



# Petronet LNG Limited

Survey No. 347, Puthuvypu P.O.

Kochi - 682 508, India.

Tel: +91-484-2502259 Fax: +91-484-2502264

www.petronetlng.com

CIN L74899DL1998PLC093073

PAN: AAACP8148D. GST: 32AAACP8148D1ZP

PLL/KOCHI/MOEF/2019-20/07

18<sup>th</sup> November, 2019

## 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 accorded to the LNG Terminal at Puthuvypu, Kochi.**

**Ref: Environment Clearance No. J-16011/26/2001-IA-III vide your letters dated 31<sup>st</sup> January 2013.**

Sir

The Six monthly compliance report for the above clearances are attached for the period ending 30<sup>th</sup> September 2019.

Thanking You,

With Regards



(T. N. Neelakantan)

Group General Manager & President (Plant Head)

CC:

- 1) The Chief Environmental Engineer,  
Kerala State Pollution Control Board,  
Gandhinagar, Kochi – 682 020.



### Registered & Corporate Office:

World Trade Centre, First Floor, Babar 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 CRZ Clearance no. J-16011/26/2001-IA-III vide your letters dated 31<sup>st</sup> JANUARY 2013 for enhancing the re-gasification capacity from 2.5 to 5 MMTPA at Puthuvypeen Island, Kochi, Kerala by M/s Petronet LNG Ltd.**

Point-wise compliance to stipulated terms and conditions of the above CRZ Clearance is as follows:

	<b>SPECIFIC CONDITIONS</b>	<b>PLL Remark</b>
I	"Consent for Establishment" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.	"Consent to Establish" Consent No. PCB/HO/EKM/ICE-R/03/2013 obtained from KSPCB and a copy of the same has already been submitted to the Ministry along with the six monthly compliance report dated 30 <sup>th</sup> September-2013.
II	NOC/Clearance shall be obtained confirming that all the firefighting provisions are as per standards specified by the Chief Controller of Explosives/Petroleum & Explosives Safety Organization (PESO) for the additional storage tanks.	No additional LNG storage tank is envisaged for this enhancement; We have got Approval of PESO for the existing LNG Storage Tanks and a copy of the same has already been submitted to the Ministry along with the six monthly compliance reports dated 05 <sup>th</sup> April-2013.
III	Leak detection/warning system shall be provided at strategic locations. Necessary control measures capable of remote operation to shut down the leakage, if any, should be provided.	Complied. State of the art automated FGS & shutdown system is installed to mitigate any such incidents.
IV	Appropriate safety devices such as masks should be provided for use by the workers handling the products at the site and their usage by them should be ensured.	Complied. Safety Helmets, Safety Shoes, Safety Goggles, SCBAs, Cryogenic suits are provided to all relevant workers and Dust mask are provided to the workers involved in activities which has potential to generate dust.
V	Project proponent should implement all the recommendations stipulated in the EIA, EMP and Risk Assessment reports pertaining to the project.	PLL is complying with all the recommendation stipulated in the EIA, EMP and Risk Assessment reports pertaining to our project.
VI	The commitments made during the Public Hearing and as recorded in the Minutes shall be complied with letter and spirit.	Noted. Public Hearing commitments are incorporated in Final EIA Report for further necessary implementation. Public hearing commitments are fulfilled details has already been submitted along with the six monthly compliance report dated 02 <sup>nd</sup> June-2016.
VII	All the conditions stipulated in the earlier Clearance including the recommendations of Environment Management Plan, Disaster Management Plan shall be strictly complied with.	Complied. All the conditions stipulated in the earlier clearance including the recommendations of EMP and DMP are strictly complied with.



