



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/MoEF&CC/2024-25/03

27/11/2024

## Additional Principal Chief Conservator of Forests (C)

Ministry of Environment, Forest and Climate Change,  
Regional Office (SZ),  
Kendriya Sadan, 4<sup>th</sup>Floor, E&F Wings, 17<sup>th</sup> Main Road,  
Koramangala II Block,  
Bangalore – 560034.

**Sub: Compliance report to Environment Clearance for dredging for the purpose of creating an approach channel for LNG Import Terminal at Puhuvypu, Kochi**

**Ref: Environment Clearance No: J-16011/26/2001-IA-III vide your letters dated 16<sup>th</sup> November 2010.**

Sir,

The Six-monthly compliance report for the above clearance for the period of April to September 2024 is attached.

Thanking You

Sincerely,

**Upinder Kumar**

Chief General Manager & Vice President (Plant Head)



**Copy:** The Environmental Engineer, District Office 1, Kerala State Pollution Control Board, Gandhinagar, Kochi – 682 020.

### 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

**Compliance report of EC&CRZ clearance vide No: J-16011/26/2001-IA-III dated 16.11.2010 for dredging for the purpose of creating an approach channel to LNG terminal at Puthuvypeen Island, Kochi, Kerala.**

**Period: April to September 2024**

Sl. No	Condition Type	Condition Description	Compliance Status
1	Specific	The total quantity of the dredged material of 35,00,000 cu. m shall be dumped at the specified offshore dumping site of Cochin Port at outer sea, about 15.6 km from the shore.	The dredged material was dumped at the specified offshore dumping site of Cochin Port Trust (CoPT) at outer sea, about 15.6 km from the shore. Now, maintenance dredging is being carried out and the dredged materials are being dumped as per the directions of CoPT.
2	Specific	The approach channel shall be properly demarcated with lighted buoys for safe navigation and adequate traffic control guidelines shall be framed. The fishermen shall be suitably educated and informed about the traffic guidelines.	The approach channel has been clearly marked with lighted buoys by Cochin Port Trust. Cochin Port Trust provides Vessel Traffic Management Service (VTMS) to all vessels within port area. Entry prohibition display boards are installed at jetty area to alert fisherman.
3	Specific	The material dredged by cutter suction dredger will be used for land development work and for beach nourishment approved by Cochin Port Trust. Dredged material from Trailer Suction Dredger will be dumped at the specified offshore dumping site of Cochin Port at outer sea, about 15.6 km from the shore.	The dredged material is being disposed of at the locations identified by Cochin Port trust. The TSHD dredging material is being dumped at the designated dumping site of CoPT located at 15.6 km from shore.
4	Specific	The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	PLL has set up an Environment Management Cell (EMC) under Chief General Manager & Vice President (Plant Head) with nominated members from plant departments.
5	Specific	The project proponent shall take up mangrove plantation/green belt in the project area, wherever possible. Adequate budget shall be provided in the Environment Management Plan for such mangrove development.	PLL had spent Rs. 60.00 lakhs for Mangrove Afforestation Project till date and the details were submitted to MoEF&CC with the HYCR for October to March 2020. A green belt is set up and maintained inside PLL, Kochi terminal.
6	Specific	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purpose.	The fund earmarked for environment management is included in the budget and will not be diverted for other purposes. Expenditures for the FY 2023-24 is submitted to MoEF&CC along with six monthly compliance report dated till March 2024.



7	General	Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid damage to the environment.	We have completed the construction and commissioning of our plant. During both the phases, adequate provisions were provided to the workers to avoid any damage to the environment.
8	General	Full support shall be extended to the officers of this Ministry/Regional Office at Bengaluru by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	PLL extend its full support to the officers of this ministry' s Regional Office, Bengaluru and the officers of the Central and State Pollution Control Board during the inspection for monitoring purpose.
9	General	A Six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bengaluru regarding the implementation of the stipulated conditions.	A six-monthly monitoring reports are being submitted by PLL to Ministry on regular basis.
10	General	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary, in the interest of environment and the same shall be complied with.	PLL will comply with additional conditions, if any suggested by the ministry or any other competent authority in writing.
11	General	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.	Noted. PLL will abide by all Environment clearance conditions.
12	General	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.	PLL will comply with this requirement and will take approval from the Ministry prior to any deviation, alteration and modification in the project.
13	General	The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.	PLL had informed the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project vide letter dated 5th Sept-2008.
14	General	A copy of the clearance letter shall be marked to concern Panchayat/Local NGO, if any, from whom any suggestion/representation has been made, received while processing the proposal.	No specific suggestion/representation has been made/received from any authority while processing the proposal. Letter submitted to Panchayat vide no. PLL/Kochi/MoEF/G GP/2013/001 dated 07 <sup>th</sup> March-2013. A copy of the letter has already been submitted with six monthly



