fuel Used (with % Sulphur content)	LNG	LNG	LNG
7.	Fuel Consumption rate per hr (mention units)	10 kg / hr	880 kg / hr	120 kg / hr
8.	Type of Stack and capacity	Round	Round	Round
9.	Production on 26.07.2024	Linear Alkyl Benzene 296 MT, Heavy Alkylate – 13 MT, N-Paraffin – 168 MT		
10.	APC Measures provided	Stack Provided	Stack Provided	Stack Provided
11.	APC functional status	Functioning	Functioning	Functioning
12.	Ambient temp in °K	305	306	305
13.	Temp of flue gas in °K	453	379	443
14.	Velocity of flue gas in m/sec	11.1	19.8	16.8
15.	Volume of flue gas sampled in m^3	1.000	1.000	1.007
16.	Gaseous Discharge rate per day in Nm^3/hr	41395	54664	15562

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

TAMILNADU POLLUTION CONTROL BOARD
District Environmental Laboratory, Manali
Stack Details

Report No.30/AAQ/SM/2024-25

1. Name and Address of the Industry : **M/s. TPL (LAB)**
Manali Express Highway, Chennai – 68

2. Date of Survey : 26.07.2024

Sl. No.	Particulars	4	5
1.	Stack attached to	CPP	Heater
2.	Details of process stack	**CPP-II**	**Hot Oil Heater**
3.	Height from G Level in (m)	31.5	76
4.	Diameter in (m)	1.2	3.4
5.	Port hole height from Ground Level or bends or ducts in (m)	23	68
6.	Fuel Used (with % Sulphur content)	FO	LNG
7.	Fuel Consumption rate per hr (mention units)	1500 kg / hr	3500 kg / hr
8.	Type of Stack and capacity	Round	Round
9.	Production on 26.07.2024	Linear Alkyl Benzene 296 MT, Heavy Alkylate – 13 MT, N-Paraffin – 168 MT	
10.	APC Measures provided	Stack Provided	Stack Provided
11.	APC functional status	Functioning	Functioning
13.	Ambient temp in ^{o}K	304	304
14.	Temp of flue gas in ^{o}K	425	432
15.	Velocity of flue gas in m/sec	20.3	16.6
16.	Volume of flue gas sampled in m^3	1.021	1.021
17.	Gaseous Discharge rate per day in Nm^3/hr	59090	381617

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

TAMIL NADU POLLUTION CONTROL BOARD
District Environmental Laboratory, Manali

STACK MONITORING SURVEY – Additional details

Report No. 30/ SM/2024-25 Date: 19.08.2024

1. Name of the Industry : **M/s. TPL (LAB)**

2. Address of the Industry : Manali Express Highway, Chennai – 68

3. Date of Survey : 26.07.2024

4. Type of Industry : Coal/Chemical/Sugar/Paper & Pulp/ Power plant / Textile Processing/ **Petroproducts**

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.	Boiler – 8T	Working	Sampling Done	--
2.	PACOL Heater	Working	Sampling Done	--
3.	Hydrobon Heater	Working	Sampling Done	--
4.	CPP-II	Working	Sampling Done	--
5.	Hot Oil Heater	Working	Sampling Done	--

19/8/24

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

TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

AMBIENT/SOURCE NOISE LEVEL SURVEY - Report of Analysis

Report No. 30/ NLS/2024-25 Date: 19.08.2024

1.	Name of the Industry	**M/s. TPL (LAB)**
2.	Address of the Industry	Manali Express Highway, Chennai - 68
3.	Date of Survey	26.07.2024

Category	**RL**	**Land use Classification**	Industrial
Type of Survey	**Ambient**/Source	**Time of Survey**	Day
Meteorological conditions		**Calm/Windy/Rainy**	Windy

Logging Parameters

Instrument Used	CESVA Model SC310		Serial No		T243103
Logging Interval	10 Minutes each point		**Measuring Range**		50-110 dB(A)
Weighting	**" A"**	**Peak Weighting**	**"C"**	**Time Weighting**	FAST
Sound Incidence	RANDOM		**Time in hrs**		14.00 – 15.30

Report of Noise Level Monitoring

Sl No	**Location**	Duration (min)	Distance (M)	Direction	**Sound Level – dB (A)**		
					L_{eq}	**Min**	**Max**
1	Near Raw Water Pond	10	100	NE	62.1	58.4	71.6
2	Near Flare Area	10	100	SE	60.4	55.3	70.2
3	Near CP Station -I	10	100	SW	58.4	54.2	66.7
4	Near Drivers Leisure Room	10	75	W	57.6	52.1	68.1
5	Near Temple	10	100	NW	63.4	59.0	73.8

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

19/8/24

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

TAMIL NADU POLLUTION CONTROL BOARD
District Environmental Laboratory, Manali

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

1. Name of Industry : **M/s. TPL (LAB)**
2. Pollution Category : Red Large
3. Date of A.A.Q. Survey : 26.07.2024
4. Predominant Wind Direction : WSW - ENE
5. Weather condition : Partially Cloudy

STATUS OF POLLUTANTS LEVEL

I. AMBIENT AIR QUALITY :-

1. Total No. of A.A.Q. stations monitored : 6
2. No. of A.A.Q. stations in which Pollutants Level exceeded the Boards standards : Nil

Maximum and Minimum values of Pollutants Level observed:

Sl. No.	POLLUTANT	Values in microgram/m^3		BOARD's STANDARD (As per consent order)
		Maximum	Minimum	
1.	PM_{10}	86	64	100
	PM.2.5	32	24	60
2.	GASEOUS POLLUTANTS:-			
	(i) SO_2	15	9	80
	(ii) NO_2	26	13	80

II. STACK MONITORING:-

1. Total No. of Stacks Monitored : 5
2. No. of Stacks in which Pollutants level Exceeded the Boards standards : Nil

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

TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED (LAB PLANT)**
ADDRESS Manali Express Highway, Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/305/09
Sample Rep No : 305/09
Date of Sampling : 23.09.2024
Reporting Date : 01.10.2024
Sampling Location : **Near Raw Water Pump House**
Sample Description : Ambient Air Monitoring
Sample Drawn By /Date : SAS/23.09.2024
Received On : 23.09.2024
Analysis Commenced On : 23.09.2024
Analysis Completed on : 01.10.2024
Sampling Method : IS 5182 (Part V) and (Part XIV)
Sampling Time : 8 Hrs
Ambient Temperature : 38°C
Relative Humidity : 59%

Sl. No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter ($PM_{2.5}$)	Envirotech Manual	µg / m^3	19.50	60
2	Respirable Particulate Matter (PM_{10})	IS 5182 Part 23-2012	µg / m^3	56.50	100
3	Sulphur Dioxide (SO_2)	IS 5182 Part 2 -212	µg / m^3	10.50	80
4	Nitrogen Dioxide (NO_2)	IS 5182 Part 6-2012	µg / m^3	24.50	80
5	Ozone (O_3)	IS 5182 Part 9-1974 R.2009	µg / m^3	11.80	180
6	Lead (Pb)	IS 5182 Part 22-2009	µg / m^3	BDL (DL=0.1)	1
7	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m^3	BDL (DL=1.15)	4
8	Ammonia (NH_3)	Indophenol Method	µg / m^3	9.50	400
9	Arsenic (As)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=1.0)	6
10	Nickel (Ni)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=0.1)	20
11	Benzene (C_6H_6)	IS 5182 Part 11-2012	µg / m^3	BDL (DL=0.1)	5
12	Benzo (a) Pyrene	IS 5182 Part 12-2009	ng / m^3	BDL	1
13	Suspended Particular Matter	IS 5182 Part 4-1999	µg / m^3	74.50	-

BDL – Below Detectable Limit ; DL – Detection Limit
Remarks: The above results meets the *National Ambient Air Quality Standards –CPCB

End of Report

for **SANTHOME ENVIRO SERVICES**

A. Kavi

Verified & Authorized By
A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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.

TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/306/09
Sample Rep No : 306/09
Date of Sampling : 23.09.2024
Reporting Date : 01.10.2024
Sampling Location : **Near Security Gate- 1**
Sample Description : Ambient Air Monitoring
Sample Drawn By /Date : SAS/23.09.2024
Received On : 23.09.2024
Analysis Commenced On : 23.09.2024
Analysis Completed on : 01.10.2024
Sampling Method : IS 5182 (Part V) and (Part XIV)
Sampling Time : 8 Hrs
Ambient Temperature : 38°C
Relative Humidity : 59%

Sl. No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter ($PM_{2.5}$)	Envirotech Manual	µg / m^3	22.60	60
2	Respirable Particulate Matter (PM_{10})	IS 5182 Part 23-2012	µg / m^3	51.50	100
3	Sulphur Dioxide (SO_2)	IS 5182 Part 2 -212	µg / m^3	15.20	80
4	Nitrogen Dioxide (NO_2)	IS 5182 Part 6-2012	µg / m^3	24.50	80
5	Ozone (O_3)	IS 5182 Part 9-1974 R.2009	µg / m^3	13.50	180
6	Lead (Pb)	IS 5182 Part 22-2009	µg / m^3	BDL (DL=0.1)	1
7	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m^3	BDL (DL=1.15)	4
8	Ammonia (NH_3)	Indophenol Method	µg / m^3	9.80	400
9	Arsenic (As)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=1.0)	6
10	Nickel (Ni)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=0.1)	20
11	Benzene (C_6H_6)	IS 5182 Part 11-2012	µg / m^3	BDL (DL=0.1)	5
12	Benzo (a) Pyrene	IS 5182 Part 12-2009	ng / m^3	BDL (DL=0.1)	1
13	Suspended Particular Matter	IS 5182 Part 4-1999	µg / m^3	72.80	-

BDL – Below Detectable Limit ; DL – Detection Limit

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

End of Report

for **SANTHOME ENVIRO SERVICES**

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/307/09
Sample Rep No : 307/09
Date of Sampling : 23.09.2024
Reporting Date : 01.10.2024
Sampling Location : **Near Ro plant**
Sample Description : Ambient Air Monitoring
Sample Drawn By /Date : SAS/23.09.2024
Received On : 23.09.2024
Analysis Commenced On : 23.09.2024
Analysis Completed on : 01.10.2024
Sampling Method : IS 5182 (Part V) and (Part XIV)
Sampling Time : 8 Hrs
Ambient Temperature : 38°C
Relative Humidity : 59%

Sl.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter ($PM_{2.5}$)	Envirotech Manual	µg / m^3	19.50	60
2	Respirable Particulate Matter (PM_{10})	IS 5182 Part 23-2012	µg / m^3	46.80	100
3	Sulphur Dioxide (SO_2)	IS 5182 Part 2 -212	µg / m^3	11.40	80
4	Nitrogen Dioxide (NO_2)	IS 5182 Part 6-2012	µg / m^3	22.10	80
5	Ozone (O_3)	IS 5182 Part 9-1974 R.2009	µg / m^3	11.50	180
6	Lead (Pb)	IS 5182 Part 22-2009	µg / m^3	BDL (DL=0.002)	1
7	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m^3	BDL (DL=0.05)	4
8	Ammonia (NH_3)	Indophenol Method	µg / m^3	6.80	400
9	Arsenic (As)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=2.0)	6
10	Nickel (Ni)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=2.0)	20
11	Benzene (C_6H_6)	IS 5182 Part 11-2012	µg / m^3	BDL (DL=0.1)	5
12	Benzo (a) Pyrene	IS 5182 Part 12-2009	ng / m^3	BDL (DL=0.1)	1
13	Suspended Particular Matter	IS 5182 Part 4-1999	µg / m^3	61.25	-

BDL – Below Detectable Limit ; DL – Detection Limit

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

End of Report

for **SANTHOME ENVIRO SERVICES**

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/308/09 — Date of Sampling : 23.09.2024
Sample Rep No : 308/09 — Reporting Date : 01.10.2024
Sampling Location : **Near Driver Restroom Filling Plant Backside**
Sample Description : Ambient Air Monitoring
Sample Drawn By /Date : SAS/23.09.2024
Received On : 23.09.2024
Analysis Commenced On : 23.09.2024
Analysis Completed on : 01.10.2024
Sampling Method : IS 5182 (Part V) and (Part XIV)
Sampling Time : 8 Hrs
Ambient Temperature : 38°C
Relative Humidity : 59%

Sl.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter ($PM_{2.5}$)	Envirotech Manual	µg / m^3	21.40	60
2	Respirable Particulate Matter (PM_{10})	IS 5182 Part 23-2012	µg / m^3	47.50	100
3	Sulphur Dioxide (SO_2)	IS 5182 Part 2 -212	µg / m^3	9.10	80
4	Nitrogen Dioxide (NO_2)	IS 5182 Part 6-2012	µg / m^3	17.40	80
5	Ozone (O_3)	IS 5182 Part 9-1974 R.2009	µg / m^3	10.80	180
6	Lead (Pb)	IS 5182 Part 22-2009	µg / m^3	BDL (DL=0.002)	1
7	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m^3	BDL (DL=0.05)	4
8	Ammonia (NH_3)	Indophenol Method	µg / m^3	6.80	400
9	Arsenic (As)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=2.0)	6
10	Nickel (Ni)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=2.0)	20
11	Benzene (C_6H_6)	IS 5182 Part 11-2012	µg / m^3	BDL (DL=0.1)	5
12	Benzo (a) Pyrene	IS 5182 Part 12-2009	ng / m^3	BDL (DL=0.1)	1
13	Suspended Particular Matter	IS 5182 Part 4-1999	µg / m^3	74.50	-

BDL – Below Detectable Limit ; DL – Detection Limit

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

End of Report

for **SANTHOME ENVIRO SERVICES**

A.Kavi

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A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/309/09 — Date of Sampling : 23.09.2024
Sample Rep No : 309/09 — Reporting Date : 01.10.2024
Sampling Location : **South West Tank Form CP Station - 1**
Sample Description : Ambient Air Monitoring
Sample Drawn By /Date : SAS/23.09.2024
Received On : 23.09.2024
Analysis Commenced On : 23.09.2024
Analysis Completed on : 01.10.2024
Sampling Method : IS 5182 (Part V) and (Part XIV)
Sampling Time : 8 Hrs
Ambient Temperature : 38°C
Relative Humidity : 59%

Sl. No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter ($PM_{2.5}$)	Envirotech Manual	µg / m^3	19.20	60
2	Respirable Particulate Matter (PM_{10})	IS 5182 Part 23-2012	µg / m^3	43.50	100
3	Sulphur Dioxide (SO_2)	IS 5182 Part 2 -212	µg / m^3	8.90	80
4	Nitrogen Dioxide (NO_2)	IS 5182 Part 6-2012	µg / m^3	17.80	80
5	Ozone (O_3)	IS 5182 Part 9-1974 R.2009	µg / m^3	11.40	180
6	Lead (Pb)	IS 5182 Part 22-2009	µg / m^3	BDL (DL=0.002)	1
7	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m^3	BDL (DL=0.05)	4
8	Ammonia (NH_3)	Indophenol Method	µg / m^3	6.80	400
9	Arsenic (As)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=2.0)	6
10	Nickel (Ni)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=2.0)	20
11	Benzene (C_6H_6)	IS 5182 Part 11-2012	µg / m^3	BDL (DL=0.1)	5
12	Benzo (a) Pyrene	IS 5182 Part 12-2009	ng / m^3	BDL (DL=0.1)	1
13	Suspended Particular Matter	IS 5182 Part 4-1999	µg / m^3	67.80	-

BDL – Below Detectable Limit ; DL – Detection Limit

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

End of Report

for **SANTHOME ENVIRO SERVICES**

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SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/310/09
Sample Rep No : 310/09
Date of Sampling : 23.09.2024
Reporting Date : 01.10.2024
Sampling Location : **East Compound wall CP Station - 3**
Sample Description : Ambient Air Monitoring
Sample Drawn By /Date : SAS/23.09.2024
Received On : 23.09.2024
Analysis Commenced On : 23.09.2024
Analysis Completed on : 01.10.2024
Sampling Method : IS 5182 (Part V) and (Part XIV)
Sampling Time : 8 Hrs
Ambient Temperature : 38°C
Relative Humidity : 59%