VIII	<p>The Committee noted the proponent's statement that augmentation of the capacity from 2.5 MMTPA to 5.0 MMTPA will not induct additional environmental issues and that the planned system will take care of the overall requirements of the facility. However, impacts if any arising out of increased activities to meet the additional capacity shall be brought to the notice of the Ministry with appropriate mitigation measures that will be put in place, to ensure that the given commitment of 'no additional impact' is maintained in letter and spirit.</p>	<p>Noted. However, Augmentation of the capacity from 2.5 MMPTA to 5.0 MMTPA will not induct additional environmental issues.</p>
IX	<p>At least 5% of the total cost of the project shall be earmarked towards the Corporate Social Responsibility (CSR) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry prior to the commencement of the project. Implementation of such program shall be ensured accordingly in a time bound manner.</p>	<p>5% of the total cost of augmentation of the capacity from 2.5 MMTPA to 5.0 MMTPA project is earmarked towards community development and other infrastructure related as well as CSR projects. A separate fund for CSR is kept aside by PLL and we have carried out various activities for the community development and welfare, a brief description of our CSR activities with photographs are enclosed as <b>Annexure # 1</b>.</p>
X	<p>It shall be ensure that the proposed activity shall not cause any disturbance to the Fishing activity.</p>	<p>The proposed augmentation/enhancement of plan capacity do not involve any modification in current marine facilities. Hence will not cause disturbance to fishing activity.</p>
Xi	<p>The smooth and safe operation of the system will be ensured by incorporating a computerized SCADA (Supervisor Control And Data Acquisition) system. Any leakage in the pipeline shall be immediately detected by the Computer system and product pumping shall be immediately cut off.</p>	<p>Complied. Computerized SCADA (Supervisor Control And Data Acquisition) system, FGS (Flame, Gas and Spill) detection system and ESD (Emergency Shutdown system) system has already been installed to ensure smooth and safe operation, for early detection of any leak and for safe shutdown in case of any emergency respectively. Regasified NG pipeline belong to GAIL and cut off of the gas supply is ensured by them and on intimation to PLL, we may stop the supply.</p>

Xii	Regular patrolling of the pipelines needs to be done. This will help in identifying any activity that have the potential to cause pipeline damage or to identify small leaks whose effects are too small to be detected by instrument.	Complied. Regasified NG pipeline belong to GAIL and PLL has no any role related to these pipelines. However, the pipelines within the terminals are equipped with temperature and pressure sensors designed to raise alarm in case of abnormalities, in additions to this all pipelines are continuously guarded with relevant detectors capable of activating ESD if situation demands.
Xiii	The project shall be carried out as per international standards in vogue and duly certified by competent authorities before commissioning.	Complied. The project was carried out in accordance with relevant international and national standards. All equipments have been inspected and certified by competent third party or by competent authorities as per requirements.
Xiv	Oil Spill Contingency Management Plan shall be put in place along with the dedicated staff to deal with Oil spill in and around the port area shall be provided in the port. No oily wastes shall be discharged into the water bodies/mangrove areas.	<p>Contingency plan is formulated to take care of the eventualities; a copy of the same has already been submitted with six monthly compliance reports dated 05<sup>th</sup> April-2013.</p> <p>PLL is having one FIFI 1 tug with required boom barrier and other oil spill control related equipments. PLL jetty falls under the Cochin Port Trust (CPT), and the Oil Spill Contingency Management Plan is prepared by CPT. PLL has provided the information required from the terminal to be incorporated in the Oil Spill Contingency Management Plan. Coast guard is also part of the Oil spill contingency plan.</p> <p>No oil waste will be discharged in to water bodies/mangrove areas. Oily waste will be collected and send to Hazardous waste handling agency.</p> <p>We have entered in to agreement with KEIL (Kerala Enviro Infrastructure Ltd) for handling and treatment of our Hazardous waste and the latest agreement copy has already been submitted along with six monthly compliance report for the period ending March -2018.</p>



Xv	Regular mock drills shall be conducted to check the effectiveness of the on-site Disaster Management Plan. The recommendations made in the Environmental Management Plan and Disaster Management Plan, as contained in the Environment Impact Assessment and Risk Analysis reports of the project, should be effectively implemented.	Regular mock drills are conducted for both On-site as well as Off-site emergency scenarios. All mock drills are conducted as per ERDMP plan. For Off-site emergencies, an effective Mutual aid arrangement is in place; all parties in the Mutual aid actively participate in Off-site Mock drills. PLL has a Mutual Aid agreement with FACT-UD and BPCL-STF to provide resources during emergency.  All recommendations made in the Environmental Management Plan and Disaster Management Plan, as contained in the Environment Impact Assessment and Risk Analysis reports of the project are covered while preparation of ERDMP (Emergency Response and Disaster Management Plan) which is effectively implemented.
xvi	No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	Noted. No any other construction work will be done in CRZ area.
Xvii	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 Environment Management Cell under Sr. Vice President – (Plant Head), other members of the team includes GM (Operations & Maintenance), Head of Operation department, C&P (Contracts & Procurement) department, Technical department, HSE department, Civil Department, Lab operation & a representative from HR department for effective implementing the stipulated environment safeguards. The SOP of the Environment Management Cell was revised on 23/04/2018 and the copy of the same has already been submitted along with six monthly compliance report for the period ending March-2018.
xviii	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.	The funds earmarked for environment management plan is included in the budget and will not be diverted for other purposes.



