

Tamilnadu Petroproducts Limited

TPL\ECH-PO\FORM-V\2025

25th September 2025

To.
The Joint Chief Environmental Engineer(M),
Tamil Nadu Pollution Control Board,
950/1, Poonamalle High Road,
Arumbakkam,
Chennai- 600 106.

Dear Sir,

Sub: TPL – ECH-PO Plant - Environmental Statement (Form V) 2024–25

We herewith submit Environmental Statement (FORM - V) for the period of April 2024 - March 2025 pertaining to TPL - ECH - PO Plant for your kind reference and record.

Thanking you,

Yours faithfully, For Tamilnadu Petroproducts Limited



Cc: The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
Voora Oceans27, Ist Floor,Surya Narayana Street,
Ennore Express Road, Tondairpet, Tollgate,
Chennai-600081.

















Regd. Office & Factory : Manali Express Highway, Manali, Chennai - 600 068, India. Tel. : (0091) - 44 - 25945500 to 09 Website : www.tnpetro.com

CIN: L23200TN1984PLC010931 TPL GSTIN: 33AAACT1295M1Z6



Tamilnadu Petroproducts Limited

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FORM - V

(See Rule 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH 2025

PART - A

ı	Name & Address of the owner/ Occupier of the Industry, Operation or process.	Mr. D. Senthi kumar Managing Director, Tamilnadu Petroproducts Limited Manali Express Highway, Manali Chennai - 600 068
II	Industry Category Primary (SIC Code) Secondary Code (SIC Code)	Petrochemical ECH – Propylene oxide
111	Production Capacity	Products MT/Month Propylene Oxide 1350 MT Chlorinated Organics 202.5 MT
IV	Year of Establishment	2019
V	Date of the last environmental statement submitted	20.09.2024



PART - B

WATER AND RAW MATERIAL CONSUMPTION

WATER CONSUMPTION:-

PURPOSE	m³/DAY			
	2023 – 2024	2024 – 2025		
Process	1650.9	1740.5		
Cooling	315.4	320.7		
Domestic	9.31	8.5		

PROCESS WATER CONSUMPTION:-

Name of the Products		otion per unit of product output m ³ / MT	
	During the last Financial year (2023 – 2024)	During the current Financial year (2024 – 2025)	
Propylene Oxide	58.77	63.75	

RAW MATERIAL CONSUMPTION:-

Name of the Raw Material	Name of the	Consumption of raw material per unit of output, MT / MT		
		During the last Financial year (2023 – 2024)	During the current Financial year (2024 – 2025)	
Propylene		0.877	0.882	
Chlorine	Propylene Oxide	1.442	1.430	
Lime		1.247	1.260	



PART - C

POLLUTION DISCHARGED TO ENVIRONMENT / UNIT OF OUTPUT

(Parameter as specified in the consent issued.)

Treated Trade Effluent:

Pollutants	Prescribed Quantity of pollutants discharge (Kg/Day)	Quantity of pollutants discharged (Kg/Day)	Percentage of variation from prescribed standard with reasons
pH	5.5 – 9.0	7.14	
TDS			
TSS	180.5	24.63	
Chlorides (as Cl)			
Sulphates (as SO4)	1805	1114.9	
BOD	180.5	20.35	Within the standards
COD	451.25	178.02	within the standards
Oil & Grease	36.1	BLQ	
Phenolic Compound	1.805	< 0.005	
Fluoride	3.61	2.68	
Chromium	3.61	< 0.0045	
TRC	1.805	0.29	

Treated Sewage Effluent *

Pollutants	Prescribed Quantity of pollutants discharge (Kg/Day)	Quantity of pollutants discharged (Kg/Day)	Percentage of variation from prescribed standard with reasons
рН	5.5 – 9.0	7.60	
TSS	2.1	0.97	Within the standards
BOD	1.4	0.59	

Emission

Stack			Quantity narge [T _/		Quantit		utants disc Day]	charged	Percentage of variation from	
Attached to	PM	SO ₂	NOx	СО	PM	SO ₂	NOx	СО	prescribed standard with reasons.	
Boiler	0.0027	0.014	0.096	0.041	0.0002	0.001	0.0045	0.002		
Chlorine Scrubber	Chlo	rine	0.00	003	Chlo	rine	0.00	007	Within the standards	



