

**Petronet LNG Limited** 

Survey No. 347, Puthuvypu P.O. Kochi - 682 508, India. Tel: +91-484-2502259 Fax: +91-484-2502264 www.petroneting.com CIN L74899DL1998PLC093073 PAN: AAACP8148D. GST: 32AAACP8148D12P

PLL/KOCHI/MOEF/2021-22/02

29th May, 2021

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 13<sup>th</sup> March 2006.

Sir,

The Six monthly compliance report for the period ending 31<sup>st</sup> March 2021 for the above clearance is attached.

Thanking You,

With Regards

shedde

Yogananda Reddy Chief General Manager & Vice 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 Bo

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 <u>COMPLIANCE REPORT of CRZ Clearance no. J-16011/26/2001-IA-III vide your letters dated 13<sup>th</sup></u> <u>MARCH 2006;</u> for the Construction of LNG Import Terminal at Puthuvypeen Island, Kochi, Kerala by M/s Petronet LNG Ltd.

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

#### A. SPECIFIC CONDITIONS

- i. All conditions stipulated in the clearance letter dated 2nd June, 2003 should be strictly implemented. Also, all conditions stipulated by the State Coastal Zone Management Authority vide their letter No.1 143/A212005/STED, dated 14th October, 2005 should be complied.
  - Conditions mentioned in the Letter No. 4215/B1/2000/STED, dated 09<sup>th</sup> February-2001 does not specify any conditions for compliance.
  - All conditions mentioned in the Letter No. 1143/A2/2005/STED dated 14<sup>th</sup> October-2005 from Kerala coastal Zone Management Authority are complied with. Point wise compliance status is given as Annexure#1.
- **ii.** No Objection Certificate/consent should be obtained from the Kerala State Pollution Control Board for the enhanced LNG capacity at the terminal, before initiating the project.
  - We have obtained Consent to Establish with No. PCB/NOC/EK/117/98 dated 17<sup>th</sup> September-1999 before initiating the project and the CTE was subsequently renewed.
  - We have obtained Consent to Operate with no. PCB/HO/EKM-1/ICO-R/18/ 2018 dated 10<sup>th</sup> October 2018, and is valid up to on 31<sup>st</sup> March 2023, a copy of the same has already been submitted along with compliance report dated March-2019.
- **III.** The project proponent should ensure that all necessary precautions including installation of Full-containment Type LNG tank with concrete roof as indicated in the risk analysis report should be implemented.
  - PLL has built two LNG storage tanks, both the tanks are of Full-containment type with concrete roofing.
- iv. The project proponent should ensure that no additional dredging/expansion or regasification plant will be undertaken for the above project.
  - PLL will not undertake additional dredging / expansion of regasification plant without approval of MOEF&CC. Only maintenance dredging is being carried out by Cochin port Trust.
- v. The budget allocated for environment safeguard measures should not be diverted for any other purpose.

 Budget allocated for environment safeguard will not be diverted for other purposes. Environment budget for FY 2020-21 is attached here as Annexure # 2.

- vi. The comprehensive Environmental Impact Assessment report which is under preparation should be completed early and the final report submitted to this Ministry within one year,
  - Comprehensive EIA of 2.5 MMTPA Terminal and EIA with QRA and Site emergency response plan of 5 MMTPA terminal has already been submitted with vide letter ND/LNG/K22/2K1 dated 16<sup>th</sup> February-2001 and letter dated 22<sup>nd</sup> September-2011 respectively.
- vii. Based on the risk analysis, Disaster Management Plan should be prepared and submitted to this Ministry within 6 months.
  - EIA with QRA and site emergency response plan (for 5 MMTPA terminal) submitted to MoEF vide letter dated 22<sup>nd</sup> September-2011 for EAC recommendations.

#### **B. GENERAL CONDITIONS**

1.	Construction of the proposed structure should be undertaken meticulously conforming to the existing Central/local rules and regulations including Coastal Regulation Zone Notification, 1991 and its amendments. All the construction designs/drawings relating to the proposed construction activities must have approvals of the concerned State Government Departments/Agencies.	<ul> <li>The construction drawings have been approved by the concerned State Government Department/Agencies like Department of Factories and Boilers, Fire and rescue Services etc. Copy of the approvals from Factories and Boiler, Fire rescue services has already been submitted with six monthly compliance report dated 05<sup>th</sup> April-2013.</li> </ul>
11.	The proponent shall ensure that as a result of the proposed constructions, ingress of the saline water into the groundwater does not take place. Piezometers shall be installed for regular monitoring for this purpose at appropriate locations on the project site.	<ul> <li>PLL is continuously ensuring that there is no ingress of saline water into the ground water by periodic analysis of ground water, and for the same we have installed a Piezometer at green belt inside the terminal.</li> <li>Sampling of the water drawn from Piezometer is being carried out by KSPCB approved third party agency. The latest Ground water analysis report of the month of December - 2020 is enclosed as Annexure#3.</li> </ul>
III.	Handling, manufacturing, storage and transportation of all hazardous chemicals should be carried out in accordance with MSIHC Rules, 1989	<ul> <li>PLL has notified as Major Accident Hazard (MAH) category industry by Factories &amp; Boilers dept. as per</li> </ul>