6.	GENERAL CONDITIONS	PLL Remark
I	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.	Noted. PLL have taken appropriate measure while undertaking digging activities. We conduct ground water analysis periodically and latest report is enclosed as <b>Annexure#2</b> .
li	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 will extend full support to the officers of this ministry's Regional Office, Bangalore and the officers of the Central and State Pollution Control Board during the inspection for monitoring purpose by furnishing full details of analysis reports and action plans for environmental protection
lii	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.	Noted. Six monthly reports regarding the implementation of the stipulated conditions are regularly been submitted to regional MoEF office for all CRZ Clearance obtained for Kochi LNG Terminal project.
Iv	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.
V	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.	PLL is aware of the Ministry's right to revoke clearance for not complying with the conditions stipulated in the clearance.
Vi	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.	Noted.
Vi i	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.	Site appraisal clearance obtained on 28 <sup>th</sup> Feb 2011. No separate land developmental work was required, as this involved only augmentation of equipment in the same land.
Vi ii	A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal.	PLL has written letter to concerned Gram Panchayat vide letter no. PLL/Kochi/MoEF/GP/2013/001 dated 07 <sup>th</sup> March-2013; A copy of the letter has already been submitted with six monthly compliance reports dated 05 <sup>th</sup> April-2013.



ix	State 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 need to be taken by State Pollution control board.
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**Other Conditions mentioned in the Environment Clearance dated 31st January 2013.**

7	These stipulation's would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.	Noted.
8	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Noted.  Copies of all relevant approvals/NOCs have already been submitted along with the six monthly compliance reports dated 05 <sup>th</sup> April-2013.
9	The project proponent shall advertise in at least 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 and CRZ Clearance and copies of clearance letters are available with the Kerala Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.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 Bengaluru.	PLL had advertised regarding environmental clearance accorded by the Ministry of Environment & Forest in two local newspapers widely circulated in the region around the project.  Copy of the advertisement given in the two local newspapers has already been submitted along with the six monthly compliance report dated 30 <sup>th</sup> September-2013.
10	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 as may be applicable to this project.	Noted.
11	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.	Status of the compliance, of various stipulated environmental conditions and environmental safeguards are uploaded in PLL's website.



12	Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted.
13	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/ 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 by the proponent.	PLL has written letter to concerned Gram Panchayat vide letter no. PLL/Kochi/MoEF/GP/2013/001 dated 7 <sup>th</sup> March-2013, we have already submitted a copy of the letter with six monthly compliance report dated 5 <sup>th</sup> April 2013.
14	The proponent shall upload the status of compliance of the stipulated Clearance 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 the SPCB.	This is uploaded in the website. <a href="http://www.petronefng.com">www.petronefng.com</a> .
15	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance 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 and the SPCB.	Noted.
16	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 Clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	We have uploaded Form-V (Environment Statement) along with the status of compliance of clearance conditions in our company's website. Compliance of the clearance conditions is regularly sent to MoEF's regional office by e-mail.  The latest Form-V (Environment Statement) for the period of FY 2018-19 is enclosed as <b>Annexure#3</b> .

Thanking You,

With Regards



(T. N. Neelakantan)  
GGM & P (Plant Head)