TPL - ECH - PO Plant

Ambient Air Quality

No	Parameter, μ gm / m3	Prescribed standard,	Concentration of Pollutants	Percentage of variation from prescribed standard with reasons
1	Particulate Matter, PM_{10} , μ gm $/$ m^3	100	68.9	Nil
2	Particulate Matter, PM _{2.5} , μ gm / m ³	60	33.80	Nil
3	Sulphur Dioxide, μ gm / m³	80	11.20	Nil
4	Oxides of Nitrogen, μ gm / m ³	80	15.40	Nil
5	Carbon Monoxide, (8 hr avg) μgm/m ³	2000	BDL	Nil
6	Lead, μ gm / m³	1.0	BDL	Nil
7	Ozone, μ gm / m³	180	18.65	Nil
8	Ammonia, μ gm / m³	400	17.80	Nil
9	Benzene, μ gm / m³	5.0	BDL	Nil
10	Benzo (a) pyrene , ng / m ³	1.0	BDL	Nil
11	Arsenic, ng / m ³	6.0	BDL	Nil
12	Nickel, ng / m ³	20.0	BDL	Nil

PART - D

HAZARDOUS WASTE

(As specified under Hazardous Wastes/ Management and Handling Rules, 2016)

	Total Quantity		
	During the current Financial year (2023 – 2024)	During the current Financial year (2024 – 2025)	
(A) From Process			
Used Spent Oil, MT	0.0	0.0	
Waste Oil, MT	0.0	8.13	
Empty Barrel MT	1.01	0	



(B) From pollution control facility		
ETP Sludge, MT	275.0	205.0

PART - E SOLID WASTE

	Total Quantity		
	During the current Financial year (2023 – 2024)	During the current Financial year (2024 – 2025)	
a) From process, MT	7632.0	7310.6	
b) Pollution control facility, MT.	Nil	Nil	
c) Quantity recycled or reutilised.	Nil	Nil	
d) Sold, MT	7632.0	7310.6	
e) Disposed.	Nil	Nil	

PART - F

Please specify the characterisation (in terms of composition and Quantum) of Hazardous as well as Solid waste and indicate disposal practice adopted for both these categories of wastes).

1. Hazardous Waste Category No: Schedule 1, S.No: 5.2 - Used / Spent Oil

Quantity

0.0 MT

Composition

Used Lube Oil

Disposal practice

Disposed to SPCB authorised recycler.

2. Hazardous Waste Category No: Schedule 1, S.No: 5.1 – Waste Oil

Quantity

8.13 MT

Composition

Oil with water.

Disposal practice

Disposed to SPCB authorised TSDF.

3. Hazardous Waste Category No: Schedule 1, S.No: 35.3 – ETP Sludge

Quantity

205 MT

Composition

ETP Sludge

Disposal practice

Disposed to SPCB authorised landfill facility.

4. Hazardous Waste Category No: Schedule 1, S.No: 33.1 – Discarded Empty Barrels

a) Quantity

0.0 MT

b) Composition

Empty barrel

c) Disposal practice

Sent to authorised recycler



PART - G

Impact of the Pollution abatement measures taken as conservation of natural resources and the cost of production.

- ✓ Migrated to cleaner fuel in Boiler from FO to R-LNG .Regasified Liquefied Natural Gas (R-LNG) It is being used as fuel in Boiler resulted in reduction in emission load.
- ✓ Energy consumption reduction achieved, with installation of an additional heat exchanger to recover waste heat.
- ✓ Energy savings realized through various initiatives: 1) Replacing existing light fixtures with high-efficiency LED fixtures, and 2) De-rating of pumps
- ✓ Tertiary Treated Reverse Osmosis (TTRO) water from Chennai Metro Water Supply and Sewerage Board is being used instead of Metro water thus by achieving reduction of effluent generation and fresh water conservation.
- Rejects from LAB RO Plant and treated effluent from HCD plant are being utilised in process as fresh water conservation measure.
- ✓ Cooling Tower blowdown and part of water treatment plant regeneration effluent is being utilised in the process as a water conservation measure.
- ✓ Entire quantity of treated effluent from sewage treatment plant is utilised for gardening and cooling tower make up water.
- ✓ Continuous Ambient Air Quality Monitoring station is provided for monitoring PM_{2.5}, PM₁₀, Chlorine and VOC in ambient air and monitoring data has been uploaded to TNPCB server.
- ✓ Online Continuous Emission Monitoring System (OCEMS) along with data uploading facility is provided in the stack attached to Boiler for the parameter PM, SO₂, NOx, and CO and monitoring data has been connected to TNPCB server.
- ✓ Online Continuous Monitoring System (OCEMS) is provided in the stack attached to Chlorine Scrubber for Chlorine parameter and monitoring data has been connected to TNPCB server.
- ✓ Online Continuous Effluent Monitoring System (OCEMS) is provided for monitoring pH, Flow meter, TSS, BOD and COD in the ETP – treated effluent outlet and monitoring data has been connected to CAC, TNPCB.
- ✓ Online flow meters are provided at inlet to ETP and Inlet to Process from LAB RO Reject & HCD - Treated effluent and monitoring data has been connected to TNPCB for continuous monitoring.

