

#### Petronet LNG Limited

Survey No. 347, Puthuvypu P.O. Kochi - 682 508, India. Tel: 0484 - 2502259 Fax: 0484 2502264 www.petroneting.com CIN L74899DL1998PLC093073

#### PLL/KOCHI/MOEF/2018-19/01

28th May, 2018

Additional Principal Chief Conservator of Forests (C)

Ministry of Environment, Forest and Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th 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 2<sup>nd</sup> June 2003.

Sir,

The Six monthly compliance report for the above clearances are attached for the period ending 31st March 2018.

Thanking You,

With Regards

(T. N. Neelakantan)

Sr. Vice President (Plant Head)

Hellale, andam

CC:

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

Tel.: 02641-257004/05/07, 253182, Fax: 02641-253180

COMPLIANCE REPORT of CRZ Clearance no. J-16011/26/2001-IA-III vide your letters dated 02nd JUNE 2003 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 above EC & CRZ Clearance is as follows:

- i. All the conditions stipulated by the Science Technology and Environment Department, Government of Kerala vide their Letter No. 4215/B1/2000/STED, dated 9<sup>th</sup> February-2001 should be effectively implemented.
  - Conditions mentioned in the Letter No. 4215/B1/2000/STED, dated 9<sup>th</sup> February-2001 does not specifies and 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 are
    and PLL compliance remarks are as under:

| Sr.<br>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. 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 <b>No</b> .              |
|    |                                      | PCB/HO/EKM/ICO-R/12/                     |
|    |                                      | 2016 dated 28th February                 |
|    |                                      | 2016, and was valid up to on             |
|    |                                      | 31st March 2018, a copy of               |
|    |                                      | the same was submitted                   |
|    |                                      | along with the six monthly               |
|    |                                      | compliance report for the                |
|    |                                      | period of October-2016 to                |
|    |                                      | March-2017. We have                      |
|    |                                      | applied for the renewal of               |
|    |                                      | our Consent to Operate                   |
|    |                                      | and we expect to receive                 |
|    |                                      | the same very soon.                      |
| 5. | EIA document including risk analysis | Comprehensive EIA of 2.5                 |
|    | and disaster management plan         | MMTPA Terminal and EIA                   |
|    | should be submitted directly to MoEF | with QRA and Site                        |
|    | for environment clearance, under     | emergency response plan                  |
|    | intimation to this office.           | 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. |

- ii. All the conditions stipulated by Kerala Pollution Control Board in their NOC No. PCB/NOC/EK/117/98 dated 17.9.99 should be effectively implemented.
  - Conditions mentioned by KSPCB in the CTE No. PCB/NOC/EK/117/98 dated 17.9.99 are and PLL compliance remarks are as under:

| Sr. | Conditions mentioned                      | PLL Compliance remarks        |
|-----|---|-------------------------------|
| No. |   |                               |
| 1   | No.3: The applicant shall comply with     | PLL will comply with any such |
|     | the instructions that the Board may       | instructions from the Board   |
|     | issue from time to time regarding         | regarding prevention and      |
|     | prevention and control of air, water,     | control of air, water, land   |
|     | land and sound pollution.                 | and sound pollution.          |
| 2   | No.4: The effluent treatment facilities   | PLL is generating only        |
|     | proposed namely sewage treatment          | sewage waste and is being     |
|     | plant/septic tank, oil traps, hot water   | handled through septic tank   |
|     | cooling facilities etc. shall be provided | and soak pit in individual    |
|     | before commissioning the industry.        | building; details of STP have |
|     | Addition facilities required, if any to   | been submitted to KSPCB.      |

| 3 | achieve the effluent standards laid down by the Board under section 17(1)(g) of Water (Prevention and Control of Pollution) Act' 1974 shall also be made along with.  No.5: Air pollution control devices required shall be installed before commissioning the industry for controlling air pollution. Minimum stack/chimney height shall be as | PLL will comply with effluent standard of Water Act and if additional facilities are required then PLL will provide those facilities for treatment of effluent.  PLL is using Natural Gas as fuel for GTGs. GTGs are inbuilt with DLE burner (Low NOx burners) and CEMS.   |
|---|---|--|
|   | detailed below: 69.0 m above ground level for flare stack   | PLL had received letter from KSPCB dated 18-10-2010 regarding change in this condition, wherein the flare stack height reduced from 69.0 m to 43.2 m, a copy of this letter had already been submitted with six monthly report dated 30th September-2013.  |
|   | 5.5 meter above the roof level of<br>Generator room for the Gensets of<br>capacity 750KVA   | PLL has provided the stack discharge at 3.5 meter above the roof level of Generator room.  |
| 4 | No.6: For bringing into use any outlet to discharge and for the discharge of sewage/trade effluent, the applicant shall obtain consent to discharge from the Board under the Water (Prevention and Control of Pollution) Act'1974 before commissioning the industry.  | PLL is generating only sewage waste and is being handled through individual building's septic tank and soak pit. PLL has obtained Consent to Operate with No. PCB/HO/EKM/ICO-R/12/2016 dated 28thFebruary 2016, and was valid up to on 31st March 2018, a copy of the same was submitted along with the six monthly compliance report for the period of October-2016 to March-2017. We have applied for the renewal of our Consent to Operate and we expect to receive the same very soon. |
| 5 | No.7: The applicant shall obtain the "Consent to Operate" from the Board under the Air (Prevention and Control of Pollution) Act'1981 before commissioning the industry.  | PLL has obtained Consent to Operate with No. PCB/HO/EKM/ICO-R/12/2016 dated 28th February 2016, and was valid up to on   |

|    |  | 31st March 2018, a copy of the same was submitted along with the six monthly compliance report for the period of October-2016 to March-2017. We have applied for the renewal of our Consent to Operate and we expect to receive the same very soon. |
|----|--|---|
| 6  | No.8: The sign board showing the name of the industry shall be displayed at the entrance of the site.  | PLL has displayed the sign board showing name of the industry at the entrance of the site.  |
| 7  | No.9: Suitable species of trees shall be planted and maintained within and along the periphery of the factory premises, forming a green belt to improve the environment.                                       | Green Belt area has been developed along the periphery of the factory premises with trees like Gulmohar, Amaltas, Neem etc.   |
| 8  | No.10: The date of commissioning of the industry shall be intimated to the Head Office and Regional office concerned of the Board at least one month in advance.   | PLL had informed the date of commissioning of the industry vide letter no PLL/KOCHI/KSPCB/2013-14/C-06 dated 07th August-2013, A copy of this letter has already been submitted with six monthly report dated 30th September-2013.                  |
| 9  | No.11: There shall not be any fugitive emission from the plant/premises.   | There will not be any fugitive emission from the plant/premises.  |
| 10 | No.12: The location of the industry shall<br>be as shown in the drawing attached.<br>No change or alteration to the above<br>shall be made.  | There is no change made in the location of the industry, Location of the industry is as per the drawing.  |
| 11 | No.13: The temperature difference between cooling water discharged and the receiving water body (sea water) temperature shall not be more than 50C and monitoring arrangements for the same shall be provided. | PLL will not discharge cooling water into sea or any other water body.  |
| 12 | The ambient sound level measured at a distance of 1 m away from the boundary shall not exceed 65 dB (A) during day time and 55 dB (A) during night time.   | Ambient sound levels measured at a distance of 1 m away from the boundary walls are well within the limits. Ambient sound level monitoring is done every month by KSPCB approved agency and the compiled  |

|    |   | report for the period of October-17 to March-18 is enclosed as <b>Annexure#1</b> .   |
|----|---|--|
| 13 | Consent to establish shall be obtained prior to setting up of captive power plant in futures. | PLL has incorporated the details of GTG, used for captive power generation, in the subsequent application of the renewal for Consent to Establish. |