Sl.No	PARAMETERS	PROTOCOL	UNIT	RESULT	NAAQS*
1	Particulate Matter ($PM_{2.5}$)	Envirotech Manual	µg / m^3	18.50	60
2	Respirable Particulate Matter (PM_{10})	IS 5182 Part 23-2012	µg / m^3	44.80	100
3	Sulphur Dioxide (SO_2)	IS 5182 Part 2 -212	µg / m^3	8.90	80
4	Nitrogen Dioxide (NO_2)	IS 5182 Part 6-2012	µg / m^3	17.80	80
5	Ozone (O_3)	IS 5182 Part 9-1974 R.2009	µg / m^3	10.50	180
6	Lead (Pb)	IS 5182 Part 22-2009	µg / m^3	BDL (DL=0.002)	1
7	Carbon Monoxide (CO) (1 Hour)	IS 5182 Part 10-1999 R.2009	mg/m^3	BDL (DL=0.05)	4
8	Ammonia (NH_3)	Indophenol Method	µg / m^3	6.80	400
9	Arsenic (As)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=2.0)	6
10	Nickel (Ni)	IS 5182 Part 22-2009	ng / m^3	BDL (DL=2.0)	20
11	Benzene (C_6H_6)	IS 5182 Part 11-2012	µg / m^3	BDL (DL=0.1)	5
12	Benzo (a) Pyrene	IS 5182 Part 12-2009	ng / m^3	BDL (DL=0.1)	1
13	Suspended Particular Matter	IS 5182 Part 4-1999	µg / m^3	68.80	-

BDL – Below Detectable Limit ; DL – Detection Limit

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

End of Report

for **SANTHOME ENVIRO SERVICES**

A. Kavi

Verified & Authorized By
A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/311/09 Date Of Sampling : 23.09.2024
Sample Rep No : 311/09 Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Emergency DG Set 1250 KVA**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Sl.No	PARAMETERS	RESULT	UNIT	Limit as per Ministry Of Environment and Forests Notification, 09.06.2002 (MOEF) (mg/m^3)	PROTOCOL
1	Flue Gas Temperature	120	°C	-	IS:11255
2	Flue Gas Pressure	8.40	mm Hg	-	IS:11255
3	Flue Gas Velocity	9.60	m / s	-	IS:11255
4	Volume of Gas Discharged	3860	Nm^3 / hr	-	IS:11255
5	Particulate Matter (PM)	35.60	mg / Nm^3	75 (max)	IS:11255
6	Sulphur- di- oxide (SO_2)	14.50	mg / Nm^3	-	IS:11255
7	Nitrogen Dioxide (NO_2)	340.0	mg / Nm^3	710 (max)	IS:11255
8	Carbon – di - oxide (CO_2)	9.20	%	-	IS:13270
9	Carbon Monoxide (CO)	58.50	%	150 (max)	IS:13270
10	Oxygen (O_2)	10.50	%	-	IS:13270

BDL – Below Detectable Limit ; DL – Detection Limit

Report Opinion: The above results meets the MOEF notification.
There is no limit for stack emission as per TNPCB Standards.

End of Report

for **SANTHOME ENVIRO SERVICES**

A.Kavi

Verified & Authorized By
A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/311/09 Date Of Sampling : 23.09.2024
Sample Rep No : 311/09 Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Emergency DG Set 1250 KVA**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Discipline- Chemical

Sl. No	PARAMETERS	RESULT	UNIT	PROTOCOL
1	Non Methane Hydrocarbons	BDL(DL:0.2)	Mg/Nm^3	SOP-SAS-009:2024
2	Hydrocarbons	BDL(DL : 0.1)	Mg/Nm^3	SOP-SAS-010:2024
3	Olefins	BDL(DL : 0.1)	$\mu g/Nm^3$	SOP-SAS-11:2024

End of Report

for **SANTHOME ENVIRO SERVICES**

A.Kavi

Verified & Authorized By
A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/312/09
Sample Rep No : 312/09
Date Of Sampling : 23.09.2024
Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Hot Oil Heater Stack**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Sl. No	PARAMETERS	RESULT	UNIT	Limit as per Ministry Of Environment and Forests Notification, 09.06.2002 (MOEF) (mg/m^3)	PROTOCOL
1	Flue Gas Temperature	635	°C	-	IS:11255
2	Flue Gas Pressure	7.20	mm Hg	-	IS:11255
3	Flue Gas Velocity	8.90	m / s	-	IS:11255
4	Volume of Gas Discharged	105480	Nm^3 / hr	-	IS:11255
5	Particulate Matter (PM)	5.50	mg / Nm^3	10(MAX)	IS:11255
6	Sulphur- di- oxide (SO_2)	7.80	mg / Nm^3	50(MAX)	IS:11255
7	Nitrogen Dioxide (NO_2)	72.60	mg / Nm^3	350(MAX)	IS:11255
8	Carbon – di - oxide (CO_2)	7.0	%	-	IS:13270
9	Carbon Monoxide (CO)	44.60	mg / Nm^3	150 (MAX)	IS:13270
10	Oxygen (O_2)	1.80	%	-	IS:13270

BDL – Below Detectable Limit ; DL – Detection Limit

Report Opinion: The above results meets the MOEF notification.
There is no limit for stack emission as per TNPCB Standards.

End of Report

for **SANTHOME ENVIRO SERVICES**

A.Kavi

Verified & Authorized By
A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/312/09 Date Of Sampling : 23.09.2024
Sample Rep No : 312/09 Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Hot Oil Heater Stack**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Discipline- Chemical

Sl. No	PARAMETERS	RESULT	UNIT	PROTOCOL
1	Non Methane Hydrocarbons	BDL(DL :0.2)	Mg/Nm^3	SOP-SAS-009:2024
2	Hydrocarbons	BDL(DL : 0.1)	Mg/Nm^3	SOP-SAS-010:2024
3	Olefins	BDL(DL : 0.1)	$\mu g/Nm^3$	SOP-SAS-011:2024

End of Report

for **SANTHOME ENVIRO SERVICES**

Verified & Authorized By
A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/313/09 Date Of Sampling : 23.09.2024
Sample Rep No : 313/09 Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **PACOL Heater Stack**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Sl.No	PARAMETERS	RESULT	UNIT	Limit as per Ministry Of Environment and Forests Notification, 09.06.2002 (MOEF) (mg/m^3)	PROTOCOL
1	Flue Gas Temperature	755	°C	-	IS:11255
2	Flue Gas Pressure	8.51	mm Hg	-	IS:11255
3	Flue Gas Velocity	9.20	m / s	-	IS:11255
4	Volume of Gas Discharged	14800	Nm^3 / hr	-	IS:11255
5	Particulate Matter (PM)	6.80	mg / Nm^3	10(MAX)	IS:11255
6	Sulphur- di- oxide (SO_2)	12.40	mg / Nm^3	50(MAX)	IS:11255
7	Nitrogen Dioxide (NO_2)	68.0	mg / Nm^3	350(MAX)	IS:11255
8	Carbon – di - oxide (CO_2)	8.50	%	-	IS:13270
9	Carbon Monoxide (CO)	36.80	mg / Nm^3	150 (MAX)	IS:13270
10	Oxygen (O_2)	1.50	%	-	IS:13270

BDL – Below Detectable Limit ; DL – Detection Limit

Report Opinion: The above results meets the MOEF notification.
There is no limit for stack emission as per TNPCB Standards.

End of Report

for **SANTHOME ENVIRO SERVICES**

A. Kavi

Verified & Authorized By
A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/313/09 Date Of Sampling : 23.09.2024
Sample Rep No : 313/09 Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **PACOL Heater Stack**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Discipline- Chemical

Sl.No	PARAMETERS	RESULT	UNIT	PROTOCOL
1	Non Methane Hydrocarbons	BDL(DL:0.2)	Mg/Nm^3	SOP-SAS-009:2024
2	Hydrocarbons	BDL(DL:0.1)	Mg/Nm^3	SOP-SAS-010:2024
3	Olefins	BDL(DL : 0.1)	$\mu g/Nm^3$	SOP-SAS-11:2024

End of Report

for **SANTHOME ENVIRO SERVICES**

A.Kavi

Verified & Authorized By

A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/451/09 — Date Of Sampling : 23.09.2024
Sample Rep No : 451/09 — Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Hydrotreater Stack**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Sl.No	PARAMETERS	RESULT	UNIT	Limit as per Ministry Of Environment and Forests Notification, 09.06.2002 (MOEF) (mg/m^3)	PROTOCOL
1	Flue Gas Temperature	255	°C	-	IS:11255
2	Flue Gas Pressure	8.51	mm Hg	-	IS:11255
3	Flue Gas Velocity	8.1	m / s	-	IS:11255
4	Volume of Gas Discharged	4826	Nm^3 / hr	-	IS:11255
5	Particulate Matter (PM)	8.0	mg / Nm^3	10(MAX)	IS:11255
6	Sulphur- di- oxide (SO_2)	13.60	mg / Nm^3	50(MAX)	IS:11255
7	Nitrogen Dioxide (NO_2)	73.29	mg / Nm^3	350(MAX)	IS:11255
8	Carbon – di - oxide (CO_2)	6.8	%	-	IS:13270
9	Carbon Monoxide (CO)	38.90	mg / Nm^3	150 (MAX)	IS:13270
10	Oxygen (O_2)	1.50	%	-	IS:13270

BDL – Below Detectable Limit ; DL – Detection Limit

Report Opinion: The above results meets the MOEF notification.
There is no limit for stack emission as per TNPCB Standards.