PART - H

Additional investment proposal for environment protection including abatement of pollution

 Mandate issued to CSIR-NEERI for ZLD feasibility study for maximum utilization of treated effluent.

PART - I

Any other Particulars for improving the Quality of the Environment

- > Green Belt Development: 1500 nos of Trees saplings were planted inside and outside of the factory premises.
- Be a socially responsible entity, we have been maintaining the green belt area of around 15.14 acres which is developed during 2022-23 at Morai village, Pandeswaram village and Grandlyon villages, Tiruvallur District
- Mission LiFE -Lifestyle of Environment." awareness programme conducted for employees and their declarations have received towards LiFE action points.



PRODUCTION

April 2024 to March 2025

S.No	PRODUCTS	2024- 2025
1	Propylene Oxide, MT	10064.00
2	Chlorinated Organics, MT	1759.0



WATER CONSUMPTION

April 2024 to March 2025

Month						
		Process				
	Fresh Water	Treated Eff From LAB	Treated Eff From HCD	Cooling	Domestic	Total Consumption (KL)
Apr-24	41615	1215	3580	8456	205	55071
May-24	44868	1207	3496	8277	235	58083
Jun-24	48522	1205	3550	8618	220	62115
Jul-24	38379	1276	3497	8035	200	51387
Aug-24	44975	1337	3554	8402	205	58473
Sep-24	44715	1233	3607	8552	220	58327
Oct-24	44471	1289	3522	8469	205	57956
Nov-24	21409	1165	3543	8485	180	34782
Dec-24	13413	728	1564	6719	235	22659
Jan-25	47942	1307	3682	8565	205	61701
Feb-25	47725	1218	4122	8446	240	61751
Mar-25	45664	1205	3778	8418	285	59350
	483698	14385	41495	99442	2635	641655
		539578		99442	2635	641655





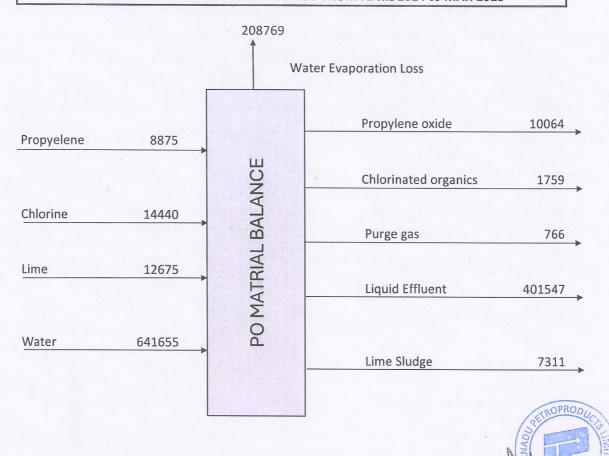
RAW MATERIAL CONSUMPTION

April 2024 to March 2025

S.No	RAW MATERIAL	2024 - 2025
1	Propylene, MT	8875
2	Chlorine, MT	14440
3	Lime, MT	12675



PO MATERIAL BALANCE FOR THE PERIOD FROM APRIL 2024 to MAR 2025







WORLD OZONE DAY

16th SEP-2025





TAMILNADU PETROPRODUCTS LIMITED

MANALI EXPRESS HIGH WAY MANALI, CHENNAI-68

We successfully conducted an Awareness program followed by administration of Ozone Day Pledge in observance of World Ozone Day on 16th September 2025.

Theme'25: From Science to Global Action

This program has thoroughly addressed strategies for protecting the ozone layer and phasing out ozone-depleting substances (ODSs) and hydrofluorocarbons (HFCs)





Tamilnadu Petroproducts Limited

12/09/2025

Circular

World Ozone Day - 2025

In observance of **World Ozone Day**, which is celebrated annually on September 16, we will be organizing an **Ozone Day Awareness** Program on Tuesday, 16th September 2025, at 10:30 hrs. in the ECC Hall – LAB Plant.