- iii. No change in scope of work shall be made without prior approval of this Ministry.
  - Any change in scope would be carried out only with the prior approval of the Ministry.
- iv. Project proponent shall take all safety measures and take into account the dynamics of the marine/coastal area before constructing the break waters. The recommendations made by CWPRS shall be duly implemented. The dredged materials shall be disposed of as per the recommendations by CWPRS.
  - The location and size of the basin has been arrived at after detailed model studies conducted by CW&PRS and further revalidated by HR Wallingford. The dredged material is being disposed off at the prescribed off-shore dumping ground identified as per CWPRS recommendations for Cochin Port Trust.
  - The Cutter suction Dredger's dredging material is dumped on the western side
    of the terminal as per the Cochin Port Trust allocated area for dumping. The
    Trailer Suction Dredger's dredging material is being dumped at the designated
    dumping site of Cochin Port at outer sea, about 15.6 km from the shore.
- v. No activities will be undertaken in the mangrove area or in the buffer zone of the mangroves. The route of the pipeline and other activities shall have minimum of 50 meters distance from the nearby mangrove and forest lands, if any, in the CRZ area. Expansion of existing service road into Coastal Regulation Zone-I (I) shall not be carried out.
  - PLL plot is not in the mangrove area and is at about 100m from the buffer zone. All activities and pipelines are confined to this plot. The existing service road which belongs to Panchayat has not been expanded into the Coastal Regulation Zone-I (i) area.
- vi. The laying and commissioning of the pipelines shall be in accordance with the established procedures; practices and rules. LNG facilities shall be designed, constructed and operated as per existing international standards. The pipelines shall be provided with in-built gas

leakage detection and warning system. Adequate measures for monitoring pressures in excess of those for which the pipeline is designed shall be ensured to prevent leakage of gas.

- The terminal construction complies with all existing International codes and best practices. Sufficient safety measures and warning systems are being in built into the system for detection of gas leakage, overpressure and other deviations in operating parameters. Details regarding the same has already been submitted with six monthly report dated 30<sup>th</sup> September-2013.
- Standards such as OISD-194, EN: 1473, NFPA 59A and others are followed during the terminal construction.
- vii. Design and alignment of the pumping platform/jetty and other structures should be chosen in such a way that it causes minimum resistance to the flow of tidal waters.
  - Jetty structure was designed and constructed after due consideration of this aspect. Jetty foundation is built on piles structure to cause minimum disturbance to tidal waters.
- viii. The pipelines related to effluent discharge, sea water intake and pumping of LNG should be laid on sea floor after trenching. Trenching operations should be restricted to minimum area to minimize damage to benthic fauna.
  - PLL has already submitted to MoEF the change of the regasification process
    of the terminal and Sea water intake is not required in Shell and Tube
    Vaporizers (STVs). It may be noted that PLL will not use sea water in any
    manner nor will discharge any effluent into the sea during operation of the
    terminal. Pipelines for LNG pumping from jetty to tanks are laid above
    ground along with trestle.
- ix. Disposal facilities should be completed prior to the commissioning of project activities. As per the thermal Plume Studies by NIO, Goa, the return water should be discharged at a location having water depth of about 3 m. Post monitoring should be carried out at definite intervals in order to ensure mid-course corrections, if any, for maintenance of environmental quality.
  - PLL has already submitted to MoEF the change of the regasification process of the terminal and Sea water intake is not required in Shell and Tube Vaporizers (STVs). It may be noted that PLL will not use sea water in any manner nor will discharge any effluent into the sea during operation of the terminal. As PLL is not using sea water in any manner this condition is not applicable.

- x. Fish eggs, larvae and small fish as well as plant and animal plankton pass through the water intake screen and at times through the trash bars. Accordingly, the water intake for regasification purpose is to be provided with a velocity cap, trash bars, and low intake velocity be maintained to minimize the entry of debris and fish.
  - PLL has already submitted to MoEF the change of the regasification process
    of the terminal and Sea water intake is not required in Shell and Tube
    Vaporizers (STVs). As PLL is not using sea water in any manner this
    condition is not applicable.
- xi. No groundwater shall be tapped for the project.
  - PLL did not tap groundwater during construction stage and will not during operation phase. Water requirement during operation of the terminal will be generated and met from the condensed water from air. At present the water requirement is met by procuring the water from vendors due to running of terminal at low output.
- xii. Specific arrangement for rainwater harvesting should be made in the project design and the rainwater so harvested should be optimally utilized.
  - Rainwater collection system is in place for LNG storage tanks top and the water collected is being used in the terminal.
- xiii. The Bathymetric survey of the dredged material disposal site should be carried out regularly and it should be ensured that there is no navigational hazard due to reduction of navigational depth as a result of project activities. Location of dumping site should be informed to all concerned.
  - The dredged material disposal site is Common dumping site at outer sea, 15.6 km away from shore and managed by Cochin Port Trust. The survey is being carried out by Cochin Port Trust.
- xiv. Regular surveys shall be conducted to identify changes in the channel morphology so that navigational hazards are minimal.
  - The channel belongs to Cochin Port and its Morphology survey is done by Cochin Port Trust.
- xv. Mangrove afforestation will be promoted in consultation with the expert agencies and the local NGOs in the area. A detailed plan shall be worked out in this regard and submitted to this Ministry within 3 months.

- A Detailed plan for Mangrove afforestation has already been submitted with six monthly report dated 30<sup>th</sup> September-2013.
- In FY 2014-2015 Petronet LNG Ltd, Kochi, arrived at an agreement with Kerala State Social Forestry for a mangrove afforestation project in Ernakulum district, the total cost of the project is 71.05 lakhs. Petronet LNG Limited have already transfer fund of Rs.45.00 lakh for the Mangrove Afforestation Project which is entitled "Project for Mangrove afforestation in Ernakulam district" All details with regard to this project had already been submitted with six monthly compliance report dated 30th March-2015. An updated progress report of the project is enclosed as Annexure # 2.
- xvi. Marine environment shall be periodically monitored to assess changes, if any, in the ecology and suitable remedial measures, if any required, shall be taken.
  - PLL is conducting marine water sampling and analysis by a KSPCB approved third party M/s. Cochin test house and the report suggest no adverse change in the marine environment.
  - Latest copy of the marine water sampling report dated December-17 is enclosed as Annexure # 3.
- xvii. The budget allocated for environment safeguard measures shall not be diverted for any other purpose.
  - Budget allocated for environment safeguard is not diverted for any other purposes. PLL has provided budget for the environment safeguard and details of the expenditure is enclosed as Annexure# 4.
- xviii. The comprehensive Environmental Impact Assessment report shall be completed early and the final report submitted to this Ministry within one year from the date of this clearance letter. Based on the comprehensive EIA report, additional environmental safeguards, as required, shall be implemented by the proponents.
  - 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.
- xix. Based on the risk analysis, Disaster Management Plan should be prepared and submitted to this Ministry within 6 months. Necessary safety norms for the movement of LNG ships are to be laid down by Cochin Port Trust Authorities within their jurisdiction and communicated to the project proponent for strict compliance with a view to prevent collision, grounding or ramming or any other major accidents.

- 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.
- Emergency Response and Disaster Management Plan of Petronet LNG Ltd, Kochi terminal was submitted with six monthly compliance report dated 05<sup>th</sup> April-2013.