			compliance reports for the period October 2012 to March 2013.
15	General	Kerala Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries centre and Collector's Office/Tahsildar's office for 30 days.	Action taken by Kerala State Pollution control board (KSPCB).
16	General	These stipulations would be enforced among others under the provisions of Water Act, 1974, Air act, 1981, Environment protection act, 1986, Public Liability Insurance act, 1991 & EIA Notification, 1994 including the amendments and rules made thereafter.	Noted. Compliance of EC clearance conditions and other applicable statutes are being ensured regularly.
17	General	All other statutory clearances such as the approvals for storage of diesel from CCOE, Fire Dept., Civil Aviation dept, Forest conservation act, 1980 and wildlife (Protection) act, 1972 etc. shall be obtained as applicable by project proponents from the respective competent authorities.	All the applicable statutory approvals and clearances are obtained by PLL before commissioning & during operation of the terminal.
18	General	The project proponent shall advertise in at least in two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded environmental clearance and copies of clearance letters are available with the Kerala Pollution Control Board and may also be seen at Website of the Ministry of Environment & Forests at <a href="http://www.envforin.in">http://www.envforin.in</a> . The advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bangalore.	Advertised in two local newspapers widely circulated in the region around the project. Copy of advertisement submitted along with the six-monthly compliance report for the period April to September 2013.
19	General	Environmental clearance is subject to final order of the Hon'ble supreme court of India in the matter of Goa Foundation vs Unio of India in writ petition (Civil) No 460 of 2004 as may be applicable to this project.	We noted here that this clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004.
20	General	An appeal against this clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.	Noted. We understand that any appeal against this clearance shall lie with the National Environment Appellate Authority as per relevant statutes.

21	General	A copy of the clearance letter shall be sent by the proponent to concern 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. The Clearance letter shall also be put on the website of the company of the proponent.	No specific suggestion/representation has been made/received from any authority while processing the proposal. Clearance letter is put on the company website.
22	General	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective zonal office of CPCB and SPCB.	Status of compliance reports are being regularly updated by Petronet on its website, <a href="http://www.petronetlng.in">www.petronetlng.in</a> and being submitted to MoEF&CC & KSPCB.
23	General	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB & the SPCB.	Noted. Compliance reports on EC conditions are being submitted to MoEF&CC & KSPCB on half yearly basis.
24	General	The environmental statement for each financial year ending 31st March in Form V as is mandated to be submitted by the project proponent 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 EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	Environment statement in Form-V for FY 2023-24 was submitted to Kerala State pollution control board on 22/08/2024 and it is also uploaded on to company website. Environment statement for FY 2023-24 is enclosed here as <b>Annexure 1</b> .





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PLL/KOCHI/KSPCB/2024-25/11

22/08/2024

To,

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

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,

*Upinder Kumar*  
22/8/2024  
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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**ENVIRONMENTAL STATEMENT FORM-V**  
(See rule 14)

*Environmental Statement for the financial year ending with 31<sup>st</sup> March 2024*

**PART-A**

1	Name and address of the owner/ Occupier of the industry, operation or process.	:	Mr. Pramod Narang, Director (Technical) <b>Kochi Address:</b> Petronet LNG Limited, Puthuvypu P.O., Ernakulam - 682508  <b>Corporate Office:</b> 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	:	20 <sup>th</sup> August 2013
5	Date of the last environmental statement submitted.	:	20-09-2023

**PART-B**

Water and Raw Material Consumption:

- I. Water Consumption (M<sup>3</sup>/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)

