Tamilnadu Petroproducts Limited

TPL\ECH - PO\2020

28th September 2020

The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
77A, South Avenue Road,
Ambattur Industrial Estate,
Ambattur,
Chennai- 600 058.

Dear Sir,

Sub: TPL – ECH – PO Plant - Environmental Statement 2019 – 20 - Reg.

We submit herewith Environmental Statement (FORM – V) for the period of April 2019 - March 2020 pertaining to TPL – ECH – PO Plant for your kind reference.

Thanking you,

Yours faithfully,
For Tamilnadu Petroproducts Limited

N. Kalyanasundaram
VP – Operations

30 SEP 2020

FORM - V

(See Rule 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH 2020

PART - A

I	Name & Address of the owner/ Occupier of the Industry, Operation or process.	Mr. D. Senthi kumar Whole Time Director – Operation. Tamilnadu Petroproducts Limited Manali Express Highway, Manali Chennai - 600 068	
II	Industry Category Primary (SIC Code) Secondary Code (SIC Code)	Petrochemical ECH – Propylene oxide	
III	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	30.09.2019	

PART - B

WATER AND RAW MATERIAL CONSUMPTION

WATER CONSUMPTION:-

PURPOSE	*m^3 / DAY*	
	2018 – 2019 *	2019 – 2020
Process	361.3	1399.8
Cooling	76.7	331.0
Domestic	2.1	7.9

PROCESS WATER CONSUMPTION:-

Name of the Products	*Process water consumption per unit of product output m^3 / MT*	
	*During the previous Financial year (2018 – 2019) **	*During the current Financial year (2019 – 2020)*
Propylene Oxide	84.65	73.04

RAW MATERIAL CONSUMPTION:-

Name of the Raw Material	*Name of the Product*	*Consumption of raw material per unit of output, MT / MT*	
		*During the previous Financial year (2018 – 2019) **	*During the current Financial year (2019 – 2020)*
Propylene	Propylene Oxide	0.953	0.885
Chlorine		1.664	1.470
Lime		1.775	1.467

* ECH – PO Plant – Plant commissioned on 29.01.2019.

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	7.5	Within the standards
TDS	----	----	Within the standards
TSS	180.5	49.56	Within the standards
Chlorides (as Cl)	----	----	Within the standards
Sulphates (as SO4)	1805	307.3	Within the standards
BOD	180.5	7.64	Within the standards
COD	451.25	61.10	Within the standards
Oil & Grease	36.1	1.14	Within the standards
Phenolic Compound	1.805	< 0.0114	Within the standards
Fluoride	3.61	< 0.057	Within the standards
Chromium	3.61	< 0.0114	Within the standards
TRC	1.805	< 1.137	Within the standards

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
pH	5.5 – 9.0	7.73	Within the standards
TSS	2.1	0.17	Within the standards
BOD	1.4	0.057	Within the standards

Emission

Stack Attached to	Prescribed Quantity of pollutants discharge [T/Day]				Quantity of pollutants discharged [T/Day]				Percentage of variation from prescribed standard with reasons.
	PM	SO_2	NOx	CO	PM	SO_2	NOx	CO	
Boiler	0.014	0.467	0.096	0.041	0.003	0.333	0.020	0.016	Within the standards
Chlorine Scrubber	Chlorine		0.003		Chlorine		0.00004		Within the standards

PART - D

HAZARDOUS WASTE

(As specified under Hazardous Wastes/ Management and Handling Rules, 2008)

	Total Quantity	
	During the previous Financial year (2018 – 2019) *	***During the current Financial year (2019 – 2020)***
(A) From Process		
Used Spent Oil, MT	0.0	0.0
Waste Oil, MT	0.0	0.0
(B) From pollution control facility		
ETP Sludge, MT	0.0	169.5

PART - E
SOLID WASTE

	Total Quantity	
	During the previous Financial year (2018 – 2019) *	***During the current Financial year (2019 – 2020)***
a) From process, MT	1360	6415
b) Pollution control facility, MT.	Nil	Nil
c) Quantity recycled or reutilised.	Nil	Nil
d) Sold, MT	1360	6415
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 vendors.

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

Quantity	:	0.0 MT (DG Not in operation)
Composition	:	Oil with water.
Disposal practice	:	Used as Fuel in TPL heater.

3. Hazardous Waste Category No: Schedule 1, S.No: 33.3 – ETP Sludge

Quantity	:	169.5 MT
Composition	:	ETP Sludge
Disposal practice	:	Disposed to SPCB authorised landfill facility.

PART - G

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

- ✓ Regasified Liquefied Natural Gas (R-LNG) is being as fuel in Boiler replacing furnace oil to reduce emission load.
- ✓ 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 is 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 $PM_{2.5}$, PM_{10}, Chlorine and VOC in ambient air and monitoring data has been uploaded to TNPCB server.
- ✓ Continuous monitoring system along with data uploading facility for stack attached to Boiler for the parameter PM, SO_2, NOx, and CO is provided and monitoring data has been connected to TNPCB server.

- ✓ Continuous monitoring system along with data uploading facility for stack attached to Chlorine Scrubber for Chlorine parameter is provided and monitoring data has been connected to TNPCB server.
- ✓ Continuous online pH, Flow meter, TSS, BOD and COD analyser is provided in the ETP – treated effluent outlet and monitoring data has been connected to CAC, TNPCB.

PART - H

Additional investment proposal for environment protection including abatement of pollution

---

PART - I

Any other Particulars for improving the Quality of the Environment

- ➢ ***Green Belt Development***: 25 nos of Trees saplings were planted inside and outside of the factory premises in the 2019 – 2020.
