PETRONET LNG LIMITED

An ISO 9001 : 2015
14001 : 2015
45001 : 2018
55001 : 2014
Certified Company

Petronet LNG Limited

Survey No. 347, Puthuvypu P.O.
Kochi - 682 508, Kerala, India.
Tel: +91- 484 - 2757302 Fax: +91- 484-2502264
www.petronetlng.in
CIN L74899DL1998PLC093073
PAN: AAACP8148D. GST: 32AAACP8148D1ZP

PLL/KOCHI/KSPCB/2024-25/11

22/08/2024

To,

The Chief Environment Engineer,
Kerala State Pollution Control Board,
Gandhinagar, Kochi – 682020.

KERALA STATE POLLUTION CONTROL BOARD
22/8/24
GANDHI NAGAR
COCHIN-682 020
DISTRICT OFFICE

Dear Sir,

Subject: Submission of Environment Statement (Form-V) for FY 2023-24.

We are submitting the Environment Statement in Form 5 for the financial year 2023-24, in accordance with the Environment (Protection) Rules, 1986.

Thanking you

Sincerely,

22/8/2024

PETRONET LNG LIMITED
KOCHI-682 508

Upinder Kumar,
CGM & VP (Plant Head)

Enclosed: Environment Statement (Form-V) for FY 2023-24

Copy: The Environment Engineer, District Office-1, KSPCB, Ernakulam, 682020.

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കടവന്ത്ര പി. ഒ.
കൊച്ചി - 682 020

22/08/2024

Registered & Corporate Office:
World Trade Centre, First Floor, Barbar Road,
Barakhamba Lane, New Delhi - 110 001 (INDIA)
Tel: +91-11-23411411 / 23472525 Fax: +91 -11-23472550

Dahej LNG Terminal:
GIDC Industrial Estate, Plot No. 7/A, Dahej Taluka:
Vagra Dist. Bharuch - 392130 (Gujarat)
Tel: +91-2641-257249 Fax: +91- 2641-257252

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ENVIRONMENTAL STATEMENT FORM-V
(See rule 14)

Environmental Statement for the financial year ending with 31st March 2024

PART-A

1	*Name and address of the owner/ Occupier of the industry, operation or process.*	:	Mr. Pramod Narang, Director (Technical) **Kochi Address:** Petronet LNG Limited, Puthuvypu P.O., Ernakulam - 682508 **Corporate Office:** Petronet LNG Limited, World Trade Center, First Floor, Babar Road, Barakamba Lane, New Delhi-110001
2	*Industry category*	:	Red
3	*Production category. Units.*	:	5 MMTPA (Million Metric Tonnes per Annum)
4	*Year of establishment*	:	20th August 2013
5	*Date of the last environmental statement submitted.*	:	20-09-2023

PART -B

Water and Raw Material Consumption:

I. Water Consumption (M^3/Day)

Process : Nil
Cooling : Nil
Domestic : 24.6 KL/day

Name of Products	***Process water consumption per unit of product output***	
	During the previous financial year	***During the current financial year***
1. RLNG	Nil	Nil

II. *Raw material consumption*

Name of raw materials	***Name of Products***	***Consumption of raw material per unit of output***	
		During the previous financial year	***During the current financial year***
LNG	RLNG	0.005	0.01928*

*0.01928 MT of LNG consumed per MMBTU of output.