#### 5. **GENERAL CONDITIONS:**

| i.   | Construction of the proposed structure should be undertaken meticulously conforming to the existing Central/local rules and regulations including Coastal Regulation Zone Notification, 1991and its amendments. All the construction designs/drawings relating to the proposed construction activities must have approvals of the concerned State Government Departments/ Agencies.   | 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 of Factories and Boiler, Fire rescue services has already been submitted with six monthly compliance report dated 05th April-2013.   |
|------|---|---|
| ii.  | 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 two Piezometers at appropriate locations.</li> <li>Sampling of the water drawn from Piezometers is being carried out by approved third party. The latest Ground water analysis report for the month of February-18 is enclosed as Annexure#5.</li> </ul>  |
| iii. | Handling, manufacturing, storage and transportation of all hazardous chemicals should be carried out in accordance with MSIHC Rules, 1989 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>We have applied for NOTIFICATION OF SITES to Factories &amp; Boilers department vide letter no. PLL/KOCHI/F&amp;B/2012-13/C-04 dated 28th November 2012 as per requirement of MSIHC rules 1989. The same has already been submitted with six monthly compliance report dated 05th April-2013.</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> </ul> |

| iv. | Minor oil spills are likely to be  | <ul> <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 30th January 2018, valid till 31st December-2018; a copy of the same is enclosed as Annexure#6.</li> <li>We have prepared Emergency response and Disaster Management Plan and it was submitted to District collector office vide letter no. PLL/KOCHI/ERDMP/DC/2014-15/C-01 dated 5th April-2014.</li> <li>A comprehensive contingency plan was prepared in collaboration with the concerned authorities before commissioning of the project to meet any eventuality in case of an accident</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> <li>Oil spill Contingency plan is formulated to</li> </ul> |
|-----|--|---|
| IV. | caused due to ship movement in the port. Engine room waste, oil ballast and tank wash water have to be discharged to the shore reception for treatment by port authorities or by certified contractors. In case of major oil spills due to accidents. Petronet LNG Limited should interact with Kochi Port to ensure full preparedness to undertake all combat operations. | take care of such eventualities. We have already submitted details regarding the  |
| V   | Control room/tower should be equipped with modern communication and control device to act instantaneously if spill/leakage occurs. At the jetty, loading arm   | <ul> <li>Control room is equipped with modern communication and control facilities including emergency shut-down systems in the event of spill occurring.</li> <li>Loading arms are equipped with latest</li> </ul>   |

|       | T  |   |
|-------|--|---|
|       | should be equipped with latest Emergency Release Systems (ERS) and monitoring device for LNG services. Articulated cargo transfer arm should be used at the unloading jetty. It shall be ensured that LPG and LNG tankers are scheduled properly to avoid bunching and also that LPG will not be unloaded from the ship when the LNG tanker is at berth.   | <ul> <li>Emergency Release System (ERS).</li> <li>We do not handle LPG at our jetty so the condition stand complied.</li> </ul>   |
| vi.   | Dry chemical firefighting extinguishers should be provided at all levels of the jetty to permit personnel to fight small fires. Water spray for dispersing un-ignited vapour clouds should be kept as standby. Full- fledged firefighting facilities should be provided at jetty.  | <ul> <li>Full-fledged firefighting facilities is provided in the jetty to handle any emergencies in the event of a fire.</li> <li>DCP extinguishers are provided at every level of jetty. Water curtain system is also provided at required locations.</li> <li>Brief note on Fire protection facilities have already been submitted with six monthly compliance report dated 30th September-2013.</li> </ul>   |
| vii.  | 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 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>A well-equipped laboratory with suitable Equipments for monitoring the quality of air and water is in place, with Qualified and competent personals. However, PLL is carrying out periodic monitoring of environmental parameters by KSPCB approved agency.</li> <li>Ambient air monitoring is carried out once in a month at four different locations and analysis report for the month of October-17 to March-18 is enclosed as Annexure # 7.</li> <li>PLL is conducting marine water quality analysis, once in six month. The latest test report, dated December-17 is enclosed as Annexure # 3.</li> </ul> |
| viii. | 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   | <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</li> </ul>  |

|       | the environment, Colonies for the   | Costal Regulation Zone area.   |
|-------|---|--|
|       | laborers should not be located in the Coastal Regulation Zone area. It should also be fuel wood purpose   |  |
| ix.   | 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 being provided for collection of sewage. The collected sewages are regular disposal through authorized agency of Cochin corporation.  No sewage or waste from PLL will be allowed to enter water bodies  |
| x.    | 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 will 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 05th April-2013.  |
| xi.   | 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 directions of Cochin Port Trust.  |
| xii.  | 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.                                    | A separate fund for CSR is kept aside by PLL and we have carried out various activities for the community development and welfare of villagers. PLL is carrying out community development and welfare measures for villagers of nearby village; Rs 78.24 Lakhs was spent on CSR activity for the Financial year 2017-2018. Details regarding the CSR activity is enclosed as Annexure # 8. |
| xiii. | 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. | PLL sourcing of quarrying material is only from Government approved quarries. We have already submitted the details regarding the same with six monthly compliance report on dated 05th April-2013.  |
| xiv.  | The dredging operations to be undertaken with the prior approval of this Ministry, shall be executed with appropriate safeguard measures to   | PLL has obtained Environmental clearance from the MOEF vide their order No. J-16011/26/2001-IA-III dated 16th November-2010 for undertaking  |

| xv.    | prevent turbidity conditions in consultation with the expert agencies such CWPRS/NIO.  For employing unskilled, semi-skilled and skilled workers for the project, preference shall be given to local people.  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. | dredging operations of the basin. Dredging operations is completed and PLL has handed over the basin to M/s Cochin Port Trust for maintenance.  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.  All recommendations made in Environment Management Plan and Disaster Management Plan, as contained in Environment Impact Assessment and Risk Analysis Report of the project are effectively implemented.     |
|--------|--|--|
| Xvii.  | 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 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 is attached as <b>Annexure#9</b> |
| Xviii. | 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 guideline by authorities.  |
| xix.   | 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.  |
| XX.    | Full support should be extended to the officers of this Ministry's Regional  |  |

| xxi.   | 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 mitigative measures and other environmental protection activities.  In case of deviation or alteration in the project including the   | Bengaluru and the officers of the Central and State Pollution Control Board during the inspection for monitoring purpose by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protection activities.  PLL has not carried out any deviation or alteration in the project. |
|--------|--|---|
|        | implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of new ones for ensuring environmental protection. The project proponents should be responsible for implementing the suggested safeguard measures.   | PLL will comply with this requirement and will take permit from the Ministry prior to any deviation, alteration and modification in the project.  |
| xxii.  | 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.   |
| xxiii. | 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 any additional conditions stipulated by the ministry or any other competent authority.   |
| xxiv.  | 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 along with the six monthly compliance report dated 30th September-2013.                     |

| XXV. | The Project proponents should inform | Site appraisal clearance obtained on 28th  |
|------|--------------------------------------|--|
| 7    |                                      | developmental work was required, as this involved only augmentation of equipment in the same land. |

Thanking You,

With Regards

(T. N. Neelakantan)
Sr. Vice President (Plant Head)

|         | Ambien                                  | Ambient Noise Mo | <b>Aonit</b> | oring | nitoring Report, October-17 to March-18 | t, Oct | ober  | -17 to | Marc  | h-18  |        | ¥      |       |
|---------|---|------------------|--------------|-------|---|--------|-------|--------|-------|-------|--------|--------|-------|
| Sr. No. | Avarage, Month                          | 0ct-17           | -17          | Š     | Nov-17                                  | Dec-17 | -17   | Jan-18 | 18    | Fe    | Feb-18 | Mar-18 | 18    |
|         | Location                                | Day              | Night        | Day   | Night                                   | Day    | Night | Day    | Night | Day   | Night  | Day I  | Night |
|         | Limit                                   | 65.00            | 55.00        | 65.00 | 55.00                                   | 65.00  | 55.00 | 65.00  | 55.00 | 65.00 | 55.00  | 65.00  | 55.00 |
| 1       | East side Gate Outside boundary wall    | 53.80            | 45.40        | 52.90 | 44.80                                   | 51.70  | 43.70 | 52.10  | 44.30 | 50.90 | 43.40  | 49.10  | 42.20 |
| 2       | 2 North side Gate Outside boundary wall | 56.10            | 44.50        | 55.80 | 43.90                                   | 54.30  | 42.50 | 53.00  | 41.90 | 52.70 | 42.80  | 51.20  | 40.30 |
| 3       | 3 West side Gate Outside boundary wall  | 54.60            | 45.90        | 55.10 | 46.30                                   | 56.10  | 45.20 | 55.70  | 46.70 | 54.10 | 45.20  | 53.60  | 41.80 |
| 4       | 4 South side Gate Outside boundary wall | 54.80            | 45.70        | 53.90 | 45.30                                   | 54.50  | 43.90 | 52.90  | 45.60 | 53.00 | 43.90  | 52.90  | 41.00 |
|         | Avg (Year)                              | 54.83            | 45.38        | 54.43 | 45.08                                   | 54.15  | 43.83 | 53.43  | 44.63 | 52.68 | 43.83  | 51.70  | 41.33 |