End of Report

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 043

Verified & Authorized By
A.Kaviyarasi - Technical Manager

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/451/09
Sample Rep No : 451/09
Date Of Sampling : 23.09.2024
Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Hydrotreater Stack**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Discipline- Chemical

Sl.No	PARAMETERS	RESULT	UNIT	PROTOCOL
1	Non Methane Hydrocarbons	BDL(DL:0.2)	Mg/Nm^3	SOP-SAS-009:2024
2	Hydrocarbons	BDL(DL:0.1)	Mg/Nm^3	SOP-SAS-010:2024
3	Olefins	BDL(DL : 0.1)	$\mu g/Nm^3$	SOP-SAS-11:2024

BDL – Below Detectable Limit ; DL – Detection Limit

End of Report

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 043

Verified & Authorized By
A.Kaviyarasi - Technical Manager

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/452/09 — Date Of Sampling : 23.09.2024
Sample Rep No : 452/09 — Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Captive Power Plant (CPP) DG set(LNG Based)**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Sl.No	PARAMETERS	RESULT	UNIT	CPCB Standards (mg/Nm^3)	PROTOCOL
1	Flue Gas Temperature	358	°C	-	IS:11255
2	Flue Gas Pressure	18.50	mm Hg	-	IS:11255
3	Flue Gas Velocity	19.41	m / s	-	IS:11255
4	Volume of Gas Discharged	78980	Nm^3 / hr	-	IS:11255
5	Particulate Matter (PM)	1.0	mg / Nm^3	5(MAX)	IS:11255
6	Sulphur- di- oxide (SO_2)	43.25	mg / Nm^3	50(MAX)	IS:11255
7	Nitrogen Dioxide (NO_2)	236	mg / Nm^3	250(MAX)	IS:11255
8	Carbon – di - oxide (CO_2)	8.2	%	-	IS:13270
9	Carbon Monoxide (CO)	42.35	mg / Nm^3	150 (MAX)	IS:13270
10	Oxygen (O_2)	1.20	%	-	IS:13270

BDL – Below Detectable Limit ; DL – Detection Limit

Report Opinion: The above results meets the MOEF notification.
There is no limit for stack emission as per TNPCB Standards.

End of Report

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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A.Kaviyarasi - Technical Manager

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/452/09 Date Of Sampling : 23.09.2024
Sample Rep No : 452/09 Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Captive Power Plant (CPP) DG set (LNG Based)**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Discipline- Chemical

Sl.No	PARAMETERS	RESULT	UNIT	PROTOCOL
1	Non Methane Hydrocarbons	BDL(DL:0.2)	Mg/Nm^3	SOP-SAS-009:2024
2	Hydrocarbons	BDL(DL:0.1)	Mg/Nm^3	SOP-SAS-010:2024
3	Olefins	BDL(DL : 0.1)	$\mu g/Nm^3$	SOP-SAS-11:2024

BDL – Below Detectable Limit ; DL – Detection Limit

End of Report

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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A.Kaviyarasi - Technical Manager

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TEST REPORT

NAME OF INDUSTRY : TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)
ADDRESS Manali Express Highway, Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/314/09
Sample Rep No : 314/09
Date Of Sampling : 23.09.2024
Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Boiler Stack**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Sl.No	PARAMETERS	RESULT	UNIT	Limit as per Ministry Of Environment and Forests Notification, 09.06.2002 (MOEF) (mg/m^3)	PROTOCOL
1	Flue Gas Temperature	176	°C	-	IS:11255
2	Flue Gas Pressure	2.20	mm Hg	-	IS:11255
3	Flue Gas Velocity	3.10	m / s	-	IS:11255
4	Volume of Gas Discharged	10980	Nm^3 / hr	-	IS:11255
5	Particulate Matter (PM)	6.50	mg / Nm^3	10(MAX)	IS:11255
6	Sulphur- di- oxide (SO_2)	13.90	mg / Nm^3	50(MAX)	IS:11255
7	Nitrogen Dioxide (NO_2)	79.0	mg / Nm^3	350(MAX)	IS:11255
8	Carbon – di - oxide (CO_2)	1.50	%	-	IS:13270
9	Carbon Monoxide (CO)	44.50	mg / Nm^3	150 (MAX)	IS:13270
10	Oxygen (O_2)	2.20	%	-	IS:13270

BDL – Below Detectable Limit ; DL – Detection Limit

Report Opinion: The above results meets the MOEF notification.
There is no limit for stack emission as per TNPCB Standards.

End of Report

for **SANTHOME ENVIRO SERVICES**

A.Kavi

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A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

NAME OF INDUSTRY : **TAMILNADU PETROPRODUCTS LIMITED(LAB PLANT)**
ADDRESS Manali Express Highway,
Manali, Chennai - 600 068.

Sample Ref No : SAS/AS/314/09
Sample Rep No : 314/09
Date Of Sampling : 23.09.2024
Reporting Date : 01.10.2024
SAMPLED ON : 23.09.2024
STACK IDENTIFICATION NO : **Boiler Stack**
PITOT TUBE CONSTANT : 0.1951
AMBIENT TEMPERATURE : 38° C
GAS VOLUME SAMPLED : 400 liters

Discipline- Chemical

Sl.No	PARAMETERS	RESULT	UNIT	PROTOCOL
1	Non Methane Hydrocarbons	BDL(DL:0.1)	Mg/Nm^3	SOP-SAS-009:2024
2	Hydrocarbons	BDL(DL:0.1)	Mg/Nm^3	SOP-SAS-010:2024

End of Report

for **SANTHOME ENVIRO SERVICES**

A.Kavi

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SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

Sample Ref No. :SAS/W/315/09	Report No. :315/09
CUSTOMER NAME : **TAMILNADU PETROPRODUCTS LIMITED** **ADDRESS** Manali Express Highway, Manali, Chennai - 600 068.	Report Date : 01.10.2024 Page: 1 of 5
Sample Description :Effluent Water Sample Drawn By /Date :SAS/23.09.2024 Customer's Reference :Letter dated on 23.09.2024 Sample Mark : ETP- Inlet	Received On : 23.09.2024 Commenced On : 23.09.2024 Completed On : 01.10.2024

Sl. No	PARAMETERS	Unit	RESULTS	TEST METHOD
Discipline: Chemical				
Pesticides				
1	Alachlor	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
2	Aldrin	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
3	Alpha BHC	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
4	Atrazine	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
5	Beta BHC	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
6	Butachlor	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
7	Chloropyrifos	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
8	Delta BHC	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
9	Dieldrin	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
10	Deltamethrin	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
11	Endosulfan alpha	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
12	Endosulfan Beta	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024

End of Page 1

for **SANTHOME ENVIRO SERVICES**

A.Kavi

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A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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

Sl. No	PARAMETERS	Unit	RESULTS	TEST METHOD
13	Endosulfan Sulfate	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
14	Ethion	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
15	Gamma BHC	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
16	Malathion	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
17	o,p'-DDD	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
18	o,p'-DDE	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
19	o,p'-DDT	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
20	p,p'-DDD	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
21	p,p'-DDE	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
22	p,p'-DDT	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
23	Parathion-methyl	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
24	Phorate	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024

End of Page 2

for **SANTHOME ENVIRO SERVICES**

A. Kavi

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A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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Sl. No	PARAMETERS	Unit	RESULTS	TEST METHOD
25	2,4-D	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
26	Isoproturon	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
27	Malaoxon	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
28	Methyl Paraoxon	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
29	Methyl Parathion	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
30	Monocrotophos	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
31	Phorate Sulfone	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
32	Phorate Sulfoxide	mg/l	BDL (DL:0.0001)	SOP/SAS/ 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

for **SANTHOME ENVIRO SERVICES**

A.Kavi

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A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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Sl. 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	1.50	IS:3025 P.34 1988 R.2009
41	Ammonical Nitrogen as NH3-N	mg/l	52.0	IS:3025 P.34 1988 R.2009
42	Bio-Chemical Oxygen Demand (BOD) 3 days @ 27°C	mg/l	400	IS: 3025 P. 44 1993 R. 2009
43	Boron as B	mg/l	0.50	IS: 3025 P. 57 2021
44	Sodium as Na	mg/l	110	IS 3025 P.45 1993
45	Chemical Oxygen Demand(COD)	mg/l	1500	IS 3025 P.58. 2006
46	Chloride as Cl^-	mg/l	335	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	0.60	APHA 24th Edn :2023 4500 D-F