	and subsequent amendments, All approvals from State and Central nodal agencies including OISD, Chief Controller of Explosives, Chief Inspectorate of Factories must be obtained. A comprehensive contingency plan in collaboration with the concerned authorities must be formulated before commissioning of the project to meet any eventuality in case of an accident	<ul> <li>the requirement of MSIHC rules 1989.</li> <li>We have received final clearance from Chief Controller of Explosive for commissioning of Jetty, LNG unloading line, LNG tanks, and Regasification facilities with letters dated 04th February-2013. We have already submitted the same with six monthly compliance reports, dated 05th April-2013.</li> <li>Permit to construct and plan approvals were obtained from Director of Factories and Boilers. We have already submitted the details regarding the same with six monthly compliance report, dated 05th April-2013.</li> <li>We have received the renewed factory license dated 16th December 2020, valid till 31st December-2021; a copy of the same has been enclosed here as Annexure # 4.</li> <li>A comprehensive Emergency response and Disaster Management Plan has prepared by Petronet to meet any eventualities in case of an accident. This plan was submitted to District collector office vide letter no. PLL/KOCHI/ERDMP/DC/2014-15/C-01 dated 5th April-2014.</li> <li>All approvals as necessary were obtained before the commissioning of the project. Terminal was commissioned on 20th August-2013 and all activities related to commissioning were completed by 10th September 2013.</li> </ul>
Iv.	A well-equipped laboratory with suitable instruments to monitor the quality of air and water shall be set up as to ensure that the quality of ambient air and water conforms to the prescribed standards. The laboratory will also be equipped with qualified manpower including a marine biologist so that the marine water quality is regularly monitored in order to	<ul> <li>A well-equipped laboratory with suitable Equipment's for monitoring the quality of air and water is in place, with Qualified and competent employees. However, PLL is carrying out periodic monitoring of environmental parameters by a</li> </ul>

	ensure that the marine life is not adversely affected as a result of implementation of the said project. The quality of ambient air and water shall be monitored periodically in all the seasons and the results should be properly maintained for inspection of the concerned pollution control agencies. The periodic monitoring reports at least once in 6 months must be sent to this Ministry (Regional Office at Bangalore) and State Pollution Control Board.	<ul> <li>KSPCB approved third party agency.</li> <li>24 hrs ambient air quality monitoring is being carried out once in a month at four different locations and analysis reports for the month of October-2020 to March 2021 are enclosed here as Annexure#5.</li> <li>PLL is conducting marine water quality analysis once in six month. The latest test report of December -2020 is enclosed here as Annexure#6.</li> </ul>
<b>v</b> .	Adequate provisions for infrastructure facilities such as water supply, fuel for cooking, sanitation, etc. must be provided for the laborers during the construction period in order to avoid damage to the environment, Colonies for the laborers should not be located in the Coastal Regulation Zone area. It should also be fuel wood purpose	<ul> <li>During the construction phase, PLL has provided adequate infrastructure facilities such as water supply, fuel for cooking, sanitation, etc. to the labourers.</li> <li>Labour colonies were not located in Costal Regulation Zone area.</li> </ul>
vi.	To prevent discharge of sewage and other liquid wastes into the water bodies, adequate system for collection and treatment of the wastes must be provided. No sewage and other liquid wastes without treatment should be allowed to enter into the water bodies.	Individual Septic tanks with soak pits have provided for collection of sewage. The collected sewages are regularly disposed through authorized agency of Cochin corporation. A STP of capacity 15KLD is also installed to handle domestic sewages. Treated water from STP was used for gardening purpose and sludge being used as manure. No sewage or waste from PLL are allowed to enter water bodies
vii.	Appropriate facility should be created for the collection of solid and liquid wastes generated by the barges/vessels and their safe treatment and disposal should be ensured to avoid possible contamination of the water bodies	Vessels and tugs dispose their garbage as per the guidelines of Annex V of Marpol (IMO). We have already submitted the related details with six monthly compliance report dated 05 <sup>th</sup> April-2013.
viii.	Necessary navigational aids such as channel markers should be provided to prevent accidents. internationally recognized safety standards shall be applied in case of barge/vessel movements	PLL has provided 4 Nos. of Buoys as instructed by cochin post trust. In future, if required, more navigation aids will be provided as per instruction/guidance of Cochin Port Trust. All required safety standards will be applied to vessel movements as per the directions of Cochin Port Trust.

ix.	The project authorities should take appropriate community development and welfare measures for villagers in the vicinity of the project site, including drinking water facilities. A separate fund should be allocated for this purpose.	PLL is carrying out various projects for community development and welfare through its subsidiary company known as Petronet LNG Foundations Limited. A separate fund has been earmarked for this purpose. A brief description of our CSR activities with photographs is enclosed here as <b>Annexure # 7</b> . An amount of Rs.21469603/- (Rupees Two Crore Fourteen lakh Sixty nine Thousand six hundred and three only) had spent in FY 2020-21 for CSR projects. Petronet had spent a total amount of Rs.144378135 /- (Rupees Fourteen Crore Forty three lakhs seventy Eight Thousand Hundred & thirty five only) for CSR projects till date. Detailed expense report is attached here as <b>Annexure #8</b> .
х.	The quarrying material required for the construction purpose shall be obtained only from the approved quarries/borrow areas. Adequate safeguard measures shall be taken to ensure that the overburden and rocks at the quarry site do not find their way into water bodies.	Quarrying material was sourced from Government approved quarries. We have already submitted the details regarding the same with six monthly compliance reports dated on 05 <sup>th</sup> April-2013.
xi.	The dredging operations to be undertaken with the prior approval of this Ministry, shall be executed with appropriate safeguard measures to prevent turbidity conditions in consultation with the expert agencies such CWPRS/NIO.	PLL has obtained Environmental clearance from MOEF&CC vide their order No. J-16011/26/2001-IA-III dated 16 <sup>th</sup> November-2010 for undertaking dredging operations of the basin. Dredging operations is completed and PLL has handed over the basin to M/s Cochin Port Trust for its maintenance.
xii.	For employing unskilled, semi-skilled and skilled workers for the project, preference shall be given to local people.	During the project, PLL had given preference to locals while employing unskilled, semi-skilled and skilled worker wherever possible based on their qualification and merits.
xiii.	The recommendations made in the Environment Management Plan and Disaster Management Plan, as contained in the Environmental Impact Assessment and Risk Analysis Reports of the project shall be effectively implemented.	All recommendations made in Environment Management Plan and Disaster Management Plan, as contained in Environment Impact Assessment and Risk Analysis Report of the project were effectively implemented.