Dy. Manager HSE

No. E2-461/18

Office the Assistant Conservator of Forests Social Forestry Division, Ernakulam Manimala Road, Edappally. E-Mail:acf.sf-ekm.for@kerala.gov.in Ph: 0484-2344761.

Date:07..05..2018

From

Assistant Conservator of Forests Social Forestry Ernakulam

To

The Vice President(O&M)
Petronet LNG Limited

Sir,

Sub: Project on mangrove afforestation in Ernakulam District -

Progress report reg.

Ref: That office letter no. PLL/KOCHI/HSE/13-14/C-2.

I am submitting herewith the progress report for mangrove afforestation project funded by Petronet LNG Limited as on 31.03.2018 for your kind perusal and necessary action. The Malippuram mangrove park has been inaugurated and functioning very well. I request your goodself to kindly deposit the next instalment of the project fund so that we shall continue our project.

Yours faithfully,

Assistant Conservator of Forests

7/3



Lat. on 42 of the late than

Social Forestry Division, Ernakulam 4700 seedlings raised department scheme under forest Remarks Progress report of mangrove afforestation and protection Project funded by Petronet LNG limited up to 31/03/2018 Expenditure incurred 1400626 426838 204880 83198 procurements of documentisation 15 awareness Seminars and classess 2 and aids 3 sites 22500 27200 Qty. Habitat improvement works done at Particulars of work 2015-16, 2016-17 &2017-18 Pasuvekkar Fish farm, Vijaan Canal, Sreevaraham fish farm Kumbalangi, Producton of mangrove seedlings Awareness class, seminar etc. and Planting of 15000 mangroves at Anjilithara areas, Kadamakkudy Kumbalanghi, Kadekurisu & Kadekurisu River Bit I, Bit II, other extension activities Name of work Physical Malippuram 71.50 Lakhs 44.57 Lakhs 45 Lakhs 12500 Nos. Production of mangrove seedlings | 12500 Nos. 30 nos. 3 sites Qty. Painting of mangrove seedlings climber cutting, waste and plastic General awareness & extension Habitat improvement including Expenditure from 31/03/2018 Name of work removal etc. activities Amount deposited in A/c. Total outlay of project SI.N Н o. 2 3 4

| ¥   |                 |  |  |   |  |         |
|---|-----------------|--|--|---|--|---------|
| 152600  | 25000           | 267458   | 1793340  | 91105                                       | 12810  | 4457855 |
| 12 nos.   | 54300           | 3000 Mangrove plants planted and 14 Kg Crabs givenas incentives      | 1 nos.   | ST  | 57   |         |
| Acrilic board for mangrove conservation message, board of mangrove areas etc. | Silvi-fisheries | Mangrove planting in private land and incentives by supplying fishes | A mangrove information centre has developed at Malippuram owned by Fisheries Department Mangrove area (2 Acre) Construction of walk way,bridges, entrance arch, toilet, information centre and ticket counter Etc. | TA of staff and other office expences       | Engaging Man Mazdoor for<br>conducting survey of Mangrove areas<br>in Ernakulam District | TOTAL   |
| 18 nos.   | LS              | S  | LS.  | LS  |  |         |
| Signages  | Silvi-fisheries | Incentives to existing mangrove<br>owners                            | Eco tourism activities involving<br>the local community and other<br>entry point activities  | Over head charges and other office expences |  |         |
| Ŋ   | 9               | ∞  | 78.9   | 10  | 11   |         |

ASST. CONSERVATOR OF FORESTS SOCIAL FORESTRY ERNAKULAM



### IN TEST HOUSE

#### ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungaliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9387381780, 9846551014, Tel.: 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, Web: ww.cochintesthouse.in

Laboratory Approved by Kerala State Pollution Control Board

#### TEST REPORT

Report No : CTH/LR/17/NN/1809

Name and Address of customer

Issue Date: 23.12.2017 : M/s. Petronet LNG Limited, Survey No. 347,

Puthuvypu, Kochi-682 508

Samplé Drawn By

Particulars of the sample

Sample code

Date of receipt of sample

Dates of Analysis

15.12.2017 15.12.2017 - 23.12.2017

Marine Water

Description of the sample by the customer

Cochin Test House

Water Sample

17/NN/1809

| SI.No. | Parameters                  | Unit         | Method  | Result         |
|--------|-----------------------------|--------------|---|----------------|
| 1      | pH                          |              | IS: 3025 (Pt.11)  | 7.66           |
| 2      | Total Dissolved Solids      | mg/l         | IS :3025 (Pt.16)  | 23600          |
| 3      | Turbidity                   | mg/          | IS :3025 (Pt.10)  | 5.1            |
| 4      | Chloride                    | mg/l         | IS: 3025 (Pt. 32)   | 17246          |
| 5      | Iron (as Fe )               | mg/l         | IS:3025 (Pt.53)   | BDL(MDL-0.08)  |
| 6      | Fluoride                    | mg/l         | APHA 22 <sup>nd</sup> Ed 4500F D                              | 3.17           |
| 7 .    | Sulphate as SO <sub>4</sub> | mg/l         | APHA 22 <sup>nd</sup> Ed 4500 SO <sub>4</sub> <sup>2-</sup> E | 1894           |
| 8      | Conductivity                | μs/cm        | IS: 3025 (Pt.14)  | 52300          |
| 9      | Mercury                     | mg/l         | APHA 22 <sup>nd</sup> Ed 3112 B                               | BDL(MDL-0.01)  |
| 10     | Lead                        | mg/l         | APHA 22 <sup>nd</sup> Ed 3111 B                               | 0.96           |
| 11     | Copper                      | mg/l         | APHA 22 <sup>nd</sup> Ed 3111 B                               | 0.06           |
| 12     | Hexavalent Chromium         | mg/l         | APHA 22 <sup>nd</sup> Ed 3500 Cr. B                           | BDL(MDL-0.1)   |
| 13     | Zinc                        | mg/l         | APHA 22 <sup>nd</sup> Ed 3111 B                               | 0.09           |
| 14     | Temperature                 | °C           | IS: 3025 (Pt.9)   | 27.1           |
| 15     | Salinity                    | ppt          | CTH/SOP/55  | 28.43          |
| 16     | Oil and Grease              | mg/l         | IS: 3025 (Pt. 39)   | BDL(MDL - 4.0) |
| 17     | Dissolved Oxygen            | mg/l         | IS: 3025 (Pt.38)  | 5.98           |
| 18     | BOD at 27°C, 3 days         | mg/l         | IS: 3025 (Pt. 44)   | 5.9            |
| 19     | COD                         | mg/l         | IS: 3025 (Pt. 58)   | 32             |
| 20     | Cyanide as CN               | mg/l         | IS: 3025 (Pt. 27)   | BDL(MDL-0.02)  |
| 21     | Cadmium as Cd               | mg/l         | APHA 22 <sup>nd</sup> Ed , 3111 B                             | BDL(MDL-0.1)   |
| 22     | Insecticide                 | μg/l         | APHA 22 <sup>nd</sup> Ed , 6630 c                             | ND             |
| 23     | Pesticide                   | μg/l         | CTH/SOP/56  | ND             |
| 24     | Color                       | Colour units | IS :3025 (Pt.4)   | 2              |
| 25     | TSS                         | mg/l         | IS :3025 (Pt.17)  | 7.2            |
| 26     | Arsenic                     | mg/l         | APHA 22 <sup>nd</sup> Ed , 3114 C                             | BDL(MDL-0.01)  |
| 27     | Nickel                      | mg/l         | APHA 22 <sup>nd</sup> Ed , 3111 C                             | 0.42           |
| 28 '   | Total Bacterial Count       | cfu/ml       | IS:1622:1981  | 5100           |
| 29     | Faecal Coliform             | MPN/100ml    | IS:1622:1981  | 22             |
| 30     | E.coli                      | MPN/100ml    | IS:1622:1981  | 14             |