All employees are encouraged to actively participate in this program and help spread awareness about the importance of protecting the ozone layer among your family, friends, and community.

VP- Operations

The theme of the World Ozone Day for the year 2025 is "From Science to Global Action"





World Ozone Day Awareness Program at TPL

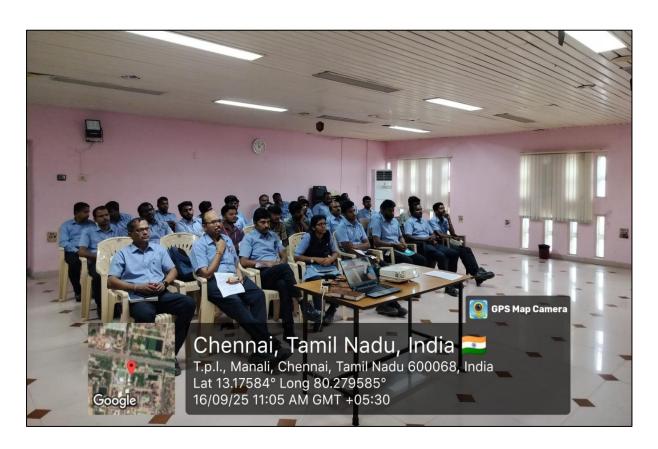




















Pledge Taken by the Employees & students to prevent the Ozone layer depletion

And Awareness Video played in Canteen for all the employees



TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

AMBIENT AIR QUALITY SURVEY - Report of Analysis

Report No. 30/AAQS/2025-26

Date: 04.08.2025

1. Name of the Industry

M/s. TPL (ECH),

2. Address of the Industry

Manali Express Highway, Manali, Chennai - 68.

3. Date of Survey

28.07.2025

4. Duration of Survey

8 Hours / 24 hours

5. Category6. Land use classification

Red / Orange / Green – Large / Medium / Small Industrial / Commercial / Residential / Sensitive

Meteorological Conditions

Ambient	Min	Max	Relative	Min	Max
Temperature (⁰ C)	32	36	Humidity (%)	50	61
Weather Condition	Partiall	y Cloudy	Rain Fall (mm)	N	
Predominant Wind Direction	WNW	– ESE	Mean Wind Speed (km/hr)	20	.2

Ambient Air Quality Survey Results

		-	Duivey 1tt					
Location	ction	nce *	nt GL	Pollutants Concentration (microgram / m ³)				n
No.	Direc *		Heigl Form (m)	PM 2.5	PM 10	SO_2	NO ₂	Cl ₂
Station II	NE	150	3.0		72	11	19	<0.05
On top of platform near Propylene Oxide Filling Point	Е	280	3.0		70	12	22	<0.05
On top of platform near STP (Gate No 5)	SE	700	3.0	42	90	16	28	<0.05
On top of platform near ERC Building (Gate No 3)	SW	200	3.0		82	15	24	< 0.05
On top of platform near Flare Area	NW	240	3.0	26	68	10	17	< 0.05
	On top of platform near CP Station II On top of platform near Propylene Oxide Filling Point On top of platform near STP (Gate No 5) On top of platform near ERC Building (Gate No 3) On top of platform near Flare	On top of platform near CP Station II On top of platform near Propylene Oxide Filling Point On top of platform near STP (Gate No 5) On top of platform near ERC Building (Gate No 3) On top of platform near Flare	On top of platform near CP Station II On top of platform near Propylene Oxide Filling Point On top of platform near STP (Gate No 5) On top of platform near ERC Building (Gate No 3) On top of platform near Flare	On top of platform near CP Station II On top of platform near Propylene Oxide Filling Point On top of platform near STP (Gate No 5) On top of platform near ERC Building (Gate No 3) On top of platform near Flare NE 150 3.0 3.0 SE 700 3.0 3.0	On top of platform near CP Station II On top of platform near Propylene Oxide Filling Point On top of platform near STP (Gate No 5) On top of platform near ERC Building (Gate No 3) On top of platform near Flare NE 150 3.0 E 280 3.0 SE 700 3.0 42 On top of platform near ERC Building (Gate No 3) On top of platform near Flare	Contop of platform near CP Station II On top of platform near Propylene Oxide Filling Point On top of platform near STP (Gate No 5) On top of platform near ERC Building (Gate No 3) On top of platform near Flare NE 150 3.0 72 E 280 3.0 70 SE 700 3.0 42 90 On top of platform near ERC SW 200 3.0 82	Con top of platform near CP Station II On top of platform near Propylene Oxide Filling Point On top of platform near STP (Gate No 5) On top of platform near ERC Building (Gate No 3) On top of platform near Flare NE 150 3.0 72 11 280 3.0 70 12 3.0 42 90 16 On top of platform near ERC SW 200 3.0 82 15	Contop of platform near CP Station II Station II