xiv.	A separate Environment Management Cell with suitably qualified staff to carry out various environment issues should be set up under the charge of a Senior Executive who will report directly to the Chief Executive of the Company.	PLL has set up an Environment Management Cell under CGM & VP – (Plant Head). Other members of the team includes Head of; Operation department, C&P (Contracts & Procurement) department, Technical department, HSE department, Civil Department, Lab operation & a representative from HR department for effectively implementing the stipulated environment safeguards. The SOP of the Environment Management Cell was revised on 01.06.2020 and the copy of the same has been submitted along with the compliance report up to September 2020.
х <b>v</b> .	The project affected people, if any should be properly compensated and rehabilitated.	No people affected directly as the project was on uninhabited land. Some Land was acquired by Cochin Port Trust for constructing new access road for the project and those affected were provided with infrastructure like road, drain, electricity and water as per the guidelines by authorities.
Xvi.	The funds earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year wise expenditure on environmental safeguards should be reported to this Ministry.	Budget allocated for environment safeguard will not be diverted for other purposes. Environment budget for FY 2020-21 is attached here as <b>Annexure # 2.</b>
Xvii.	Full support should be extended to the officers of this Ministry's Regional Office at Bangalore and the officers of the Central and State Pollution Control Boards by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the 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, Bengaluru 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
Xviii.	In case of deviation or alteration in the project including the implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of	PLL has not carried out any deviation or alteration in the project. PLL will comply with this requirement and will take permit from the Ministry

	new ones for ensuring environmental protection. The project proponents should be responsible for implementing the suggested safeguard measures.	prior to any deviation, alteration and modification in the project.
xix.	This Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	PLL is aware of the Ministry's right to revoke clearance for not complying with the conditions stipulated in the clearance.
XX.	This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary for environmental protection, which shall be complied with.	PLL will comply with additional conditions, if any suggested by the ministry or any other competent authority in writing.
xxi.	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Committee and may also be seen at Website of the Ministry of Environment & Forests at http://www.envfornic.in. The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bangalore.	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.
xxII.	The Project proponents should 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 28th Feb 2011. PLL had already 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, from Director (Technical) addressed to Additional Director, MoEF & CC, Delhi and copy marked to MoEF & CC regional office.

Thanking You,

With Regards

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Yogananda Reddy Chief General Manager & Vice President (Plant Head)

Compliance report Up to 31<sup>st</sup> March 2021

### Conditions mentioned in the Letter No. 4215/B1/2000/STED, dated 9<sup>th</sup> February-2001 does not specifies any conditions for compliance.

Conditions mentioned in the Letter No. 1143/A2/2005/STED dated 14<sup>th</sup> October-2005 from Kerala coastal Zone Management Authority and PLL compliance remarks are as under:

Sr. No.	Conditions mentioned	PLL Compliance remarks
1.	No activities will be undertaken in the Mangrove area or in the buffer zone of the mangrove. The route of the pipeline and other activities shall have minimum of 50m from the nearby mangroves and forest land if any in the CRZ area.	PLL's plot is not in the mangrove area, it is about 100 m away from the buffer zone. All activities including the laying of pipelines are confined within the PLL's plot.
2.	Expansion of existing service road in the Costal Regulation Zone-I shall not be carried out.	Expansion of the existing service road in the Costal Regulation Zone-I belongs to Panchayat and PLL will not do any expansion of the service road.
3.	No groundwater shall be tapped for the project	PLL will not tap any ground water during operation of the terminal as water requirement will be met from the condensed water from air and by local purchase. During construction stage, requirement of water was met by outsourcing. At present the water requirement is met by procuring the water from vendors.
4.	The proponent shall obtain necessary No Objection Certificate (NOC) from Kerala State Pollution Control Board.	PLL has obtained required NOC from Kerala State Pollution Control Board in 1999 vide NOC No. PCB/NOC/EK/117/98 dated 17 <sup>th</sup> September-1999 which was renewed every time (mostly 2 years) before expiry of its validity period. We have obtained Consent to Operate with no. PCB/HO/EKM-1/ICO-R/18/ 2018 dated 10 <sup>th</sup> October 2018, and is valid up to on 31 <sup>st</sup> March 2023, a copy of the same has already been submitted along with the compliance report dated March-2019.
5.	EIA document including risk analysis and disaster management plan should be submitted directly to MoEF for environment clearance, under intimation to this office.	Comprehensive EIA of 2.5 MMTPA Terminal and EIA with QRA and Site emergency response plan of 5 MMTPA terminal has already been submitted with vide letter ND/LNG/K22/2K1 dated 16 <sup>th</sup> Feb-2001 and letter dated 22 <sup>nd</sup> Sept-2011 respectively.