<b>Pollutants</b>		<b>Quantity of Pollutants discharged (mass/day)</b>		<b>Concentration of Pollutants discharged (mass/volume)</b>	<b>Percentage of variation from prescribed standards with reasons.</b>
(a) Water		NIL		NIL	NIL
(b) Air	<b>Equipment</b>	<b>Parameters</b>	<b>Quantity of Pollutants discharged (mass/day)</b>	<b>Concentration of Pollutants discharged (mass/volume)</b>	<b>Percentage of variation from prescribed standards with reasons.</b>
	GTG-A	NO <sub>x</sub>	7802 g/day	67.6 mg/Nm <sup>3</sup>	No variation from prescribed standard
	GTG-B	NO <sub>x</sub>	0	0	No variation from prescribed standard
	GTG-C	NO <sub>x</sub>	900 g/day	52.9 mg/Nm <sup>3</sup>	No variation from prescribed standard
	Emergency DG set (EDG)	PM	36.98 g/day	28.3 mg/Nm <sup>3</sup>	No variation from prescribed standard
		CO <sub>2</sub>	0	0	
		CO	152.39 g/day	93.3 mg/Nm <sup>3</sup>	
		SO <sub>2</sub>	18.95 g/day	14.5 mg/Nm <sup>3</sup>	
		NO <sub>x</sub>	35.42 g/day	27.1 mg/Nm <sup>3</sup>	
	b) Air	Fire Pumps-C (Diesel Operated)	PM	4.64 g/day	33.6 mg/Nm <sup>3</sup>
CO <sub>2</sub>			0	0	
CO			17.6 g/day	102 mg/Nm <sup>3</sup>	
SO <sub>2</sub>			1.97 g/day	14.3 mg/Nm <sup>3</sup>	
NO <sub>x</sub>			3.52 g/day	25.5 mg/Nm <sup>3</sup>	
Fire Pumps-D (Diesel Operated)		PM	3.42 g/day	30.8 mg/Nm <sup>3</sup>	No variation from prescribed standard
		CO <sub>2</sub>	0	0	
		CO	13.89 g/day	100 mg/Nm <sup>3</sup>	
		SO <sub>2</sub>	1.73 g/day	15.6 mg/Nm <sup>3</sup>	
		NO <sub>x</sub>	2.87 g/day	25.9 mg/Nm <sup>3</sup>	



Fire Pumps-E (Diesel Operated)	PM	3.59 g/day	33.8 mg/Nm <sup>3</sup>	No variation from prescribed standard
	CO <sub>2</sub>	0	0	
	CO	14.15 g/day	106.4 mg/Nm <sup>3</sup>	
	SO <sub>2</sub>	1.64 g/day	15.4 mg/Nm <sup>3</sup>	
	NO <sub>x</sub>	3.02 g/day	28.4 mg/Nm <sup>3</sup>	
Fire Pumps-F (Diesel Operated)	PM	3.37 g/day	32.3 mg/Nm <sup>3</sup>	No variation from prescribed standard
	CO <sub>2</sub>	0	0	
	CO	13 g/day	99.85 mg/Nm <sup>3</sup>	
	SO <sub>2</sub>	1.31 g/day	12.6 mg/Nm <sup>3</sup>	
	NO <sub>x</sub>	2.29 g/day	22 mg/Nm <sup>3</sup>	
Fire Pumps-G (Diesel Operated)	PM	3.08 g/day	28.43 mg/Nm <sup>3</sup>	No variation from prescribed standard
	CO <sub>2</sub>	0	0	
	CO	13.68 g/day	101 mg/Nm <sup>3</sup>	
	SO <sub>2</sub>	2.11 g/day	19.5 mg/Nm <sup>3</sup>	
	NO <sub>x</sub>	2.86 g/day	26.4 mg/Nm <sup>3</sup>	

**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<sup>3</sup>.

**PART -E**

**SOLID WASTES:**

<b>Solid Wastes</b>	<b>Total Quantity (Kg)</b>	
	<b>During the previous financial year</b>	<b>During the current financial year</b>
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.

<b>Sl: No</b>	<b>Hazardous wastes</b>	<b>:</b>	<b>Composition</b>
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

:

*Upinder Kumar*

Date

:

*22/8/2024*



Approved By: Upinder Kumar

Designation : Chief General Manager & Vice President (Plant Head)