End of Page 4

for **SANTHOME ENVIRO SERVICES**

A. Kavi

Verified & Authorized By

A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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Sl. 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:0.005)	IS 3025 P.52 2003
51	Oil and grease	mg/l	85.0	IS 3025 P.39 2021
52	pH value @25°C	mg/l	6.6	IS:3025: P.11:2022
53	Phenolic Compound	mg/l	Nil	IS 3025:P.43:1992
54	Dissolved Phosphate as P	mg/l	0.65	APHA 24th Edn :2023 4500 P-B,D
55	Residual Sodium Carbonate	mEq/L	Nil	IS: 11624 1986
56	Sulphate as $SO4^-$	mg/l	115	IS 3025 P.24 1986
57	Sulphide as $S2^-$	mg/l	1.50	IS 3025 P.29 1986
58	Temperature	°C	27.0	IS 3025 P.09 1984
59	Total dissolved solids @ 180°C	mg/l	1320	IS 3025 P.16 1984
60	Total Kjeldahl Nitrogen as N	mg/l	390	IS:3025 P.34 1988 R.2009
61	Total suspended Solids @105°C	mg/l	110	IS 3025 P.17 1984

End of Page 5

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Sample Ref No. :SAS/W/315/09

CUSTOMER NAME	: **TAMILNADU PETROPRODUCTS LIMITED**	Report Date	: 01.10.2024
ADDRESS	Manali Express Highway, Manali, Chennai - 600 068.	Page: 1 of 5	
Sample Description	:Effluent Water	Received On	: 23.09.2024
Sample Drawn By /Date	:SAS/23.09.2024	Commenced On	: 23.09.2024
Customer's Reference	:Letter dated on 23.09.2024	Completed On	: 01.10.2024
Sample Mark	: ETP- Inlet		
Sample Ref No. :SAS/W/315/09		Report No.	:315/09

Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
Discipline: Chemical					
Pesticides					
1	Alphamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
2	Cypermethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
3	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
4	Permethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 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

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for **SANTHOME ENVIRO SERVICES**

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SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

Sample Ref No. :SAS/W/316/09	Report No. :316/09
CUSTOMER NAME : **TAMILNADU PETROPRODUCTS LIMITED** **ADDRESS** Manali Express Highway, Manali, Chennai - 600 068.	Report Date : 01.10.2024 Page: 1 of 5
Sample Description :Effluent Water Sample Drawn By /Date :SAS/23.09.2024 Customer's Reference :Letter dated on 23.09.2024 Sample Mark : ETP - Outlet	Received On : 23.09.2024 Commenced On : 23.09.2024 Completed On : 01.10.2024

Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
Discipline: Chemical					
Pesticides					
1	Alachlor	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
2	Aldrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
3	Alpha BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
4	Atrazine	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
5	Beta BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
6	Butachlor	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
7	Chloropyrifos	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
8	Delta BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
9	Dieldrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
10	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
11	Endosulfan alpha	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
12	Endosulfan Beta	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024

End of Page 1

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Sl. 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/SAS/ 012/2024
14	Ethion	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
15	Gamma BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
16	Malathion	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
17	o,p'-DDD	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
18	o,p'-DDE	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
19	o,p'-DDT	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
20	p,p'-DDD	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
21	p,p'-DDE	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
22	p,p'-DDT	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
23	Parathion-methyl	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
24	Phorate	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024

End of Page 2

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SANTHOME ENVIRO SERVICES CHENNAI 600 043

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Sl. 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/SAS/ 012/2024
26	Isoproturon	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
27	Malaoxon	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
28	Methyl Paraoxon	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
29	Methyl Parathion	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
30	Monocrotophos	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
31	Phorate Sulfone	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
32	Phorate Sulfoxide	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
33	Arsenic	mg/l	BDL (DL:0.005)	Absent	USEPA 200.8 Revision 5.4:1994
34	Cadmium	mg/l	BDL (DL:0.01)	Absent	USEPA 200.8 Revision 5.4:1994
35	Chromium	mg/l	BDL (DL:0.1)	Absent	USEPA 200.8 Revision 5.4:1994
36	Copper	mg/l	BDL (DL:0.01)	Absent	USEPA 200.8 Revision 5.4:1994

End of Page 3

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
37	Nickel	mg/l	BDL (DL:0. 1)	Absent	USEPA 200.8 Revision 5.4:1994
38	Selenium	mg/l	BDL (DL:0.005)	Absent	USEPA 200.8 Revision 5.4:1994
39	Zinc	mg/l	BDL (DL:0.1)	Absent	USEPA 200.8 Revision 5.4:1994
40	Ammonia as NH3	mg/l	0.5	5	IS:3025 P.34 1988 R.2009
41	Ammonical Nitrogen as NH3-N	mg/l	18.0	50	IS:3025 P.34 1988 R.2009
42	Bio-Chemical Oxygen Demand (BOD) 3 days @ 27□	mg/l	15.0	30	IS: 3025 P. 44 1993 R. 2009
43	Boron as B	mg/l	BDL (DL:0.1)	2	IS: 3025 P. 57 2021
44	Sodium as Na	mg/l	68.0	-	IS 3025 P.45 1993
45	Chemical Oxygen Demand(COD)	mg/l	110	250	IS 3025 P.58. 2006
46	Chloride as Cl^-	mg/l	290	1000	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	0.40	2	APHA 24th Edn :2023 4500 D-F

End of Page 4

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Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
49	Free Residual Chlorine	mg/l	Nil	-	IS 3025 P.26 2021
50	Hexavalent Chromium as Cr6+	mg/l	Nil	-	IS 3025 P.52 2003
51	Oil and grease	mg/l	Nil	10	IS 3025 P.39 2021
52	pH value @25 °C	mg/l	8.0	6.5 to 8.5	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 24th Edn :2023 4500 P-B,D
55	Residual Sodium Carbonate	mEq/L	Nil	NA	IS: 11624 1986
56	Sulphate as $SO4^-$	mg/l	102	1000	IS 3025 P.24 1986
57	Sulphide as $S2^-$	mg/l	BDL (DL : 1.0)	2	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	860	2100	IS 3025 P.16 1984
60	Total Kjeldahl Nitrogen as N	mg/l	92.0	100	IS:3025 P.34 1988 R.2009
61	Total suspended Solids @105 °C	mg/l	65.0	100	IS 3025 P.17 1984

End of Page 5

for **SANTHOME ENVIRO SERVICES**

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TEST REPORT

Sample Ref No. :SAS/W/316/09	Report No. :316/09
CUSTOMER NAME : **TAMILNADU PETROPRODUCTS LIMITED** **ADDRESS** Manali Express Highway, Manali, Chennai - 600 068.	Report Date : 01.10.2024 Page: 1 of 5
Sample Description :Effluent Water Sample Drawn By /Date :SAS/23.09.2024 Customer's Reference :Letter dated on 23.09.2024 Sample Mark : ETP - Outlet	Received On : 23.09.2024 Commenced On : 23.09.2024 Completed On : 01.10.2024

Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
Discipline: Chemical					
Pesticides					
1	Alphamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
2	Cypermethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
3	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
4	Permethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 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

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TEST REPORT

Sample Ref No. :SAS/W/317/09	Report No. :317/09
NAME OF INDUSTRY : TAMILNADU PETROPRODUCTS LIMITED **ADDRESS** Manali Express Highway, *Manali Chennai-600068*	Report Date :01.10.2024 Page: 1 of 3
Sample Description : Water Sample Drawn By/ Date :Customer11.09.2024 Customer's Reference : Letter Dated on 11.09.2024 Sample Mark : Bore Well Water -1	Received On :11.09.2024 Commenced On :11.09.2024 Completed On :01.10.2024