l. No	Item	Amount (RS.)	Remark
1	Environment Monitoring charges	229146	
2	Consent fees to Pollution Control board	500	
3	Kitchen garden maintenance charges	44000	
4	Green Belt development & maintenance charges	6557394	
5	CSR expenditure for FY 2020-21	2,14,69,603	
6	World Environment Day Celebration	1,00,000	
7	IMS Annual surveillance audit (ISO14001)	50,000	
8	Hazardous waste disposal charges	100000	
9	Maintenance charges for CAAQMS (Continous Ambient Air Quality Monitoring Station)	997248	
10	Maintenance charges for Environment statistics LED display	148500	
11	Waste Bin maintenance charges	100000	
12	STP Maintenance charges	739665	
otal ( T	Three Crore Five Lakhs Thirty Six Thousand and Fifty Six only)	30536056	







33.9

10.1

0.17

42.1

846

< 0.002

0.39

#### TEST REPORT

ULR No: TC540220000004267F		D	ate: 30.12.2020	Page	1 of 2
		CUSTOMER DI	ETAILS		
	M/s Petro	net LNG Limited			
Customer Name &	Survey No.	347, Puthuvypu P.O			
Address		nakulam District			
Customer Reference	Test Requ	est dt 23.12.2020			
		SAMPLE DET	TAILS		
Product Category	Water		Sample Code	WT20120052	
Sample Name	Ground Water	r - Piezometer Pump	Sample Received on	23.12.2020	)
Sample Conditions at Receipt	Fit for Analysi		Temperature @ Receipt	30 °C	
Sample Quantity & Packing	2 litre & 100n Plastic Bottle	nl	Test Commenced on	on 23.12.2020	
Sampled by	Lab Authorize	ed Sampler	Test Completed on	30.12.2020	
Information Provided by Customer					
Customer		DETAILS OF SA	MPLING		
Sample Source	Ground Water	- Piezometer Pump	Date of Sampling	23.12.2020	0
Sampling Procedure	SEAAL/ENL/C SEAAL/MBL/S	GEN/SOP/01& SOP/06	Sample Temperature	32 °C	
	TEST R	ESULTS - CHEMI	CAL PARAMETERS		
SI.No. PARAL	METERS	TES	ST METHOD	UNIT	RESULT
1 pH		IS 3025 Part 11	:1983 RA 2017		7.35
2 Total Dissolved	Solids	IS 3025 Part 16	:1984 RA 2017	mg/L	550
3 Turbidity		IS 3025 Part 10	: 1984 RA 2017	NTU	570

Shency Joy Dy. TM Chemical Checked by:

Chloride (as Cl)

Iron (as Fe)

Fluoride(as F)

Sulphate (as SO<sub>4</sub>)

Mercury (as Hg)

Lead (as Pb)

**Electrical Conductivity** 

4

5

6

7

8

9

10



IS 3025 Part 32:1988 RA 2014

IS 3025 Part 53:2003 RA 2014

IS 3025 Part 24:1986 RA 2014

IS 3025 Part 14:1984 RA 2013

APHA (23rdEdition)3112-B: 2017

APHA (23rd Edition)3111-B: 2017

APHA 23rdEdition 4500-F- B D: 2017

Laboratory Head Authorized Signatory

mg/L

mg/L

mg/L

mg/L

µS/cm

mg/L

mg/L

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.





#### TEST REPORT

ULR N	JLR No: TC54022000004267F		te: 30.12.2020	Page 2 of	
11	Copper (as Cu)	IS 3025 Part 42:19	992 RA 2014	mg/L	0.33
12	Total Chromium (as Cr)	IS 3025(Part 52):2	IS 3025(Part 52):2003		<0.40
13	Zinc (as Zn)	APHA 3111B 23rd	l Edn, 2017	mg/L	1.66
14	Temperature	IS 3025 Part 9:19	84 RA 2006	°C	30.0
15	Salinity	SEAAL/SOP/06		ppt	0.06
16	Oil & Grease	IS 3025 Part 39:19	991 RA 2014	mg/L	53.0
17	Dissolved Oxygen	IS 3025 Part 38:19	989 RA 2014	mg/L	3.78
18	Biochemical Oxygen Demand (3 days at 27 °C)	IS 3025 Part 44:19	993 RA 2014	mg/L	78.6
19	Chemical Oxygen Demand	IS 3025 Part 58:20	006 RA 2012	mg/L	2964
20	Cyanide (as CN)	IS 3025 (Part-27):	1986 (Reaff.2003)	mg/L	< 0.01
21	Cadmium (as Cd)	APHA (23rd Edition	a) 3111-B: 2017	mg/L	< 0.03
22	Pesticide	SEAAL/INS/RWM	/SOP/01		Absent

Note: Values given for test parameters Mercury, Lead, Copper, Chromium, Zinc, Cyanide and Cadmium are our MDL values (Minimum Detectable Values) as per NABL scope..

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

Shency Joy Dy. TM Chemical Checked by:



PN. Laboratory Head

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.



TEST REPORT

Test Report No: WT20120052		Date: 30.12.2020	Page 1 of 2
	CUSTOMER I	DETAILS	
Customer Name & M/s Petronet LNG Limite Address Survey No.347, Puthuvypu Kochi , Ernakulam District			
Customer Reference	Test Request dt 23.12.2020		
	SAMPLE DE	TAILS	
Product Category	Water	Sample Code	WT20120052
Sample Name	Ground Water - Piezometer Pump		23.12.2020
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	30 °C
Sample Quantity & Packing	2 litre & 100ml Plastic Bottle	Test Commenced on	23.12.2020
Sampled by	Lab Authorized Sampler	Test Completed on	30.12.2020
Information Provided by Customer		· ·	
	DETAILS OF SA	AMPLING	
Sample Source	Ground Water - Piezometer Pump	Date of Sampling	23.12.2020
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	32 °C

TEST RESULTS – CHEMICAL PARAMETERS						
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT		
1	Insecticide	USEPA 508 : 1995		Absent		

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

P. N. Laboratory Head

Authorized Signatory

Shency Joy Dy. TM Chemical Checked by:

Annexure - 4



### GOVERNMENT OF KERALA DEPARTMENT OF FACTORIES AND BOILERS

Form-4

(Prescribed under Rule 5)

License is hereby granted to Shri/Smt. VINOD KUMAR MISHRA (DIRECTOR FINANCE)() for the premises detailed hereunder for the use as a factory within the limits specified in the Permit (s) and for the manufacturing process stated herein after subject to the provision of the Factories Act 1948 and the Kerala Factories Rules 1957.