ND: Not Detected, BDL- Below Detection Limit; MDL-Minimum Detection Limit.

End of report.

Authorised Signatory Microbiology COCHIN TEST HOUSE

K.P. Yacob Authorised Signatory Chemical COCHIN TEST HOUSE

NOTE: This test results relate only to the sample submitted for analysis.

The test report shall not be reproduced except in full without the written approval of the laboratory.

#### Annexure-04

| Environment Expenditure Fo          | or FY 2017-2018 in F | Rupees        |
|-------------------------------------|----------------------|---------------|
| Particulars                         | Budget               | Consumed      |
| Environment Monitoring              | 680,076.00           | 1,349,076.00  |
| Training & Awareness                | 87,875.00            | 87,875.00     |
| Hazardous Waste Handling & Disposal | 126,481.00           | 126,481.00    |
| Licence Fees                        | 8,682,083.00         | 8,682,083.00  |
| Audits                              | 895,500.00           | 895,500.00    |
| Afforestation                       | 1,500,000.00         | 1,500,000.00  |
| Other                               |                      |               |
| Total                               | 11,972,015.00        | 12,641,015.00 |



### CHIN TEST HOUS

#### ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungaliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9387381780, 9846551014, Tel.: 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, Web: www.cochintesthouse.in

Laboratory Approved by Kerala State Pollution Control Board

#### **TEST REPORT**

Report No

: CTH/LR/18/NN/395

Issue Date

: February 27, 2018

Name and Address of customer

M/s. Petronet LNG Limited, Survey No. 347,

Puthuvypu, Kochi-682 508

Sample Drawn By

Particulars of the sample

Sample code

Date of receipt of sample

**Dates of Analysis** 

Cochin Test House Water Sample

18/NNi/395

22.02.2018

22.02.2018 - 27.02.2018

Poro Wall Water

| Descri | otion of the sample by the cust | omer  | : Bore Well Water   |               |
|--------|---------------------------------|-------|---|---------------|
| Sl.No. | Parameters                      | Unit  | Method  | Result        |
| 1      | pH                              |       | IS: 3025 (Pt.11)  | 7.04          |
| 2      | Total Dissolved Solids          | mg/l  | IS :3025 (Pt.16)  | 75            |
| 3      | Turbidity                       | mg/   | IS :3025 (Pt.10)  | 2.3           |
| 4      | Chloride                        | mg/l  | IS: 3025 (Pt. 32)   | 23.42         |
| 5      | Iron (as Fe ).                  | mg/l  | IS :3025 (Pt.53)  | 0.08          |
| 6      | Fluoride                        | mg/l  | APHA 22 <sup>nd</sup> Ed 4500F D                              | 0.12          |
| 7      | Sulphate as SO <sub>4</sub>     | mg/l  | APHA 22 <sup>nd</sup> Ed 4500 SO <sub>4</sub> <sup>2-</sup> E | 21.4          |
| 8      | Conductivity                    | μs/cm | IS: 3025 (Pt .14)   | 154           |
| 9      | Mercury                         | mg/l  | APHA 22 <sup>nd</sup> Ed 3112 B                               | BDL(MDL-0.01) |
| 10     | Lead                            | mg/l  | APHA 22 <sup>nd</sup> Ed 3111 B                               | BDL(MDL-0.05) |
| 11     | Copper                          | mg/l  | APHA 22 <sup>nd</sup> Ed 3111 B                               | BDL(MDL-0.1)  |
| 12     | Chromium                        | mg/l  | APHA 22 <sup>nd</sup> Ed 3500 Cr. B                           | BDL(MDL-0.05) |
| 13     | Zinc                            | mg/l  | APHA 22 <sup>nd</sup> Ed 3111 B                               | BDL(MDL-0.05) |
| 14     | Temperature                     | °C    | IS: 3025 (Pt.9)   | 27            |
| 15     | Salinity                        | ppm   | CTH/SOP/55  | 38.85         |
| 16     | Oil and Grease                  | mg/l  | IS: 3025 (Pt. 39)   | BDL(MDL- 4.0) |
| 17     | Dissolved Oxygen                | mg/l  | IS: 3025 (Pt.38)  | 6.1           |
| 18     | BOD at 27°C 3 days              | mg/l  | IS: 3025 (Pt. 44)   | BDL(MDL- 2.0) |
| 19     | COD                             | mg/l  | IS: 3025 (Pt. 58)   | 12            |
| 20     | Cyanide as CN                   | mg/l  | IS: 3025 (Pt. 27)   | BDL(MDL-0.02) |
| 21     | Cadmium as Cd                   | mg/l  | APHA 22 <sup>nd</sup> Ed , 3111 B                             | BDL(MDL-0.1)  |
| 22     | Insecticide                     | μg/l  | APHA 22 <sup>nd</sup> Ed , 6630 c                             | ND            |
| 23     | Pesticide ·                     | μg/l  | CTH/SOP/56  | ND            |

ND: Not Detected, BDL- Below Detection Limit; MDL-Minimum Detection Limit.

End of report



K.P. Yacob **Authorised Signatory** Chemical COCHIN TEST HOUSE

NOTE: This test results relate only to the sample submitted for analysis.

The test report shall not be reproduced except in full without the written approval of the laboratory.



### GOVERNMENT OF KERALA DEPARTMENT OF FACTORIES AND BOILERS

Form-4

(Prescribed under Rule 5)

License is hereby granted to Shri/Smt. RAJENDER SINGH, DIRECTOR (TECHNICAL)() 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 2018.

| 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<br>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. | Details of the premises       |   | 8. | Manufacturing Process & NIC Co | ode                   |
|    | Panchayat                     | Elamkunnappuzha   |    | 1. STORING PUMMPING            | AND RE- GASIFICATIO   |
|    | Village                       | Puthuvaippu   |    | OF LIQUIFIED NATURAL (         |                       |
|    | Survey No                     | 347   |    | OF COMPRESSED NATUR            | RAL GAS (52109)       |
|    | Taluk                         | Kochi   |    |                                |                       |
|    | District                      | Ernakulam   |    |                                |                       |