Sl. No	PARAMETERS	RESULTS	IS 10500:2012		TEST METHOD
			Acceptable Limit	Permissible Limit	
1	Color (Hazen Unit)	5.0	5	15	APHA 24th Edn :2023 2120 B
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 P.5 1983 R.2012
3	pH value @ 25°C	7.95	6.5-8.5	No relaxation	APHA 24th Edn :2023 4500 H^+ B
4	Dissolved Oxygen	5.80	NA	NA	IS 3025 P-38:1989
5	Salinity	1352	NA	NA	APHA 24th Edn :2023 2520 B
6	Total Dissolved Solids (mg/l)	1850	500	2000	IS 3025:P.16:1984:R.2012
7	Total Suspended Solids	65.0	-	-	IS:3025: P.17:1984:R.2012
8	ElectricaL Conductivity at 25°C	2720	NA	NA	IS 3025 P-14:2013
9	Aluminium as Al(mg/l)	BDL (DL:0.01)	0.03	0.2	APHA 24th Edn :2023 3500-Al B
10	Taste	Agreeable	Agreeable	Agreeable	IS3025 P-8:1 984
11	BOD at 27°C for 3 days (mg/l)	2.0	NA	NA	IS: 3025 P. 44 1993 R. 2009
12	COD (mg/l)	20.0	NA	NA	APHA 24th Edn :2023 5220 B
13	Sodium as Na (mg/l)	350	NA	NA	IS 3025 P-45 :1993

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT – ADDITIONAL SHEET

Sample Ref No. :SAS/W/317/09

Report No. :317/09
Report Date :01.10.2024
Page : 2 of 3

Sl. No	PARAMETERS	RESULTS	IS 10500:2012 Acceptable Limit	IS 10500:2012 Permissible Limit	TEST METHOD
14	Turbidity (NTU)	4.0	1.0	5.0	IS 3025 (Part 10) : 1984
15	Temperature °C	27.0	NA	NA	IS 3025 P.09 1984
16	Chlorides as Cl(mg/l)	820	250	1000	APHA 24thEdn :202 4500 Cl^- B
17	Copper as Cu (mg/l)	0.35	0.05	1.5	APHA 24thEdn :2023 3500-Cu B
18	Fluoride as F (mg/l)	1.20	1.0	1.5	APHA 24thEdn :2023 4500-F D
19	Free Residual Chlorine (mg/l)	<0.2	0.2	1.0	APHA 24thEdn :2023 4500 Cl B
20	Total Iron as Fe(mg/l)	0.70	1.0	No Relaxation	APHA 24thEdn :2023 3500 Fe B
21	Magnesium as Mg (mg/l)	72.0	30.0	100	APHA 24thEdn :2023 2340 C
22	Total Arsenic as As (mg/l)	BDL (DL=0.01)	0.01	No Relaxation	APHA 24thEdn :2023 3500-As
21	Cadmium as Cd (mg/l)	BDL (DL=0.001)	0.003	No Relaxation	APHA 24thEdn :2023 3500-Cd
22	Nitrate as NO_3 (mg/l)	BDL (DL=0.1)	45.0	No Relaxation	IS 3025 P.34 1988 R.2009
23	Total Chromium as Cr(mg/l)	BDL (DL=0.01)	0.05	No Relaxation	APHA 24thEdn :2023 3500 Cr
24	Lead as Pb (mg/l)	BDL (DL=0.005)	0.01	No Relaxation	APHA 24thEdn :2023 3500 Pb B
25	Silver as Ag(mg/l)	BDL (DL=0.01)	0.01	No Relaxation	APHA 24thEdn :2023 3500 Ag

BDL=Below Detectable Limit DL= Detection Limit

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 028

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TEST REPORT – ADDITIONAL SHEET

Sample Ref No. :SAS/W/317/09

Report No. :317/09
Report Date :01.10.2024
Page : 3 of 3

Sl. No	PARAMETERS	RESULTS	IS 10500:2012		TEST METHOD
			Acceptable Limit	Acceptable Limit	
26	Sulphates as SO_4(mg/l)	210	200	400	APHA 24thEdn :2023 4500 SO_4 E
27	Mercury as Hg (mg/l)	BDL (DL=0.001)	0.001	No Relaxation	APHA 24thEdn :2023 3500-Hg
28	Total Alkalinity as $CaCO_3$(mg/l)	245	200	600	APHA 24thEdn :2023 2320B
29	Total Hardness as $CaCO_3$ (mg/l)	420	200	600	APHA 24thEdn :2023 2340 C
30	Zinc as Zn (mg/l)	BDL (DL=0.01)	5.0	15.0	APHA 24thEdn :2023 3500-Zn B
31	Calcium as Ca (mg/l)	110	75.0	150	APHA 24thEdn :2023 3500 - Ca B
32	Manganese as Mn(mg/l)	BDL(DL : 0.01)	0.1	0.30	APHA 24thEdn :2023 3500-Mn B

MICROBIOLOGICAL EXAMINATION

Sl. No	PARAMETERS	RESULTS	Requirement as per IS 10500: 2012 Second revision (Acceptable Limit)	TEST METHOD
33	Total Coliforms (MPN / 100ml)	Absent	Shall not be detectable in any100 ml	IS:1622-1981 Amd.4 RA 2012
34	*E.*coli (MPN / 100ml)	Absent	Shall not be detectable in any100 ml	IS:1622-1981 Amd.4 RA 2012

for **SANTHOME ENVIRO SERVICES**

A. Kavi

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SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

Sample Ref No. :SAS/W/318/09	Report No. :318/09
NAME OF INDUSTRY : TAMILNADU PETROPRODUCTS LIMITED **ADDRESS** Manali Express Highway, *Manali Chennai-600068*	Report Date :01.10.2024 Page: 1 of 3
Sample Description : Water Sample Drawn By/ Date :Customer11.09.2024 Customer's Reference : Letter Dated on 11.09.2024 Sample Mark : Bore Well Water -2	Received On :11.09.2024 Commenced On :11.09.2024 Completed On :01.10.2024

Sl. No	PARAMETERS	RESULTS	IS 10500:2012		IS 10500:2012
			Acceptable Limit	Acceptable Limit	
1	Color (Hazen Unit)	5.0	5	15.0	APHA 24th Edn :2023 2120 B
2	Odor	Agreeable	Agreeable	Agreeable	IS 3025 P.5 1983 R.2012
3	pH value @ 25°C	7.84	6.5-8.5	6.5-8.5	APHA 24th Edn :2023 4500 H^+B
4	Dissolved Oxygen	6.10	NA	NA	IS 3025 P-38:1989
5	Salinity	1240	NA	NA	APHA 24th Edn :2023 2520 B
6	Total Dissolved Solids (mg/l)	1780	500	500	IS 3025:P.16:1984:R.2012
7	Total Suspended Solids	61.0	-	-	IS:3025: P.17:1984:R.2012
8	ElectricaL Conductivity at 25°C	2617	NA	NA	IS 3025 P-14:2013
9	Aluminium as Al(mg/l)	BDL (DL:0.1)	0.03	0.03	APHA 24th Edn :2023 3500-Al B
10	Taste	Agreeable	Agreeable	Agreeable	IS3025 P-8:1 984
11	BOD at 27°C for 3 days (mg/l)	2.0	NA	NA	IS: 3025 P. 44 1993 R. 2009
12	COD (mg/l)	20.0	NA	NA	APHA 24th Edn:2023 5220 B
13	Sodium as Na (mg/l)	350	NA	NA	IS 3025 P-45 :1993

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 043

A. Ka

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End of Page 1

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TEST REPORT – ADDITIONAL SHEET

Sample Ref No. :SAS/W/318/09

Report No. :318/09
Report Date :01.10.2024
Page : 2 of 3

Sl. No	PARAMETERS	RESULTS	IS 10500:2012 Acceptable Limit	IS 10500:2012 Permissible Limit	TEST METHOD
14	Turbidity (NTU)	3.0	1.0	5.0	IS 3025 (Part 10) : 1984
15	Temperature °C	27.0	NA	NA	IS 3025 P.09 1984
16	Chlorides as Cl(mg/l)	914	250	1000	APHA 24thEdn :2023 4500 Cl^- B
17	Copper as Cu (mg/l)	0.35	0.05	1.5	APHA 24thEdn :2023 3500-Cu B
18	Fluoride as F (mg/l)	0.40	1.0	1.5	APHA 24thEdn :2023 4500-F D
19	Free Residual Chlorine (mg/l)	<0.2	0.2	1.0	APHA 24thEdn :2023 4500 Cl B
20	Total Iron as Fe(mg/l)	0.82	1.0	No Relaxation	APHA 24thEdn :2023 3500 Fe B
21	Magnesium as Mg (mg/l)	93.0	30.0	100	APHA 24thEdn :2023 2340 C
22	Total Arsenic as As (mg/l)	BDL (DL=0.01)	0.01	No Relaxation	APHA 24thEdn :2023 3500-As
21	Cadmium as Cd (mg/l)	BDL (DL=0.001)	0.003	No Relaxation	APHA 24thEdn :2023 3500-Cd
22	Nitrate as NO_3 (mg/l)	BDL (DL=0.1)	45.0	No Relaxation	IS 3025 P.34 1988 R.2009
23	TotalChromium as Cr(mg/l)	BDL (DL=0.01)	0.05	No Relaxation	APHA 24thEdn :2023 3500 Cr
24	Lead as Pb (mg/l)	BDL (DL=0.01)	0.01	No Relaxation	APHA 24thEdn :2023 3500 Pb B
25	Silver as Ag(mg/l)	BDL (DL=0.01)	0.01	No Relaxation	APHA 24thEdn :2023 3500 Ag