The license shall remain in force till the 31st day of December 2021.

1.	Registration No	D09/CHN/03/286/2013	5.	Permit No & Date	175/2012 (17-07-2012)
2.	Name & Address of the Factory	PETRONET LNG LTD PUTHUVYPU P.O,ERNAKULAM, KOCHI, KERALA - 682 508.	6.	Name of the Region	Ernakulam
3.	Registration Date	09-05-2013	7.	Name of the Division	Kochi
4.	4. Details of the premises		8.	Manufacturing Process & NIC Co	ode
	Panchayat	Elamkunnappuzha		1. RECEIVING STORAG	E RELOADING
	Village	Puthuvype (CT)		BUNKERING REGASIFICA	TION AND SUPPLY OF
	Survey No	347		LNG & RLNG (52109)	
	Taluk	Kochi			
	District	Ernakulam			

Place : Ernakulam Date : 16-12-2020

### License Details

Calendar Year	No. of Workers	Power	Fees	Additional Fee	Excess Fee	Remittance Date	Renewed Date	Sign	of Official
2021	380	69920.83 KW +18249.99 KVA	228220.00			12-10-2020	16-12-2020		
Amendment Details									
Factory Na	me	No. of Workers	Power(KW)	Fees	Additional Fee	Remittance Date	Amendment Year	Amendment Date	Sign of Official
PETRONET LNG LTD		290	67834.97 (18249.99 KVA)	0	0.0		2018	25-07-2018	
PETRONET LNG LTD		380	67834.97 (18249.99 KVA)	790	13280.0	23-10-2018	2018	19-12-2018	
PETRONET LNG LTD		380	69920.83 (18249.99 KVA)	830	0.0	17-10-2019	2019	16-11-2019	
Transfer Details									
Transferred From	Transf	erred To	Transfer Fee	Remittance	Year of	Transf	er Date	Sign	of Official

Transferred To	Transfer Fee	Remittance	Year of	Transfer Date	Sign of Official
		Date	Transfer		
Vinod Kumar Mishra (Director Finance)	830.00	26-08-2019	2019	25-09-2019	
()					
\ (			Date	Date Transfer	Date Transfer

(License Renewal application for 2022 should be submitted on or before 31-10-2021)

\* This is a computer generated certificate. Hence there is no need for a physical signature

\* Third Party Verification is enabled for Digitally Signed License.Please visit https://idms.fabkerala.gov.in/fabnet/verifyLicense.do

### Annexure- 5

				Ambient Air Mo	nitoring Report, (Octo	ber 2020 - March 2021)			
OCATION NO.	Location of Ambient Air Sampling	Month	PM (<10 microns) in Micrograms/m3; Limit 100 Micrograms/m3	PM (<2.5 microns) in Micrograms/m <sup>3</sup> ; Limit 60 Micrograms/m <sup>3</sup>	SOx as SO₂ in Micrograms/m³; Limit 80 Micrograms/m³	NOx, Oxides of Nitrogen in Micrograms/m3 ; Limit 80 Micrograms/m3	Carbon Monoxide (CO); mg/m <sup>3</sup> 4.0 mg/m <sup>3</sup>	OZONE Micrograms/m <sup>3</sup> ; Limit 180 Micrograms/m <sup>3</sup>	Hydrocarbons (HC); Micrograms/m3 ;
		Oct-20	58.9	22.1	0	0	0	0	(
		Nov-20	63.4	25.8	0	0	0	0	(
	(Watch Tower-2)	Dec-20	70.4	27.1	0	0	0	0	(
1	near MGH	Jan-21	76.5	29.5	0	0	0	0	(
	building	Feb-21	72.5	24.6	0	0	0	0	(
	Dullang	Mar-21	78.4		0	0	0	0	(
		Avarage	70.02	26.10	0.00	0.00		0.00	0.00
	Near Fire Station Building	Oct-20	64.2		0			0	(
		Nov-20	70.6		0	4.36	0	0	(
		Dec-20	68.3		0	5.18	0	0	(
2		Jan-21	73.66		0	4.87		0	(
		Feb-21	79.9		0	3.96	0	0	
		Mar-21	72.3	25.9	0	4.98	0	0	
		Avarage	71.49	26.60	0,00	4.71		0.00	0.00
		Oct-20	60.5		0	5.37		0	(
	Fire water	Nov-20	66.3			4.98			
	Reservoir+	Dec-20	69.4			4.16			
3		Jan-21	74,5		0	3,98			
		Feb-21	70.8		0	4,16		0	
	Watch Tower-5	Mar-21	76.9		0	5.38		0	
_	14	Avarage	69.73		0.00	4.67	-	0.00	0.0
		Oct-20	67.1				0	0	
		Nov-20	63.8					0	
	Watch Tower-3	Dec-20	70.1					0	
4		Jan-21	67.6	24.8	0	0	0	0	
	near Tank T-101	Feb-21	74.1	26.8	0	0	0	0	
		Mar-21	80.6	29.5	0	0	0		
		Average	70.55		0.00	0 00	0.00	0.00	0.0