Place: Ernakulam Date: 30-01-2018

#### (Issued under Rule 5, renewed under Rule 7)

| Calendar Year     | No. of Workers | Power                        | Fees                          | Additional<br>Fee  | Excess Fee          | Remittance<br>Date | Renewed<br>Date   | Sign              | of Official     |
|-------------------|----------------|------------------------------|-------------------------------|--------------------|---------------------|--------------------|-------------------|-------------------|-----------------|
| 2018              | 290            | 67834.97 KW<br>+18249.99 KVA | 194350.00                     |                    |                     | 16-10-2017         | 30-01-2018        |                   |                 |
| Amendment Details |                |                              |                               |                    |                     |                    |                   |                   |                 |
| Factory Name      | )              | No. of Workers               | Power(KW)                     | Fees               | Additional<br>Fee   | Remittance<br>Date | Amendment<br>Year | Amendment<br>Date | Sign of Officia |
| PETRONET LNG LTD  |                | 195                          | 66804.19<br>(18249.99<br>KVA) | 750                | 0.0                 | 10-10-2014         | 2014              | 10-12-2014        |                 |
| PETRONET LNG LTD  |                | 195                          | 66832.58<br>(18249.99<br>KVA) | 750                | 0.0                 | 14-10-2015         | 2015              | 02-02-2016        |                 |
| PETRONET LNG LTD  |                | 290                          | 67834.97<br>(18249.99<br>KVA) | 1500               | 11500.0             | 18-07-2016         | 2016              | 06-09-2016        |                 |
| Transfer Details  |                |                              |                               |                    |                     |                    |                   |                   |                 |
| Transferred From  | Transfe        | erred To                     | Transfer Fee                  | Remittance<br>Date | Year of<br>Transfer | Transf             | er Date           | Sign              | of Official     |
|                   |                |                              |                               |                    |                     |                    |                   |                   |                 |
|                   |                |                              |                               |                    |                     |                    |                   |                   |                 |

(License Renewal application for 2019 should be submitted on or before 31-10-2018)

- \* 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-07

|                 |  |                                     |  | Ambient Air Mor  | nitoring Report, (Octok   | Ambient Air Monitoring Report, (October 2017 to March 2018)            |   |  |                                      |
|-----------------|--|-------------------------------------|--|--|---|--|---|--|--------------------------------------|
| LOCATION<br>NO. | Location of<br>Ambient Air<br>Sampling | Month &<br>&<br>Date of<br>Sampling | PM (<10 microns) in<br>Micrograms/m3;<br>Limit 100 Micrograms/m3 | PM (<2.5 microns) in<br>Micrograms/m³;<br>Limit 60 Micrograms/m³ | SOx as SO <sub>2</sub> in Micrograms/m³; Limit 80 Micrograms/m³ | NOx, Oxides of Nitrogen in<br>Micrograms/m3;<br>Limit 80 Micrograms/m3 | Carbon Monoxide (CO);<br>mg/m³<br>4.0 mg/m³ | OZONE Micrograms/m³; Limit 180 Micrograms/m³ | Hydrocarbons (HC);<br>Micrograms/m3; |
|                 |  | Oct-17                              | 35.18  | 14.16  | 9.37  | 17.08  | 0   | 6.76   |                                      |
|                 |  | Nov-17                              | 31.82  | 10.65  | 11.72   | 14.54  | 0   | 9.76   |                                      |
|                 | (Watch tower-2)                        | Dec-17                              | 35.16  | 16.43  | 14.8  | 12.92  | 0   | 10.52  |                                      |
| -               | near MGH                               | Jan-18                              | 51.32  | 21.32  | 13.41   | 13.81  | 0   | 7.47   |                                      |
|                 | building                               | Feb-18                              | 48.32  | 20.32  | 10.21   | 12.15  | 0   | 6.23   |                                      |
|                 | )                                      | Mar-18                              | 47.34  | 19.35  | 9.15  | 13.25  | 0   | 4.34   |                                      |
|                 |  | Avarage                             | 41.52  | 17.04  | 11.44   | 13.96  | 00.00                                       | 7.51   | 0.00                                 |
|                 |  | Oct-17                              | 39.15  | 11.67  | 16.41   | 14.18  | 0   | 10.52  |                                      |
|                 |  | Nov-17                              | 34.16  | 12.72  | 13.57   | 15.27  | 0   | 9.01   |                                      |
| 0               | Near                                   | Dec-17                              | 31.08  | 10.55  | 12.02   | 17.22  | 0   | 92.9   |                                      |
| 7               | Fire Station                           | Jan-18                              | 48.52  | 18.53  | 11.01   | 16.07  | 0   | 5.98   |                                      |
|                 | Building                               | Feb-18                              | 45.72  | 16.71  | 9.28  | 14.27  | 0 0   | 4.27   |                                      |
|                 | 0                                      | Mar-18                              | 46.79  | 18.71  | 8.18  | 14.78  | 0   | 3.32   |                                      |
|                 |  | Avarage                             | 40.90  | 14.82  | 11.75   | 15.30  | 00.00                                       | . 6.64                                       | 0.00                                 |
|                 |  | Oct-17                              | 36.14  | 16.22  | 12.89   | 16.07  | 0 /   | 8.26   |                                      |
|                 | Fire water                             | Nov-17                              | 38.16  | 15.52  | 15.23   | 18.37  | 0   | 7.51   |                                      |
|                 | Recervoir+                             | Dec-17                              | 33.11  | 13.79  | 10.55   | 14.17  | 0 /   | 8.26   |                                      |
| m               |  | Jan-18                              | 49.58  | 20.68  | 9.17  | 16.16  | 0   | 8.22   |                                      |
|                 |  | Feb-18                              | 47.16  | 18.45  | 9.58  | 15.12  | 0   | 7.49   |                                      |
|                 | Watch Tower-5                          | Mar-18                              | 47.85  | 19.36  | 7.35  | 14.35  | 0   | 4.35   |                                      |
|                 |  | Avarage                             | 42.00  | 17.34  | 10.80   | 15.71  | 00'0  | 7.35   | 0.00                                 |
|                 |  | Oct-17                              | 31.82  | 12.73  | 14.06   | 11.86  | 0 0   | 9.01   |                                      |
|                 |  | Nov-17                              | 35.11  | 17.15  | 9.87  | 16.15  | 0   | 11.27  |                                      |
|                 | Water town                             | Dec-17                              | 37.08  | 18.11  | 16.41   | 13.77  | 0 0   | 11.27  |                                      |
| 4               |  | Jan-18                              | 50.35  | 20.18  | 90.6  | 12.36  | 0   | 6.72   |                                      |
|                 | near Tank T-101                        | Feb-18                              | 48.35  | 18.15  | 8.75  | 12.58  | 0   | 6.15   |                                      |
|                 |  | Mar-18                              | 48.95  | 19.25  | 6.13  | 13.75  | 0   | 5.15   |                                      |
|                 |  | Average                             | 41.94  | 17.60  | 10.71   | 13.41  | 00:00                                       | 8.26   | 0.00                                 |