BDL=Below Detectable Limit DL= Detection Limit

for **SANTHOME ENVIRO SERVICES**

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT – ADDITIONAL SHEET

Sample Ref No. :SAS/W/318/09

Report No. :318/09
Report Date :01.10.2024
Page : 3 of 3

Sl. No	PARAMETERS	RESULTS	IS 10500:2012 Acceptable Limit	IS 10500:2012 Acceptable Limit	TEST METHOD
26	Sulphates as SO_4(mg/l)	210	200	400	APHA 24th Edn :2023 4500 SO_4 E
27	Mercury as Hg (mg/l)	BDL (DL=0.001)	0.001	No Relaxation	APHA 24th Edn :2023 3500-Hg
28	Total Alkalinity as $CaCO_3$(mg/l)	245	200	600	APHA 24th Edn :2023 2320B
29	Total Hardness as $CaCO_3$ (mg/l)	280	200	600	APHA 24th Edn :2023 2340 C
30	Zinc as Zn (mg/l)	BDL (DL=0.01)	5.0	15.0	APHA 24th Edn :2023 3500-Zn B
31	Calcium as Ca (mg/l)	115	75.0	150	APHA 24th Edn :2023 3500 - Ca
32	Manganese as Mn(mg/l)	BDL(DL : 0.01)	0.1	0.30	APHA 24th Edn :2023 3500-Mn B

MICROBIOLOGICAL EXAMINATION

Sl. No	PARAMETERS	RESULTS	Requirement as per IS 10500: 2012 Second revision (Acceptable Limit)	TEST METHOD
33	Total Coliforms (MPN / 100ml)	Absent	Shall not be detectable in any100 ml	IS:1622-1981 Amd.4 RA 2012
34	*E.*coli (MPN / 100ml)	Absent	Shall not be detectable in any100 ml	IS:1622-1981 Amd.4 RA 2012

for SANTHOME ENVIRO SERVICES

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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TEST REPORT

Sample Ref No. :SAS/W/319/09	Report No. :319/09
CUSTOMER NAME : **TAMILNADU PETROPRODUCTS LIMITED** **ADDRESS** Manali Express Highway, Manali, Chennai - 600 068.	Report Date : 01.10.2024 Page: 1 of 5
Sample Description :Effluent Water Sample Drawn By /Date :SAS/23.09.2024 Customer's Reference :Letter dated on 23.09.2024 Sample Mark : RO-PERMEATE	Received On : 23.09.2024 Commenced On : 23.09.2024 Completed On : 01.10.2024

Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
Discipline: Chemical					
Pesticides					
1	Alachlor	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
2	Aldrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
3	Alpha BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
4	Atrazine	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
5	Beta BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
6	Butachlor	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
7	Chloropyrifos	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
8	Delta BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
9	Dieldrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
10	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
11	Endosulfan alpha	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
12	Endosulfan Beta	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024

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for **SANTHOME ENVIRO SERVICES**

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SANTHOME ENVIRO SERVICES CHENNAI 600 043

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Sl. 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/SAS/ 012/2024
14	Ethion	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
15	Gamma BHC	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
16	Malathion	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
17	o,p'-DDD	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
18	o,p'-DDE	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
19	o,p'-DDT	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
20	p,p'-DDD	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
21	p,p'-DDE	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
22	p,p'-DDT	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
23	Parathion-methyl	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
24	Phorate	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024

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for **SANTHOME ENVIRO SERVICES**

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SANTHOME ENVIRO SERVICES CHENNAI 600 043

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Sl. 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/SAS/ 012/2024
26	Isoproturon	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
27	Malaoxon	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
28	Methyl Paraoxon	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
29	Methyl Parathion	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
30	Monocrotophos	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
31	Phorate Sulfone	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
32	Phorate Sulfoxide	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
33	Arsenic	mg/l	BDL (DL:0.005)	Absent	USEPA 200.8 Revision 5.4:1994
34	Cadmium	mg/l	BDL (DL:0.01)	Absent	USEPA 200.8 Revision 5.4:1994
35	Chromium	mg/l	BDL (DL:0.1)	Absent	USEPA 200.8 Revision 5.4:1994
36	Copper	mg/l	BDL (DL:0.01)	Absent	USEPA 200.8 Revision 5.4:1994

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Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
37	Nickel	mg/l	BDL (DL:0. 1)	Absent	USEPA 200.8 Revision 5.4:1994
38	Selenium	mg/l	BDL (DL:0.005)	Absent	USEPA 200.8 Revision 5.4:1994
39	Zinc	mg/l	BDL (DL:0.1)	Absent	USEPA 200.8 Revision 5.4:1994
40	Ammonia as NH3	mg/l	BDL (DL:0.1)	5	IS:3025 P.34 1988 R.2009
41	Ammonical Nitrogen as NH3-N	mg/l	BDL (DL:0.1)	50	IS:3025 P.34 1988 R.2009
42	Bio-Chemical Oxygen Demand (BOD) 3 days @ 27°C	mg/l	BDL (DL:0.1)	30	IS: 3025 P. 44 1993 R. 2009
43	Boron as B	mg/l	BDL (DL:0.1))	2	IS: 3025 P. 57 2021
44	Sodium as Na	mg/l	14.0	-	IS 3025 P.45 1993
45	Chemical Oxygen Demand(COD)	mg/l	BDL (DL:4.0)	250	IS 3025 P.58. 2006
46	Chloride as Cl^-	mg/l	42.0	1000	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	BDL (DL:0.1)	2	APHA 24th Edn :2023 4500 D^-F

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Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
49	Free Residual Chlorine	mg/l	BDL(DL : 0.2)	-	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	BDL(DL : 0.1)	10	IS 3025 P.39 2021
52	pH value @25°C	mg/l	7.20	6.5 to 8.5	IS:3025: P.11:2022
53	Phenolic Compound	mg/l	Nil	1.0	IS 3025:P.43:1992
54	Dissolved Phosphate as P	mg/l	Nil	5.0	APHA 24th Edn :2023 4500 P-B,D
55	Residual Sodium Carbonate	mEq/L	Nil	NA	IS: 11624 1986
56	Sulphate as $SO4^-$	mg/l	14.0	1000	IS 3025 P.24 1986
57	Sulphide as $S2^-$	mg/l	Nil	2	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	165	-	IS 3025 P.16 1984
60	Total Kjeldahl Nitrogen as N	mg/l	Nil	100	IS:3025 P.34 1988 R.2009
61	Total suspended Solids @105°C	mg/l	Nil	100	IS 3025 P.17 1984

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TEST REPORT

Sample Ref No. :SAS/W/319/09	Report No. :319/09
CUSTOMER NAME : **TAMILNADU PETROPRODUCTS LIMITED** **ADDRESS** Manali Express Highway, Manali, Chennai - 600 068.	Report Date : 01.10.2024 Page: 1 of 5
Sample Description :Effluent Water Sample Drawn By /Date :SAS/23.09.2024 Customer's Reference :Letter dated on 23.09.2024 Sample Mark : RO-PERMEATE	Received On : 23.09.2024 Commenced On : 23.09.2024 Completed On : 01.10.2024

Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
Discipline: Chemical					
Pesticides					
1	Alphamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
2	Cypermethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
3	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
4	Permethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 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