Annexure-1



**PETRONET  
LNG  
LIMITED**



## **CSR UPDATE KOCHI**

**Major Highlights  
April 2019- September 2019**



# EDUCATION & SKILL DEVELOPMENT

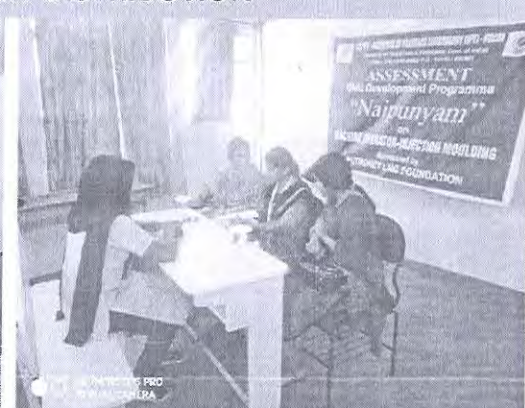


## 1. "Naipunyam" Vocational Skill Development programme 2018-2019



INAUGURATAL CEREMONY

EDUCATIONAL KIT DISTRIBUTION



FIRE & SAFETY CLASS

ASSESSMENT SESSION



# EDUCATION & SKILL DEVELOPMENT



## 2. Valedictory Ceremony of "Velicham" Educational project in Vypin

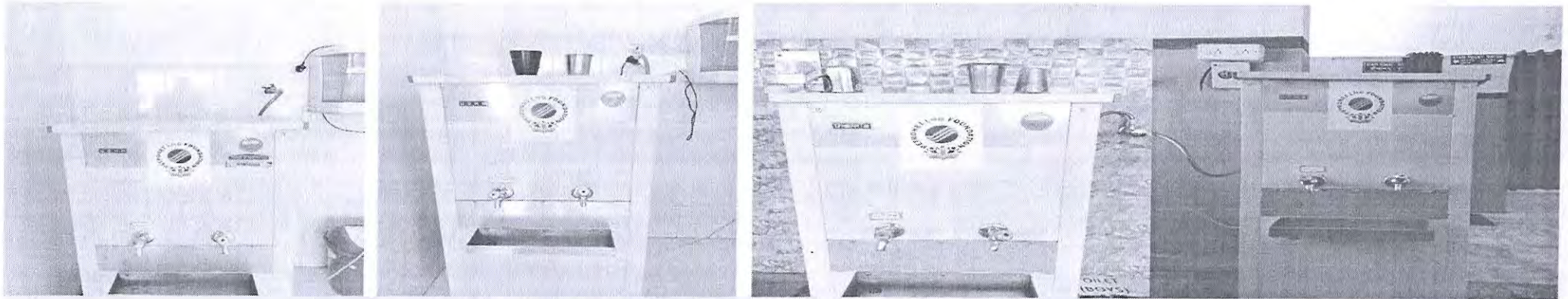


Awarding the best performers of the Velicham project.



# EDUCATION & SKILL DEVELOPMENT

## 3. Drinking Water Facility in Kendriya Vidyalaya, Kadavanthara



Support with 4 Nos of Water Cooler In Kendriya Vidhyalaya, Kadavanthara

## 4. Infrastructure Development of Rama Varma Union LP School, Cherai



Supply of 30 pairs of Benches and desk with 2 pairs of Almirah to RVU LP School, Cherai



# ENVIRONMENT

## 1. Haritha Vypin



Valedictory Ceremony of Haritha Vypin Street painting Drive in Cherai



Environment Day Celebration Under Haritha Vypin Project



# DISASTER MANAGEMENT

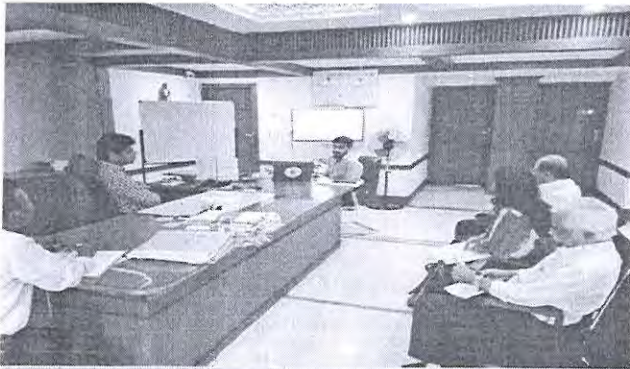


Supply of essential items to the relief camps in the state



# HEALTH/HUNGER/POVERTY ERADICATION

## 1. Numma Oonu – Hunger Eradication Project



Meeting on Numma Oonu with regard to its extension and expansion.

## 2. Supply of Rice bags through ADLCS



100 bags of rice supplied to underprivileged section in Kumbalam Grama panchayath through Ambedkar District Level Charitable Society .