Dy. Manager HSE

Officer HSE

#### CSR EXPENDITURE SHEET, KOCHI

#### FY 17-18 (April to March) **Petronet LNG Limited** Approved & SI. No. Name of the Project Vertical Location Committed (Rs) Consumed (Rs) Remarks Supporting the Vypin Fire Station for ensuring Fire Safety Rural Development 1 to the Villages Projects Vypin, Ernakulam 500,000.00 500,000.00 Completed Promoting Kabaddi by Providing Kabbadi Mats to 2 Ernakulam District Kabaddi Association Sports, Art & Culture Niaracckel, Ernakulam 300.000.00 300,000.00 Completed Construction of School Toilets and Construction of Bore 3 wells respectively Health & Sanitation 28,857.00 28,857.00 Completed Kothamangalam, Ernakulam Ensuring Drinking water facility through the construction of Bore well and Installation of Water Filter at the Govt. at 4 the Aided L P School, Puthur Education 150.000.00 129,000.00 Completed Puthur, Kannur Construction of Causality Complex at Thrikakara Municipal 5 Co-operative Hospital, Kakkanad Health & Sanitation Thrikakara, Ernakulam 1,571,900.00 1,571,900.00 Completed Total 2,550,757.00 2,529,757.00 Petronet LNG Foundation (PLF) Providing School Bus at the E K Nayanar Smaraka, Govt. H Education 1,740,000.00 1,740,000.00 Completed Vengad, Kannur 1 S S School Supporting the FIFA World Cup through the Ground 2 Facility and Water Tank **Promoting Sports** Fort Kochi, Ernakulam 1,946,544.00 1,946,544.00 Completed Supporting the Scholarship Programme (Unarvu - Akshaya 3 Educational Programme) Education Kalamessery, Ernakulam 500,000.00 500,000.00 Completed Maintenance of the School Toilets Constructed under Approved, Under Implementation (To be Paid on receipt 4 Swachh Bharath (Vidyalaya) Abhiyan Health & Sanitation Kothamangalam, Ernakulam 500.000.00 of Invoice /Bills) - Provisioning Kept Skill Development Training Programme for 100 Youths of Approved, Under Implementation (To be Paid on receipt the Ernakulam District in convergence with Centre for of Invoice /Bills) - Provisioning Kept (Rs 28.60 Lakh Biopolymer Science & Technology (CBPST - A UNIT OF 7,310,000.00 63,130.00 Payment to be Made, Bill at HO) Education Ernakulam 5 CIPET), Kochi Construction of Smart Classroom at -1. GMUP School, Poonoor, Kozhikode Approved, Under Implementation (To be Paid on receipt Kozhikode, Kasargode and 2.Govt. L.P School, Vayakode, Kasargode 6 3.Govt. L P School Perumpadanna, Parur, Ernakulam Organization of Medical Camp at Nyarambalam Bhagvati Education Ernakulam 321.000.00 0.00 of Invoice /Bills) - Provisioning Kept 7 Vilasam High School Health & Sanitation Nayarambalam, Ernakulam 500.000.00 500,000.00 Completed Approval to implement the project to feed the needy people of the Ernakulam District (Numma Oonu) in convergence with District Administration - A Pilot Project 8 for two Months Health & Sanitation Ernakulam 360.000.00 235.469.00 Completed Completed (2nd Installment in December 2018) -- $_{\mathbf{q}}$ Support to the art form of Koodiyattam, Ernakulam 500,000.00 250,000.00 Provisioning Kept Art, Culture and Heritage Ernakulam Approved, Under Implementation (To be Paid on receipt Installation of Incinerator at the Taluka Hospital, Pemabra Health & Sanitation Perambra, Kozhikode 500,000.00 0.00 of Invoice /Bills) - Provisioning Kept Providing Drinking Water Facility at Kendriya Vidyalaya, 59,960.00 Completed Education Ernakulam 60.000.00 11 CPT 14,237,544.00 5,295,103.00 Total

16,788,301.00

7.824.860.00

PLL + PLF



## **CSR UPDATE**

FY 2017-18

### **MAJOR HIGHLIGHTS**

### **KOCHI**



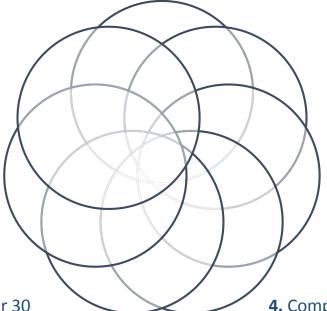
### CONTENTS

**☐ Major Initiatives of FY 2017-18 - Highlights □PLF** and Execution Meetings **☐ Way Forward – Proposals for FY 18-19 ■ Media and Accolades □**Budget VS Spent

1. Construction of School
Toilets across the 8
Locations by Wockhardt
Foundation ( Completion of the Job ) – Under SBA (
Health and Sanitation )

7. FIFA U 17 World Cup -Water Storage facility through construction of the Water Tank at Fort Kochi (Sports)

**6.** School Bus to the E K Nayanar Smaraka, Govt. H S S School, Vengad, Kannur *(Education)* 



2. Ayurveda Dispensary at Edavandakad - Completion & Inauguration ( Health )

**3.** Promotion of Kabaddi with Dist. Kabaddi Association, Ernakulam

(Sports)

5. Kashmir Super 30
Students Success and felicitation at MoPNG,
PMO, Chairman PESB, OIL
India Chairman at Delhi (
Education)

4. Completion of Survey in the 30 Villages of Ernakulam District for Petronet Eyes Project & Deehat Project by PWC ( Health)



The Ayurveda Dispensary Constructed at Edavanakad – A Project of the District Health Dept, Block Panchayath and PLL



Around 100 Students get trained under the District Kabaddi Association at Njaracckel



**Joint Inspection at the Interior Locations** 



Completion of the Pending Activities by Wockhardt Foundation and Field Visits



**Medicines under Subsidised rates for the Public** 



Inauguration of the Ayurveda Dispensary with a total cost of Rs 15 Lakh at Edavanakad



**Inauguration of the Ayurveda Dispensary** 



The Control of Control

Students during a practice match



Handing over of the Kabaddi Mats ( Equipment ) to the Ernakulam Dist. Kabaddi Association in a Ceremony, Matches were also played during the Programme



Cleaning of the Toilets at the interior 7 Schools in the Ernakulam District (Kuttampuzha Block) by Wockhardt Foundation



Good Samaritan Interaction with a Beneficiary



**Good Samaritan Awareness Sessions with Contract Workmen** 



Support to Nodal Officer FIFA by MD & CEO for Water Tank and Practice Ground



**Completed Water Tank at Fort Kochi Parade Ground** 



Passes for Employees as a noble gesture provided by FIFA







Interaction of the Kashmir Super 30 Students with Dr Jitendra Singh, Maj Gen. Kalita and PLL Officials at PMO,
North Block



Interaction of the Kashmir Super 30 Students with Dr Jitendra Singh, Maj Gen. Kalita and PLL Officials at PMO,
North Block



Team PLL at Shastri Bhavan, MoPNG



Interaction of the Kashmir Super 30 Students at Shastri Bhavan, MoPNG

•8. Construction of Causality Complex at Thrikakara Municipal Cooperative Hospital (Inaugurated by Hon'ble CM Kerala) ( Health )

• 9. AMC of the Constructed Toilets carried out at 7 Schools with WASH Programme as per MHRD & MoPNG Notifications to PSUs (Education)

 10. Good Samaritan Project Launched and Identification of Cases ongoing time to time (At Kochi 2 Cases Supported, 2 undergoing)

• 11. Support to the 560 A+ Scoring talented meritorious students of project Unarvu - Akshaya -Initiative of the District Administration and at the Annual Meet 2017 at Kalmessery

(Education)



Casualty Complex at the TMHCL, Inaugurated



Handing over of School Bus at High School Kannur



Handing over the Support for the Meritorious Students



Casualty Complex at the TMHCL, Inaugurated



Students and Teachers at the E K Nayanar High School Kannur



Around 560 Students from vernacular medium and CSBE Schools were on the list



Wash And Toilet Cleaning At Kunjipara



Wash And Toilet Cleaning At Kunjipara



Wash And Toilet Clening At Anandamkudy



Wash And Toilet Cleaning At Talawchpara



Wash And Toilet Cleaning At Kunjipara



Good Samaritan Support Handed Over To Ms Shakeela



Support Handed Over Mr Vijayan



Ms Shakeela's Daughter - Thanks Card for the Support



**Good Samaritan Support Handover Programme** 



**Good Samaritan Support Handover Programme** 



**Good Samaritan Support Handover Programme** 



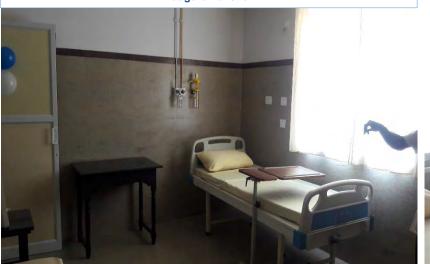
Shri T N Neelakantan addressing the assemblage on the inaugural function



Casualty Complex to cater to a majority population of Migrant Labours



Shri Pinarayi Vijayan, Honble CM Kerala with Shri Manoj Pawa at the Inaugural function



**Equipped with Modern Treatment Facilities** 



Petronet LNG Supported with an amount of around Rs 30 Lakh



**Casualty Complex at the TMHCL - Facilities** 



IITans during Discussion Sessions with Govt. Officials



Photo of the Participants (Students) & PLL Management at GTI, Noida

## "Ideation of National Agenda Initiative" (Education)

27 IITians from the top 5 IITs were engaged in the process of developing the blue ocean thinking.

8 Flagship programmes by Government of India were selected.

Subject Matter Experts from PLL participated with MD & CEO.