PART-C

Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

Pollutants		***Quantity of Pollutants discharged (mass/day)***		***Concentration of Pollutants discharged (mass/volume)***	***Percentage of variation from prescribed standards with reasons.***
(a) Water		NIL		NIL	NIL
(b) Air	***Equipment***	***Parameters***	***Quantity of Pollutants discharged (mass/day)***	***Concentration of Pollutants discharged (mass/volume)***	***Percentage of variation from prescribed standards with reasons.***
	GTG-A	NO_x	7802 g/day	67.6 mg/Nm3	No variation from prescribed standard
	GTG-B	NO_x	0	0	No variation from prescribed standard
	GTG-C	NO_x	900 g/day	52.9 mg/Nm3	No variation from prescribed standard
	Emergency DG set (EDG)	PM CO_2 CO SO_2 NO_x	36.98 g/day 0 152.39 g/day 18.95 g/day 35.42 g/day	28.3 mg/Nm^3 0 93.3 mg/Nm^3 14.5 mg/Nm^3 27.1 mg/Nm^3	No variation from prescribed standard
b) Air	Fire Pumps-C (Diesel Operated)	PM CO_2 CO SO_2 NO_x	4.64 g/day 0 17.6 g/day 1.97 g/day 3.52 g/day	33.6 mg/Nm^3 0 102 mg/Nm^3 14.3 mg/Nm^3 25.5 mg/Nm^3	No variation from prescribed standard
	Fire Pumps-D (Diesel Operated)	PM CO_2 CO SO_2 NO_x	3.42 g/day 0 13.89 g/day 1.73 g/day 2.87 g/day	30.8 mg/Nm^3 0 100 mg/Nm^3 15.6 mg/Nm^3 25.9 mg/Nm^3	No variation from prescribed standard

	Fire Pumps-E (Diesel Operated)	PM CO_2 CO SO_2 NO_x	3.59 g/day 0 14.15 g/day 1.64 g/day 3.02 g/day	33.8 mg/Nm^3 0 106.4 mg/Nm^3 15.4 mg/Nm^3 28.4 mg/Nm^3	No variation from prescribed standard
	Fire Pumps-F (Diesel Operated)	PM CO_2 CO SO_2 NO_x	3.37 g/day 0 13 g/day 1.31 g/day 2.29 g/day	32.3 mg/Nm^3 0 99.85 mg/Nm^3 12.6 mg/Nm^3 22 mg/Nm^3	No variation from prescribed standard
	Fire Pumps-G (Diesel Operated)	PM CO_2 CO SO_2 NO_x	3.08 g/day 0 13.68 g/day 2.11 g/day 2.86 g/day	28.43 mg/Nm^3 0 101 mg/Nm^3 19.5 mg/Nm^3 26.4 mg/Nm^3	No variation from prescribed standard

Note: Environmental monitoring in FY 2023-24 was carried out by M/s. Standard Environment & Analytical Laboratories, a KSPCB approved laboratory.

PART-D

HAZARDOUS WASTES

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

Hazardous Wastes	***Total Quantity (Kg)***	
	During the previous financial year (2022-23)	***During the current financial year (2023-24)***
(a) Form Process		
1. Used Oil (Schedule 1, Category: 5.1)	905.3 Kg	1151.75 Kg
2. Waste residue containing oil (Schedule 1, Category: 5.2)	353 Kg	185 Kg
3. Empty barrels / containers /liners contaminated with hazardous chemicals /wastes (Schedule 1, Category 33.1). (Used for storing dosing chemicals and used oil)	419.5 Kg	457.8 Kg

4. Industrial use of paints, and Ink wastes (Schedule 1, Category 21.1)	439 Kg	105 Kg
(b) From pollution control facilities	None	None

Note: For converting used oil from KL to Kg, the density of used oil is taken as 850 Kg/m^3.

PART -E

SOLID WASTES:

Solid Wastes	***Total Quantity (Kg)***	
	During the previous financial year	***During the current financial year***
a. From process	NIL	NIL
b. From Pollution Control Facility	NIL	NIL
c. Quantity recycled or re-Utilised within the unit.	NIL	NIL

PART -F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

SL: No	***Hazardous wastes***	***:***	***Composition***
1	Used oil (Cat 5.1)	:	Organic Matter – 98 – 99 %, Inorganic Matter – 1 – 2 %.
2	Waste residue containing oil (Schedule 1, Category: 5.2)	:	Hydrocarbon
3	Empty barrels / containers /liners contaminated with hazardous chemicals /wastes (Cat 33.1)	:	Plastic or metallic barrels containing chemical / oil residue.
4	Industrial use of paint and Ink wastes (Schedule 1, Category 21.1)	:	Paint pigment, Solvents etc.