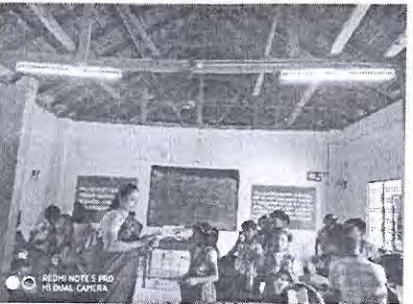
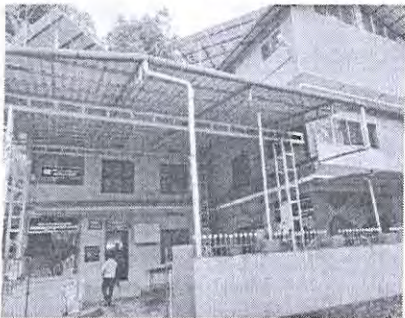
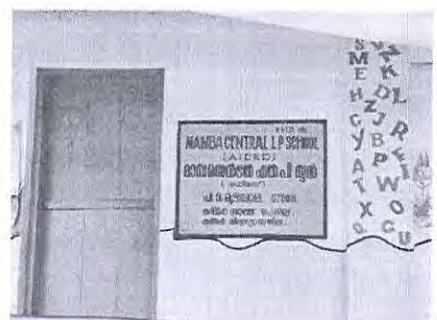
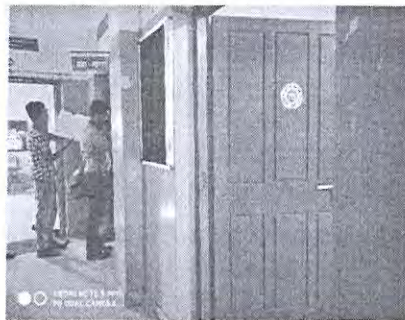
# GENDER EQUALITY/ SETTING UP OF OLD AGE HOME



Extended support in the infrastructure development of old age home run by Samraksha Charitable Trust.



# Project Assessment through Field Visits/ Meetings







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H  
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K  
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Test Report No: TC540219000002697P	Date: 01.07.2019	Page 1 of 1
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CUSTOMER DETAILS			
Customer Name & Address		M/s Petronet LNG Limited Survey No.347 ,Puthuvypu P.O Kochi - 682 508	
Customer Reference		Test Request Form Dated 25.06.2019	
SAMPLE DETAILS			
Sample Code	TC540219000002697P	Sample Received On	26.06.2019
Sample Name	Water	Sampling Procedure	---
Sample Description	Ground Water- Bore Well	Sampling Location	East Side
Identification By Customer	---	Sampling Condition	Good
Sampled On	25.06.2019	Test Started On	26.06.2019
Sampled By	Laboratory	Test Completed on	01.07.2019

SL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULT	ACCEPTABLE LIMIT (IS 10500 - 2012)
01	pH	IS 3025 Part 11:1983 RA 2017	---	6.72	6.50 - 8.50
02	Total Dissolved Solids	IS 3025 Part 16:1984 RA 2017	mg/L	172	500 (Max)
03	Turbidity	IS 3025 Part 10: 1984 RA 2017	NTU	0.80	1.00 (Max)
04	Chloride (as Cl)	IS 3025 Part 32:1988 RA 2014	mg/L	31.9	250 (Max)
05	Iron (as Fe)	IS 3025 Part 53:2003 RA 2014	mg/L	0.31	1.00 (Max)
06	Fluoride(as F)	APHA 23 <sup>rd</sup> Edition 4500-F- B D: 2017	mg/L	< 0.10	1.00 (Max)
07	Sulphate (as SO <sub>4</sub> )	IS 3025 Part 24:1986 RA 2014	mg/L	28.5	200 (Max)
08	Electrical Conductivity	IS 3025 Part 14:1984 RA 2013	μS/cm	278	---
09	Mercury (as Hg)	IS 3025 Part 48:1994 RA 2014	mg/L	< 0.001	0.001 (Max)
10	Lead (as Pb)	IS 3025 Part 47:1994 RA 2014	mg/L	< 0.01	0.01 (Max)
11	Copper (as Cu)	IS 3025 Part 42:1992 RA 2014	mg/L	< 0.05	0.05 (Max)
12	Total Chromium (as Cr)	IS 3025 Part 52:2003 RA 2014	mg/L	< 0.05	0.05 (Max)
13*	Zinc (as Zn)	IS 3025 Part 49:1994 RA 2009	mg/L	< 0.20	5.00 (Max)
14	Temperature	IS 3025 Part 9:1984 RA 2006	°C	29.0	---
15*	Salinity	SEAL/SOP/06	ppm	0.058	---
16	Oil & Grease	IS 3025 Part 39:1991 RA 2014	mg/L	< 5.00	---
17	Dissolved Oxygen	IS 3025 Part 38:1989 RA 2014	mg/L	6.75	---
18	Biochemical Oxygen Demand (3 days at 27 °C)	IS 3025 Part 44:1993 RA 2014	mg/L	< 2.00	---
19	Chemical Oxygen Demand	IS 3025 Part 58:2006 RA 2012	mg/L	< 10.0	---
20*	Cyanide (as CN)	IS 3025 Part 27:1986 RA 2009	mg/L	< 0.01	0.05 (Max)
21	Cadmium (as Cd)	IS 3025 Part 41:1992 RA 2014	mg/L	< 0.003	0.003 (Max)
22*	Pesticide	USEPA 508 : 1995	---	Absent	---
23*	Insecticide	USEPA 508 : 1995	---	Absent	---