Dy. Manager HSE

2021

Sr. Manager HSE



Annexure -6



#### TEST REPORT

ULR No: TC540220000	004266F	Date: 30.12.2020	Page 1 of 2
	CUSTOMER	R DETAILS	
Customer Name & Address	M/s Petronet LNG Limited Survey No.347, Puthuvypu Kochi , Ernakulam District	P.O	
Customer Reference	Test Request dt 23.12.20	20	
	SAMPLE	DETAILS	
Product Category	Water	Sample Code	WT20120051
Sample Name	Marine Water- Port Jetty	Sample Received on	23.12.2020
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	30 °C
Sample Quantity & Packing	2 litre & 100ml Plastic Bottle	Test Commenced on	23.12.2020
Sampled by	Lab Authorized Sampler	Test Completed on	30.12.2020
Information Provided by Customer			
	DETAILS OF	F SAMPLING	
Sample Source	Marine Water- Port Jetty	Date of Sampling	23.12.2020
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	32 °C

	TEST RESULTS – CHEMICAL PARAMETERS									
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT						
1	Temperature	IS 3025 Part 9:1984 RA 2006	0C	30.0						
2	Colour	IS 3025 Part 4:1983 RA 2017	Hazen	1.00						
3	рН	IS 3025 Part 11:1983 RA 2017		7.88						
4	Electrical Conductivity	IS 3025 Part 14:1984 RA 2019	µS/cm	44300						
5	Total Dissolved Solids	IS 3025 Part 16:1984 RA 2017	mg/L	28795						
6	Turbidity	IS 3025 Part 10:1984 RA 2017	NTU	7.50						
7	Chloride (as Cl)	IS 3025 Part 32:1988 RA 2019	mg/L	18694						
8	Salinity	SEAAL/SOP/06	ppt	33.8						
9	Sulphate (as SO <sub>4</sub> )	IS 3025 Part 24:1986 RA 2019	mg/L	2231						
10	Iron (as Fe)	IS 3025 Part 53:2003 RA 2019	mg/L	0.46						



Checked by:



oratory Head La

Authorized Signatory

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#### TEST REPORT

LR N	o: TC540220000004266F		Date: 30.12.2020	Page	2 of 2
11	Mercury (as Hg)	APHA (23rdE	dition) 3112-B: 2017	mg/L	< 0.002
12	Lead (as Pb)	APHA (23rd B	Edition) 3111-B: 2017	mg/L	1.55
13	Copper (as Cu)	IS 3025 Part	42:1992 RA 2019	mg/L	0.08
14	Zinc (as Zn)	APHA 3111B	23rd Edn, 2017	mg/L	0.26
15	Nickel (as Ni)	IS 3025 Part	54: 2003 RA 2019	mg/L	0.58
16	Cadmium (as Cd)	IS 3025 Part	41: 1992 RA 2019	mg/L	0.11
17	Cyanide (as CN)	IS 3025 Part	27:1986 RA 2019	mg/L	< 0.01
18	Fluoride(as F)	APHA 23rdEd	ition 4500-F- B D: 2017	mg/L	1.59
19	Arsenic (as As)	IS 3025 Part	37: 1988 RA 2019	mg/L	< 0.002
20	Hexavalent Chromium (as Cr <sup>3+</sup> )	IS 3025 Part	52:2003 RA 2019	mg/L	< 0.20
21	Pesticide	USEPA 508 :	1995		Absent
22	Oil & Grease	IS 3025 Part	39:1991 RA 2019	mg/L	< 1.00
23	Dissolved Oxygen	IS 3025 Part	38:1989 RA 2019	mg/L	5.18
24	Biochemical Oxygen Demand (3 days at 27 °C)	IS 3025 Part 44:1993 RA 2019		mg/L	4.98
25	Chemical Oxygen Demand	IS 3025 Part	58:2006 RA 2017	mg/L	2483
26	Total Suspended Solids	IS 3025 Part	17:1984 RA 2017	mg/L	9.20

	TEST RESULTS - BIOLOGICAL PARAMETERS								
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT					
1	Total Bacterial Count	IS 1622:1981 RA 2014	cfu/mL	88					
2	Faecal Coliform	IS 1622:1981 RA 2014	MPN/100ml	< 2					
3	E coli	IS 1622:1981 RA 2014	MPN/100ml	< 2					

Remarks:

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

Shency Joy Dy. TM Chemical

Checked by:

S. Salin Microbiologist

Laboratory Head

Authorized Signatory

Authorized Signatory

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TEST REPORT

Test Report No: WT201	20051	Date: 30.12.2020	Page 1 of 2	
	CUSTOME	R DETAILS		
Customer Name & Address	M/s Petronet LNG Limite Survey No.347, Puthuvypu Kochi , Ernakulam District	P.O		
Customer Reference	Test Request dt 23.12.20	20		
	SAMPLE	DETAILS		
Product Category	Water	Sample Code	WT20120051	
Sample Name	Marine Water- Port Jetty	Sample Received on	23.12.2020	
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	30 °C	
Sample Quantity & Packing	2 litre & 100ml Plastic Bottle	Test Commenced on	23.12.2020	
Sampled by	Lab Authorized Sampler	Test Completed on	30.12.2020	
Information Provided by Customer				
	DETAILS OF	F SAMPLING		
Sample Source	Marine Water- Port Jetty	Date of Sampling	23.12.2020	
Sampling Procedure SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06		Sample Temperature	32 °C	

	TEST	RESULTS – CHEMICAL PARAMETERS		
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT
1	Insecticide	USEPA 508 : 1995		Absent

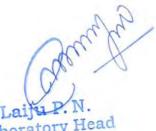
Remarks:

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



Checked by:





Authorized Signatory

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# CSR UPDATE KOCHI

Major Highlights FY-2020-21

## **HEALTHCARE & DISASTER MANANGEMENT**



5000 nos. of food and sanitization kits distributed for fishermen families across 6 panchayats in Vypin through the Kerala State Coastal Area Development Corporation (KSCADC).