Storage and disposal practice:

Hazardous wastes generated inside the terminal are being disposed /recycled through the agencies authorized by Kerala State Pollution Control Board (KSPCB). Petronet LNG Limited has an agreement with M/s. Cee Jee Lubricants, Aluva and KEIL (Kerala Enviro Infrastructure Limited, Kochi) for disposing hazardous wastes generated in the terminal. Hazardous wastes are stored in a dedicated hazardous wastes storage shed inside the terminal till its disposal. Hazardous waste storage shed is constructed and maintained as per the requirement of consent issued by KSPCB. Storage shed is provided with impervious flooring and proper roofing as specified in the consent.

Used oil generated is collected in MS barrels or other suitable containers at the generation point and then shifted to storage shed by concerned department. Used oil and empty chemical barrels are sold to KSPCB authorised recycler, M/s. Cee Jee Lubricants, Aluva.

Waste residues containing oil such as oil-soaked cotton wastes generated at various locations are collected and stored in designated storage bin located inside hazardous waste storage shed. These wastes are disposed through KEIL.

Paint and ink wastes are collected & stored in hazardous waste storage area and is disposed through KEIL.

Signboards are installed at hazardous waste storage for displaying each category of waste storages. Records of hazardous wastes generation are maintained in Form 3 as per Hazardous Wastes (Management & Transboundary movement) rules, 2016.

PART-G

Impact of the pollution control measures taken on conservation of natural Resources and consequently on the cost of production.

An environment management cell (EMC) has been constituted and being maintained inside the terminal as required by the environment clearance issued by MoEF&CC to PLL, Kochi Terminal. EMC is headed by Chief General Manager & Vice President (Plant head) and other members are from different plant departments. Environment management cell meets once in a quarter, take review of the situation and propose new environment initiatives.

A rainwater harvesting system has installed inside the terminal. Rainwater collected from LNG storage tanks are being collected and stored in raw water storage tanks. This water is being used for domestic use. Condensate water from air heater is directed to fire water storage reservoir. An STP of capacity 30 KLD is installed in the terminal for treating domestic sewages. STP water quality is being regularly monitored by plant laboratory dept. and by an external KSPCB grade 'A' environment laboratory. The waste slurry generated from STP has been used as manure for plants inside the terminal.

Green belt is developed across the terminal with different plant species appropriate to the environment. Green belt is being maintained by the plant horticulture department. Total 135 new plants were planted in the green belt during World Environment Day celebrations -2023. A kitchen garden is also being set up and maintained inside the terminal.

Gas Turbine Generator (GTG) installed in PLL terminal is fitted with a Dry low emission burner (DLEB). DLE burners are designed to meet stringent emission standards.

A Continuous Ambient Air Quality Monitoring Station (CAAQMS) is installed at our terminal. Ambient air quality data from CAAQMS has been linked to CPCB server. Ambient air quality data is being continuously monitored and being updated to CPCB server.

Two solar power plants of 250 KW capacity each has been installed in the terminal for meeting the power requirements for operating the terminal.

PART -H

Additional measures/investment proposal for environmental protection including abatement of pollution.

PLL has been certified for Environment Management system, ISO 14001:2015. All the aspects and impacts associated with the terminal operations are identified and control measures are implemented. Objectives are established and it is periodically reviewed for the continual improvement of management system.

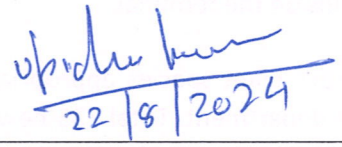
Ambient air quality data from CAAQMS, stack emission & hazardous waste generation details are being displayed at terminal main gate using a LED screen.

PART –I

MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution.

Nil

For and on behalf of Petronet LNG Limited
Sign :  
Date : 22/8/2024
Approved By: Upinder Kumar
Designation : Chief General Manager & Vice President (Plant Head)