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

Test Performed	Test Method
PM10	IS 5182 : (Part 23) – 2006
SO2	Modified Wart O 1 /70 5100



District Environmental Laboratory, Manali

AMBIENT AIR QUALITY SURVEY

Schematic Diagram Showing Location of Sampling

Report No. 30/AAQS/2025-26

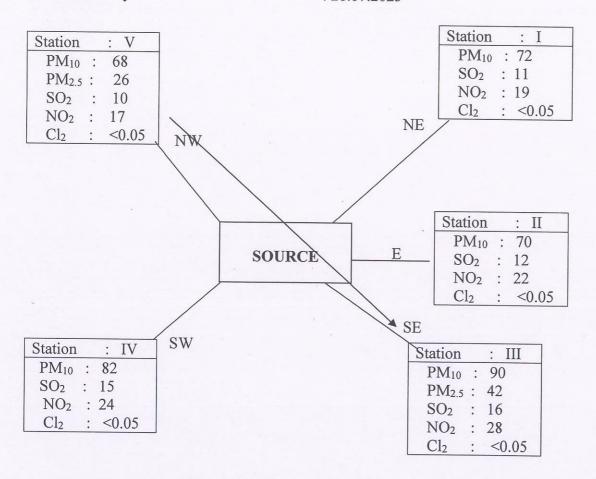
Name and Address of the Industry

: M/s. TPL (ECH)

Manali Express Highway, Manali, Chennai – 68.

Date of Survey

: 28.07.2025



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	WNW - ESE					
Wind Speed (Km/hr)	20.2					
Weather Condition	Partially Cloudy					
Rainfall	Nil					

Chief Scientific Officer,



District Environmental Laboratory, Manali

STACK MONITORING SURVEY - Report of Analysis

Report No. 30/AAQS/2025-26

Date: 04.08.2025

1. Name of the Industry

M/s. TPL (ECH),

2. Address of the Industry

Manali Express Highway, Manali, Chennai – 68

3. Date of Survey

28.07.2025

4. Type of Industry

Coal/Chemical/Sugar/Paper & Pulp/

Power plant / Textile Processing

Stack Monitoring Survey Results

Sl.		þ	dw	ii.	rate hr	Pollutants (mg / Nm ³)			
No.	Stack attached to	Fuel used	Stack .Temp ⁰ K	Velocity i (m/ sec)	Discharge rat In Nm³/hr	PM	SO ₂	NO _x	Cl ₂
1	Boiler 12.5 T	LNG	415	9.8	8656	1.7	<1.0	36.4	
2	Vent Gas Scrubber		311	5.8	471	2.4			1.3

Test Performed	Test Method					
PM	IS 11255: (Part 1) – 1985					
SO2	IS 11255: (Part 2) – 1985					
NOx	IS 11255: (Part 7) – 2005					



TAMILNADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

1. Name and Address of the Industry:

M/s. TPL (ECH)

Manali Express Highway, Manali, Chennai – 68

2. Date of Survey

28.07.2025

Sl.				
No.	Particulars	1	2	
1.	Stack attached to	Boiler	Vent gas scrubber	
2.	Details of process stack	Boiler 12.5T	Vent gas scrubber	
3.	Height from G Level in (m)	47.4	30.0	
4.	Diameter in (m)	0.65	0.17	
5.	Port hole height from Ground Level or bends or ducts in (m)	20.35	13.25	
6.	Fuel Used (with % Sulphur content)	LNG		
7.	Fuel Consumption rate per hr (mention units)	231.7 m ³ /hr		
8.	Type of Stack and capacity	Round	Round	
9.	Production on 28.07.2025	Propylene Oxide – 20.581 MT		
10.	APC Measures provided	Stack provided with low No _x Burner	Scrubber	
11.	APC functional status	Functioning	Functioning	
12.	Ambient temp in °K	307	309	
13.	Temp of flue gas in °K	415	311	
14.	Velocity of flue gas in m/sec	9.8	5.8	
15.	Volume of flue gas sampled in m ³	1.020	1.033	
16.	Gaseous Discharge rate per day in Nm ³ /hr	8656	471	