Distributed Personal Protective Equipment's (PPE's) for Healthcare workers in Kalammasery Medical College (COVID hospital) worth Rs. 18.50 lakhs through Indian Medical Association (IMA)

### **HEALTHCARE & DISASTER MANANGEMENT**





മമിഷണർ പി.ജി. ലാലു ഏറ്റവാങ്ങുന്നു.

Distributed 1080 nos. of Personal Protective Equipment (PPE) kits to the Customs officers deployed at three airports (Kannur, Kozhikode, Calicut) in Kerala.

Distributed 500 nos. of Personal Protective Equipment (PPE) kits, Face shields, N95 masks to the Health care workers in Medical College Hospital, Kottayam



Setting up of COVID APEX Centre in PVS Government Hospital, Ernakulam in association with Indian Medical association (IMA) -

### **HEALTHCARE**

### **MOBILE MEDICAL UNIT**



Inauguration of Mobile Medical Van for Vypin area held in association with M/s Wockhardt Foundation



### **DISASTER MANANGEMENT**



കൊച്ചിയിൽ അഗ്നിരക്ഷാ സേനയ്ക്കുള്ള ഉപകരണങ്ങളുടെ കൈമാറ്റച്ചടങ്ങിനെത്തിയ കലക്ടർ എസ്. സുഹാസ് പ്രദർശിപ്പിച്ചിരിക്കുന്ന ബോട്ടുകളിലൊന്നിൽ.

### അന്നിരക്ഷാ സേനയ്ക്ക് ഉപകരണങ്ങൾ കൈമാറി

ഓഫിസർ കെ.കെ.ഷിജു അധ്യ ക്ഷത വഹിച്ചു. ജില്ലാ ഫയർ ഓഫി സർ എ.എസ്. ജോജി, ഫോർട്ട് കൊച്ചി ഐഎടിഡബ്ല്യുആർ റീജ നൽ ഫയർ ഓഫിസർ എം.ജി. രാ ജേഷ്, പെട്രോനെറ്റ് എൽഎൻജി സിഎസ്ആർ ഹെഡ് ആശിഷ് ഗു പ്ത, ബിപിസിഎൽ എച്ച്എസ്ഇ ജനറൽ മാനേജർ എം.കെ. രാമച ന്ദ്രൻ, ഗാന്ധിനഗർ സ്റ്റേഷൻ ഫയർ ഓഫിസർ എ. ഉണ്ണിക്കൃഷ്ണർ എന്നിവർ പ്രസംഗിച്ചു.

കൊച്ചി ● കലക്ടറുടെ പൊതുന ന്മ ഫണ്ടിൽ നിന്ന് അഗ്നിരക്ഷാ സേനയ്ക്കു നൽകുന്ന ഉപകരണ ങ്ങൾ കലക്ടർ എസ്. സുഹാസ് കൈമാറി. ഇൻഹ്ലേറ്റബിൾ റെസ്ക്യൂ ബോട്ടുകൾ, സേർച് ലൈറ്റ്, ലൈഫ് ബയോ, ലൈഫ് ജാക്കറ്റ്, മഴക്കോട്ടുകൾ, എമർജൻസി എസ്കേപ് ബ്രീത്തിങ് ഡിവൈസ്, പാരച്യൂട്ടി സിഗ്നൽ റോക്കറ്റ് തുട ജനം ഉപകരണങ്ങളാണു കെട്ടിറ്റ്റ്റ്റ്റ്റ് റെട്ടിറ്റ്റ്റ് പായർ O AI DUAL CAMERA

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പെൻഷനേഴ്സ് ഷൻ സംസ്ഥാന റ ളനവും ജനറൽ ക ളെ എറണാകുള ആശിർഭവനിൽ റ സിസി വർക്കിങ് ( സുധാകരൻ എം ചെയ്യും.

അസോസിയേ പ്രസിഡന്റ് അയം അനുസ്മരണ പ്രദ ബഹനാൻ എംപ് പെൻഷൻകാരെ പതിനൊന്നാം ഗ റിപ്പോർട്ടിനെതിം കൾ സമ്മേളനം മെന്നു സെക്രട്ട അറിയിച്ചു.

#### സ്വകാര്യവൽം സംയുക്തം

കൊച്ചി പൊ ഇൻഷാറൻസ്, Elogi mon മാർച്ച് 1ന് റൈ ളിൽ ചേരും നജ നവ്ന 0. 00° a കേന്ദ്ര പൊ ങ്ങൾ, ส റെയിൽറേ കേന്ദ്ര സ ലുള്ള സ്വ allas mi ലാളിക ദിക്കു നേതാം கை. 1 සංග්, നി. ര 610)



Distribution of Disaster management Equipment to Fire Brigade of Ernakulam by District Collector

Lela

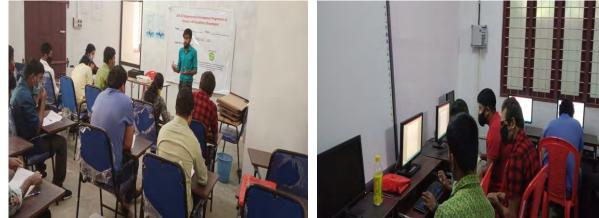
## **EDUCATION**



Distribution of ladies bicycles to 2000 girls students of fisher folk community in the 9 coastal districts of Kerala



Construction of School library for Arumughavilasam LP school, Kannur



Skill training classes for Person with Disabilities (PWD's) in association with NHFDC.