\*Not Under NABL scope

Note: Parameters Lead, Mercury, Total Chromium does not meet the range of NABL Scope compare with Specification.

\*\*\*End of Report\*\*\*

For and on behalf of  
Standard<sup>S</sup> Environmental & Analytical Laboratories

Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

Standard<sup>S</sup> Environmental & Analytical Laboratories

Accreditation and Approval: NABL as per ISO 17025: 2005 & "A" Grade laboratory of KSPCB

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43  
Web: www.sealabs.in, E-mail: seaalab@gmail.com, info@sealabs.in





# Petronet LNG Limited

Survey No. 347, Puthuvypu P.O.  
Kochi - 682 508, India.  
Tel: +91-484-2502259 Fax: +91-484-2502264  
www.petronetlmg.com  
CIN L74899DL1998PLC093073  
PAN: AAACP8148D. GST: 32AAACP8148D1ZP

PLI/KOCHI/KSPCB/Form-V/2019-20

18.09.2019

KSPCB Consent No: PCB/HO/EKM-1/ICO-R/18/2018.

To,

The Chief Environmental Engineer,  
Kerala State Pollution Control Board,  
Gandhinagar, Kochi - 682020.

Sub: Submission of Environment Statement (Form-V).

Dear Sir/Madam,

Petronet LNG, Kochi terminal was commissioned on 20<sup>th</sup> August 2013 and KSPCB Consent number is PCB/HO/EKM-1/ICO-R/18/2018.

Kindly find Form-V (Environment Statement) of Petronet LNG Ltd, Kochi Terminal for the financial year 2018-2019, as per Environment (Protection) Rules, 1986.

Thanking you,

For, Petronet LNG Ltd.



T.N. Neelakantan,  
GGM & P (Plant Head).

Enclose: Environment Statement (Form-V).

Cc:

The MEMBER SECRETARY,  
Kerala State Pollution Control Board,  
Pattom P. O.,  
Thiruvananthapuram - 695004,  
Kerala.



Registered & Corporate Office:

World Trade Centre, First Floor, Babar 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



**ENVIRONMENTAL STATEMENT FORM-V**  
(See rule 14)

*Environmental Statement for the financial year ending with 31st March 2019*

**PART-A**

1	Name and address of the owner/ Occupier of the industry, operation or process.	:	Mr. Vinod Kumar Mishra, Director (Finance), Addition charge of Director (Technical).  <b>Kochi Address:</b> Petronet LNG Limited, Puthuvypu P.O., Ernakulam-382508  <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 Million TPA
4	Year of establishment	:	20 <sup>th</sup> August 2013
5	Date of the last environmental statement submitted.	:	11-09-2018

**PART -B**

Water and Raw Material Consumption:

- I. Water Consumption (M<sup>3</sup>/Day)
- Process : 6 M<sup>3</sup>/d
- Cooling : Nil
- Domestic : 22.9 M<sup>3</sup>/d

Name of Products	Process water consumption per unit of products	
	During the previous financial year	During the current financial year
1. RLNG	0.006 M <sup>3</sup> /MT	0.005 M <sup>3</sup> /MT

- 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	0.017*	0.021*

\*Converted LNG consumed in energy units (MMBTU)/ RLNG produced in energy units.