District Environmental Laboratory, Manali

STACK MONITORING SURVEY - Additional details

Report No. 30/SM/2025-26 Date: 04.08.2025

1. Name of the Industry :

M/s. TPL (ECH)

2. Address of the Industry

Manali Express Highway, Manali, Chennai – 68

3. Date of Survey

28.07.2025

4. Type of Industry

Coal/Chemical/Sugar/Paper & Pulp/

Power plant / Textile Processing

Stack Monitoring Additional details

Sl. No.	Details of stack mentioned in the Air Consent order 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 12.5T	Working	Sampling Done	<u></u>	
2.	Vent Gas Scrubber	Working	Sampling Done		



TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Manali

AMBIENT/SOURCE NOISE LEVEL SURVEY - Report of Analysis

Report No. 30/ NLS/2025-26 Date: 04.08.2025

1.	Name of the	ne Industry	M/s. T	M/s. TPL (ECH)				
2.	Address of the Industry Mana		Manali	Ianali Express Highway, Manali, Chennai - 68				
3.	Date of Su	irvey	28.07.2	2025				
Cate	egory	RL		Land use Classification	Industrial			
Тур	Type of Survey Ambient/Sou		ource	Time of Survey	Day			
Met	eorological co	nditions		Calm/Windy/Rainy	Windy			

Logging Parameters

				50	8	
Instrument Used Cl		CESVA Model SC3	SC310 Serial No		erial No	T243103
Logging Interval		10 Minutes each pe	10 Minutes each point Measur		leasuring Range	50-110 dB(A)
Weighting	" A	A" Peak Weighting	"C	77	Time Weighting	FAST
Sound Inciden	ce	RANDOM	1		Time in hrs	14.00 - 15.30

Report of Noise Level Monitoring

SI No	Location	Duration (min)	Distance (M)	Direction	Sound Level - dB (A)		
					Leq	Min	Max
1	Near CP Station II	10	150	NE	60.4	55.8	69.1
2	Near Propylene Oxide Filling Point	10	280	Е	54.2	50.6	62.7
3	Near STP (Gate No.5)	10	700	SE	59.6	53.4	71.2
4	Near ERC Building (Gate No 3)	10	200	SW	62.2	58.1	73.0
5	Near Flare Area	10	240	NW	58.8	51.7	66.4

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



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 (ECH)

2. Pollution Category

: Red Large

3. Date of A.A.Q. Survey

28.07.2025

4. Predominant Wind Direction

: WNW - ESE

5. Weather condition

: Partially Cloudy

STATUS OF POLLUTANTS LEVEL

I. AMBIENT AIR QUALITY:-

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

: 5

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.		Values in m	nicrogram/m ³	BOARD's STANDARD	
No.	POLLUTANT	Maximum	Minimum	(As per consent order)	
1.	PM ₁₀ PM.2.5 GASEOUS POLLUTANTS:-	90 42	68 26	100 60	
	(i) SO ₂	16	10	80	
	(ii) NO2	28	17	80	

II. STACK MONITORING:-

1. Total No. of Stacks Monitored

: 2

2. No. of Stacks in which Pollutants level

Exceeded the Boards standards

: Nil



TAMIL NADU POLLUTION CONTROL BOARD DISTRICT ENVIRONMENTAL LABORATORY – MANALI

TVOC Survey - Report of Anlaysis

Report No.30 /TVOC/2025-26

dated: 04.08.2025

1. Name of the Industry

M/s. TPL (ECH)

2. Address of the Industry

Manali Express Highway, Manali, Chennai - 68

3 Date of Survey

28.07.2025

4. Pollution Category

Red Large

TVOC - Analysis Report

Sl.No.	Location	Direction	Distance (mts)	TVOC (ppm)	
1	Near CP Station II	NE	150 280	0.0	
2	Near Propylene Oxide Filling Point	Е			
3	Near STP (Gate No.5)	SE	700	0.0	
4	Near ERC Building (Gate No 3)	SW	200	0.0	
5	Near Flare Area	NW	240	0.0	