## **EDUCATION**



Infrastructure development of Laxmi Vilasam and LP school in Mannayad, Kannur



Tobacco consumption awareness campaign by CCRC Need Assessment study in Vypin area conducted through Barath Mata College, Thrikkakara.

Training equipment or INSIGHT Coaching Programme conducted by Panoor Police.

### **EDUCATION**



## **PROMOTION OF ARTS & SPORTS**



### Promotion of the art form of Kathakali through Thripunithura Kathakali Kendram.



Development of playground for Elankunnapuzha Govt. HSS











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Annexure -8

	CSR Expenditure - Petrone	t LNG Limited	d, Kochi Te	rminal (FY 2	2020-21)	
SI.No	Project Details	Category	Project Location	Approved / Committed (INR Lakh)	Payment done (INR lakh)	Project Status
Projec	t carried forward for implementation from FY 19-2	0 to FY 20-21				
1	Support in the printing of Booklets for the Tobacco Consumption awareness Campaign by Cochin Cancer Research Centre, Kalammasery	Education	Ernakulam	1,80,000.00	1,80,000.00	Project Completed
2	Support towards the distribution of 2000 bicycles to the girl students from fishermen families	Education	9 Coastal Districts, Kerala	90,00,000.00	36,11,240.00	Project Completed. Advance of INR 45 Lakh was given in FY2019-20
3	Support towards the promotion of the art form of Kathakali through Tripunithura kathakali Kendram.	Promotion of Arts	Ernakulam	5,00,000.00	-	Project ongoing
4	Request to support in the infrastructure development of Arumughavilasam LP School, Pathiriyad	Education	Kannur	5,00,000.00	4,69,828.00	Project Completed
5	Conduct Need assessment survey in Vypin Area		Ernakulam	5,00,000.00	-	Project completed
6	Naipunyam' skill development program in association with CIPET Kochi for 120 underprivileged students for 2019-20	Education	Ernakulam	94,50,000.00	34,12,000.00	Project under implementation
7	Construction of Anganawadi in Elankunnapuzha Grama Panchayath, Vypin	Education	Ernakulam	4,96,000.00	-	Project under implementation
8	Developing a playground in Govt. higher secondary school, Elankunnapuzha, Vypin	Sports	Ernakulam	5,00,000.00	5,00,000.00	Project Completed
9	Infrastructure development of Mannayad Laxmi Vilasam LP school, Kannur.	Education	Kannur	2,97,000.00	2,97,000.00	Project Completed
10	Support towards the socially committed programme called "INSIGHT' under Janamaithree police, Panoor	Education	Kannur	2,32,000.00	2,32,000.00	Project Completed
11	Improving the infrastructure facilities of Mannayad L.P school, Kannur	Education	Kannur	2,00,000.00	2,00,000.00	Project Completed

12	Proposal to install CCTV cameras at Goshree Junction & Vypin Jungar Jetty ensuring women safety & welfare of the people of Vypin area	Safety	Ernakulam	1,00,000.00	-	Project Completed
13	Toilet complex for SDPY school Edavanakad, Vypin	Health	Ernakulam	15,50,000.00	3,87,500.00	Project under implementation
14	Supply of Disaster Management equipment to Ernakulam District Administration to withstand the upcoming natural disasters affecting the district	Disaster Management	Ernakulam	24,99,000.00	24,99,000.00	Project Completed
15	Development of soil-less green median gardening using Bio- waste along Kochi metro rail corridoor	Waste management	Ernakulam	4,50,000.00	1,50,000.00	Project under implementation
	Total (Rs.)			2,64,54,000.00	1,19,38,568.00	
Proje	cts Approved in FY 2020-21					
11	COVID -19 Containment support to Indian Medical Association (IMA) through distribution of personal protective Equipments (PPE) kits to the health workers	Covid & Disaster Management	Ernakulam	18,13,000.00	18,13,000.00	Project Completed
12	Approval for the distribution of food and sanitization kit for the fishermen community in an around Vypin, Ernakulum	Covid & Disaster Management	Ernakulam	29,32,000.00	29,32,000.00	Project Completed
13	Distribution of PPE kits for the Airport Customs officers in Kerala	Covid & Disaster Management	Trivandrum, Kannur, calicut	6,86,070.00	6,86,070.00	Project Completed
14	Distribution of 500 nos of PPE kits, N95 mask and face shield for the health workers of Medical college Hospital, Kottayam	Covid & Disaster Management	Kottayam	3,97,125.00	3,97,125.00	Project Completed
15	PVS Apex COVID Centre	Covid & Disaster Management	Ernakulam	25,27,840.00	25,27,840.00	Project Completed
16	Safe Transportation for PWDs of Mahatma BUDs School	Education	Ernakulam	12,40,000.00	11,75,000.00	Project Completed
Total	(Rs.)			95,96,035.00	95,31,035.00	

CSR EXPENSES - Till March 2021		
SI. No	Financial Year	Total CSR
		Expenditure
		(Lakhs)
1	2013-14	25457793
2	2014-15	16008694
3	2015-16	22301262
4	2016-17	16826007
5	2017-18	7824860
6	2018-19	19145429
7	2019-20	15344487
8	2020-21	21469603
		144378135
TOTAL ( Forteen Crore Forty Three Lakhs Sevety		
Eight Thousand One Hundred and Thirty Five only		