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TEST REPORT

Sample Ref No. :SAS/W/450/09	Report No. :450/09
CUSTOMER NAME : **TAMILNADU PETROPRODUCTS LIMITED** **ADDRESS** Manali Express Highway, Manali, Chennai - 600 068.	Report Date : 01.10.2024 Page: 1 of 5
Sample Description :Effluent Water Sample Drawn By /Date :SAS/23.09.2024 Customer's Reference :Letter dated on 23.09.2024 Sample Mark : RO-REJECT	Received On : 23.09.2024 Commenced On : 23.09.2024 Completed On : 01.10.2024

Sl. No	PARAMETERS	Unit	RESULTS	TEST METHOD
Discipline: Chemical				
Pesticides				
1	Alachlor	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
2	Aldrin	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
3	Alpha BHC	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
4	Atrazine	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
5	Beta BHC	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
6	Butachlor	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
7	Chloropyrifos	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
8	Delta BHC	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
9	Dieldrin	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
10	Deltamethrin	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
11	Endosulfan alpha	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
12	Endosulfan Beta	mg/l	BDL (DL:0.0001)	SOP/SAS/012/2024

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Sl. No	PARAMETERS	Unit	RESULTS	TEST METHOD
13	Endosulfan Sulfate	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
14	Ethion	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
15	Gamma BHC	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
16	Malathion	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
17	o,p'-DDD	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
18	o,p'-DDE	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
19	o,p'-DDT	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
20	p,p'-DDD	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
21	p,p'-DDE	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
22	p,p'-DDT	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
23	Parathion-methyl	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
24	Phorate	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024

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Sl. No	PARAMETERS	Unit	RESULTS	TEST METHOD
25	2,4-D	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
26	Isoproturon	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
27	Malaoxon	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
28	Methyl Paraoxon	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
29	Methyl Parathion	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
30	Monocrotophos	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
31	Phorate Sulfone	mg/l	BDL (DL:0.0001)	SOP/SAS/ 012/2024
32	Phorate Sulfoxide	mg/l	BDL (DL:0.0001)	SOP/SAS/ 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:0.0001)	USEPA 200.8 Revision 5.4:1994
36	Copper	mg/l	BDL (DL:0.01)	USEPA 200.8 Revision 5.4:1994

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Sl. 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	0.1	IS:3025 P.34 1988 R.2009
41	Ammonical Nitrogen as NH3-N	mg/l	24.0	IS:3025 P.34 1988 R.2009
42	Bio-Chemical Oxygen Demand (BOD) 3 days @ 27°C	mg/l	18.0	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	BDL (DL:0.0001)	IS 3025 P.45 1993
45	Chemical Oxygen Demand(COD)	mg/l	120.0	IS 3025 P.58. 2006
46	Chloride as Cl^-	mg/l	1925	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	0.60	APHA 24th Edn :2023 4500 D^-F

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for **SANTHOME ENVIRO SERVICES**

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Sl. No	PARAMETERS	Unit	RESULTS	TEST METHOD
49	Free Residual Chlorine	mg/l	BDL(DL:0.2)	IS 3025 P.26 2021
50	Hexavalent Chromium as Cr6+	mg/l	BDL (DL:0.0001)	IS 3025 P.52 2003
51	Oil and grease	mg/l	Nil	IS 3025 P.39 2021
52	pH value @25°C	mg/l	6.62	IS:3025: P.11:2022
53	Phenolic Compound	mg/l	BDL(DL:0.1)	IS 3025:P.43:1992
54	Dissolved Phosphate as P	mg/l	0.80	APHA 24th Edn :2023 4500 P-B,D
55	Residual Sodium Carbonate	mEq/L	Nil	IS: 11624 1986
56	Sulphate as $SO4^-$	mg/l	485	IS 3025 P.24 1986
57	Sulphide as $S2^-$	mg/l	Nil	IS 3025 P.29 1986
58	Temperature	°C	27.0	IS 3025 P.09 1984
59	Total dissolved solids @ 180°C	mg/l	7690	IS 3025 P.16 1984
60	Total Kjeldahl Nitrogen as N	mg/l	28.0	IS:3025 P.34 1988 R.2009
61	Total suspended Solids @105°C	mg/l	14.0	IS 3025 P.17 1984

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for **SANTHOME ENVIRO SERVICES**

Verified & Authorized By
A.Kaviyarasi - Technical Manager

SANTHOME ENVIRO SERVICES CHENNAI 600 043

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

TEST REPORT

Sample Ref No. :SAS/W/450/09	Report No. :450/09
CUSTOMER NAME : **TAMILNADU PETROPRODUCTS LIMITED** **ADDRESS** Manali Express Highway, Manali, Chennai - 600 068.	Report Date : 01.10.2024 Page: 1 of 5
Sample Description :Effluent Water Sample Drawn By /Date :SAS/23.09.2024 Customer's Reference :Letter dated on 23.09.2024 Sample Mark : RO-REJECT	Received On : 23.09.2024 Commenced On : 23.09.2024 Completed On : 01.10.2024

Sl. No	PARAMETERS	Unit	RESULTS	Tolerance limits for Treated Outlet as per TNPCB	TEST METHOD
Discipline: Chemical					
Pesticides					
1	Alphamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
2	Cypermethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
3	Deltamethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 012/2024
4	Permethrin	mg/l	BDL (DL:0.0001)	Absent	SOP/SAS/ 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

for **SANTHOME ENVIRO SERVICES**

A.Kavi

SANTHOME ENVIRO SERVICES CHENNAI 600 043

Verified & Authorized By
A.Kaviyarasi - Technical Manager

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TPL – LAB Plant

Environmental Clearance - Newspaper Advertisement

Tamilnadu Petroproducts Limited

Regd.Office & Factory: Manali Express Highway, Manali, Chennai 600 068.Telefax: 044-25945500
CIN: L23200TN1984PLC010931
Website: www.tnpetro.com
E-mail: secy-legal@tnpetro.com

PUBLIC NOTICE

This is to inform that the Ministry of Environment, Forest and Climate Change, New Delhi has accorded Environmental Clearance for the expansion of Linear Alkyl Benzene (LAB) production from 125000 TPA to 145000 TPA within the existing LAB Plant, Manali, Chennai - 600068 vide their letter No.J–11011/469/2021–IA–II(I)dated 28.11.2022

Copy of the Environmental Clearance letter referred above for the proposed project is available at Tamilnadu Pollution Control Board / Committee, Chennai and can also be seen at website of Ministry of Environment, Forest and Climate Change at http://parivesh.nic.in.

Place : Chennai - 600068
Date : 02.12.2022

Dy. General Manager - HR

English Newspaper – Financial Express dated 03.12.2022

தமிழ்நாடு பெட்ரோப்ராடக்ஸ் லிமிடெட்

பதிவு அலுவலகம் - ஆலை: மணலி எக்ஸ்பிரஸ் ஹைவே, மணலி, சென்னை-600 068.
நி.ப.எண் : L23200TN1984PLC010931
தொலைபேசி எண்: 044-25945500
வலைதளம்: www.tnpetro.com
மின்னஞ்சல்: secy-legal@tnpetro.com

பொது அறிவிப்பு

தமிழ்நாடு பெட்ரோப்ராடக்ஸ் லிமிடெட், மணலி, சென்னை 600068ல் அமைந்துள்ள லீனியர் அல்கைல் பென்சீன் ஆலையில் 1,20,000 டன் வருட உற்பத்தியிலிருந்து 1,45,000 டன் வருட உற்பத்தி அளவிற்கு லீனியர் அல்கைல் பென்சீன் உற்பத்தி விரிவாக்கத் திட்டத்திற்கு மத்திய சுற்றுச்சூழல், வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகம் சுற்றுச்சூழல் அனுமதி வழங்கியுள்ளது (J–11011/469/2021–IA–II(I) தேதி 28.11.2022).

மேற்படி விரிவாக்கத் திட்டத்திற்கான சுற்றுச்சூழல் அனுமதி கடிதத்தின் நகல் தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம் / கமிட்டி சென்னை அலுவலகத்தில் உள்ளது. மேலும் இக்கடிதத்தின் நகலை மத்திய சுற்றுச்சூழல், வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகத்தின் இணையதளத்திலும் (http://parivesh.nic.in) காணலாம்.

இடம் : சென்னை - 600068
தேதி : 02.12.2022

துணை பொது மேலாளர் - மனிதவளம்

Tamil Newspaper – Makkal Kural dated 02.12.2022

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.

AM Primary Health Care Centre

AM Foundation
A cleaner, healthier, better life.
Dr Mobile

பெருநகரசென்னை மாநகராட்சி
சென்னை நடுநிலைப் பள்ளி