b) Air	Fire Pumps-C (Diesel Operated)	PM	0.00 Kg/d	20.0 mg/Nm <sup>3</sup>	No variation from prescribed standard
		CO <sub>2</sub>	0.00 T/d	1.9 %	
		CO	0.02 Kg/d	162.0 ppm	
		SO <sub>2</sub>	0.00 Kg/d	8.2 mg/Nm <sup>3</sup>	
		NO <sub>x</sub>	0.00 Kg/d	15.5 mg/Nm <sup>3</sup>	
	Fire Pumps-D (Diesel Operated)	PM	0.00 Kg/d	17.6 mg/Nm <sup>3</sup>	No variation from prescribed standard
		CO <sub>2</sub>	0.00 T/d	1.9 %	
		CO	0.02 Kg/d	140.5 ppm	
		SO <sub>2</sub>	0.00 Kg/d	7.5 mg/Nm <sup>3</sup>	
		NO <sub>x</sub>	0.00 Kg/d	15.3 mg/Nm <sup>3</sup>	
	Fire Pumps-E (Diesel Operated)	PM	0.00 Kg/d	17.2 mg/Nm <sup>3</sup>	No variation from prescribed standard
		CO <sub>2</sub>	0.00 T/d	1.9 %	
		CO	0.02 Kg/d	143.8 ppm	
		SO <sub>2</sub>	0.00 Kg/d	8.5 mg/Nm <sup>3</sup>	
		NO <sub>x</sub>	0.00 Kg/d	19.6 mg/Nm <sup>3</sup>	
	Fire Pumps-F (Diesel Operated)	PM	0.00 Kg/d	18.5 mg/Nm <sup>3</sup>	No variation from prescribed standard
		CO <sub>2</sub>	0.00 T/d	1.9 %	
		CO	0.01 Kg/d	113.5 ppm	
		SO <sub>2</sub>	0.00 Kg/d	7.7 mg/Nm <sup>3</sup>	
		NO <sub>x</sub>	0.00 Kg/d	16.3 mg/Nm <sup>3</sup>	

**Note:** All environmental monitoring activities during the FY 2018-19 was carried out by M/s. Standard Environment & Analytical Laboratories, a KSPCB approved agency.





### 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	Discarded containers / barrels and Plastic/Ink/paint wastes ( Cat 33.3)	:	Plastic or metallic barrels containing chemical / oil residue.
4	Industrial use of paint, plastic and Ink wastes (Schedule 1, Category 21.1)	:	Paint pigment, solvents etc.

#### Storage and disposal practice:

Hazardous wastes generated inside the terminal is being disposed through an agency, authorized by Kerala state pollution control board (KSPCB). Petronet LNG Limited has made agreement with M/s. APJ Refineries Pvt. Ltd. for disposing used oil generated in the terminal. Used oil generated is been collected in MS barrels or other suitable containers at the generation point. Collected waste is stored in hazardous waste storage area designated for the purpose with impervious flooring and proper roofing and handed over to authorized vendor for disposal.

Waste residues containing oil such as oil soaked cotton wastes generated at various locations are collected and kept in designated storage bin located inside hazardous waste storage shed. It is be disposed through an authorized agency.

Discarded containers / barrels and Plastic/Ink/paint wastes are collected & stored in hazardous waste storage area of proper roofing and concrete flooring inside the terminal and is disposed through authorised agency, M/s. KEIL (Kerala Enviro Infrastructure Limited).

Hazardous waste storage area is kept clean and display boards are provided at the site for storing hazardous waste as per the category. Records of hazardous wastes generated in the terminal are maintained in Form 3.

### PART-G

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

We have developed and implemented Environment Management Cell (EMC), the cell is headed by GM (Plant Operations & Maintenance), and other members are the Head of Lab, Civil, Materials, Technical and HSE. Sufficient man-hours are allocated for functioning of EMC. Environment management cell meets once in a month and take review of the situation.

We have adopted Dry low emission burner (DLFB) in our GTG, this system ensures that the stringent emission standards are met.



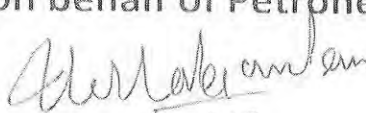


PART - I

MISCELLANEOUS:

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

Nil

<b>For and on behalf of Petronet LNG Limited</b>	
Sign	: 
Date	: 17/9/19
Approved By : T. N. Neelakantan	
Designation : GGM & P (Plant Head)	