Field Visits, Representation in front of Govt. Officials and Secretaries to GOI of concerned Ministries by the Students on findings

Students visited existing/potential beneficiaries including ladies, children and *divyangs* in Villages

Existing beneficiaries/ potential beneficiaries, social and educational institutions, sanitation facilities – Individual Household Toilets, ITI, Poly Technique College, small entrepreneurs and 110 (approx.) inhabitants of the Villages

Interaction session with LSG Officials in order to understand their concerns in the presence of villagers at large in Atal Seva Kendra of village Manka, Alwar, Rajasthan was done.

Presentation in front of MOS ( I/C ) and Secretary MoPNG was by the students.

Felicitations and Certificates to the students as well as Interaction with Sh. Sanjay Kothari ( Secretary, Honble President Of India )



Interaction of the Students with Shri Sanjay Kothari, Secretary to the Hon'ble President of India, Shri Prabhat Singh and Other PLL Officials



Dr Jitendra Singh (MOS) with the Students and PLL Management at PMO

Ideation Programme – Planning to Execution (Photo Gallery)



**Planning Meeting of the Programme** 



**Brainstorming sessions** 



Field Visits by the IITans at Alwar, Rajasthan



A Visit to an ITI by the Students, who were divided into groups



Interaction session of the students with the village representatives



Presentations and Interaction by the students before the LSG Officials



Yoga Sessions were conducted for the Students



Presentations on the findings by the students



Presentations on the findings by the students – GOI representatives guided them

- **12.** "Naipunyam" Skill Training Project to 100 Students in Plastic Technology ( 2 Courses ) With CBPST ( Centre for Bioplolymer Science and Technology ) ( Education )
- **13. Health Camp** at Nayarambalam with Dist. Hospital & MLA with **940 Patients** (*Heath*)
- 14. Eye Check Up Camp at Community Health Centre,Malipuram organised with 503 Patients, 421 SpectaclesDistributed ( Health )
- **15.** *Numma Onnu* The Pilot Project on providing free food in the District of Ernakulam with Dist. Admin, KHRA is launched, with an objective of making a hunger free city and ensuring access of food to the needy.



MoA Inking between PLF and CBPST for Naipunyam



Director CBPST and Director PLF – Signing the MOA



Selection Interview for the Courses of Machine Operator – Injection Moulding and Machine Operator-Plastic processing



Batch of 50 Students – Selected for Machine Operator – Injection Moulding



**Medical Camp At Nayarambalam Primary School** 



940 Patients Attended With Different Ailments And Regular Check Up As Well



**Pathological Facilities Provided In The Camp** 



Jointly Organised By PLF, BPCL AND DIST HOSPITAL



Free Eye Check Up Camp with consultation.

Medicines and spectacles conducted



A total of 503 Patients were enrolled in the registration process



Women members participated at large across several strata of the society from the nearby areas

### Numma Onnu – Project Details



District Collector's Meetings - To roll out the Project on 26<sup>th</sup> January 2018 ( KHRA. Railway, Collectorate and PLL Officials were present )



Committee Formation under the chairmanship of Dy. Collector, Collectorate, KHRA and Petronet LNG Officials



Meetings on the Pilot Project with KHRA at KHRA Office and Collectorate Officials with Petronet LNG



Designs of the Coupons, Mechanism Worked Out for the Project and locations for coupons distribution finalised



Launch of *Numma Oonu* on 26<sup>th</sup> January by Shri A K Moideen, Minister of Industries in presence of District Collector and officials of KHRA, PLL and Collectorate

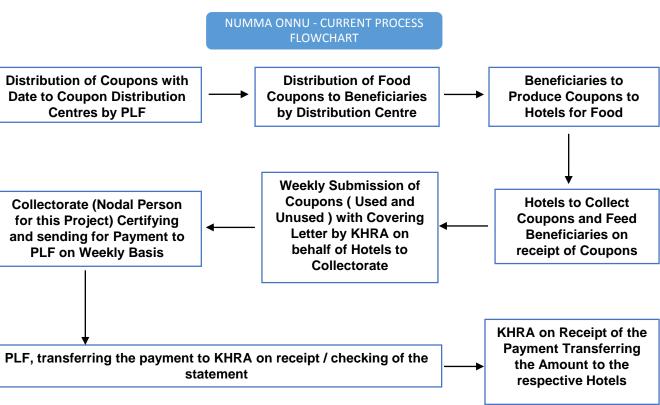


A beneficiary on the first day getting a food coupon at the Collectorate



Several Beneficiaries at Hotels and Coupon Distribution centres

Numma Onnu - Process Flow Chart



MUGHAL RESTAURANT

**VEG & NON VEG** 











The Seven
Hotels at the
Collectorate
& South
Railway
Station
Region
currently
providing
the Numma
Oonu Food (
All photos ).



Another location in addition is the Collectorate Canteen because of the closure of one of the 8 selected Hotels.

### Numma Onnu – Highlights



A Statement Sample Submitted by KHRA for the Reimbursement of Coupons



A Sample of the Food Coupon



### നുമ്മ ഊണ് വിശപ്പുരഹിത നഗരം

വിശന്നുപൊരിയുന്ന ഒരാളും ജില്ലയിൽ ഉണ്ടാവരു ത്. ഭക്ഷണം എല്ലാവർക്കും ലഭ്യമാകണം. ജില്ല ഭരണ കുടത്തിൻെറ ഈ മഹത്തായ ചിന്തയിൽനിന്നാണ് വി പ്പവകരമായ പദ്ധതിക്ക് തുടക്കമാകുന്നത്. ജില്ല കല ക്ടർ കെ. മുഹമ്മദ് വൈ. സഫീറുല്ല മുൻകൈയെടു ത്ത് അവിഷ്കരിച്ച നുമ്മ ഊണ് വിശച്ചുരഹിത നഗ രം പദ്ധതിയിലൂടെയാണ് സൗജന്യമായി ഉച്ചയുണ് ന ൽകാനുള്ള തീരുമാനമായത്. തെരഞ്ഞെടുത്ത ഹോ ട്ടലുകളിൽനിന്ന് ഉച്ചയുണ് ലഭിക്കും. പദ്ധതിക്ക് പെദേ ട്രാനെറ്റ് എൽ.എൻ.ജി ഫൗണ്ടേഷനും കേരള ഹോട ൽ ആൻഡ് റസ്റ്റാറൻറ് അസോസിയേഷൻ ജില ക മ്മിറ്റിയും വലിയ പിന്തുണയാണ് നൽകുന്നത്. കാക്ക നാട് കലക്ടറേറ്റിലും എറണാകുളം സൗത്ത് റെയിൽ വേ സ്റ്റേഷനിലും നുമ്മ ഊണ് കൗണ്ടറുകൾ പ്രവർ ത്തിക്കാം. ഇവിടെനിന്ന് ലഭിക്കുന്ന കുപ്പണുകൾ നൽ കിയാൽ കാക്കനാട്ടെയും സൗത്തിലെയും തെരഞ്ഞെ ടുത്ത ഹോട്ടലുകളിൽനിന്ന് സൗജന്യമായി മികച്ച നി ലവാരത്തിലുള്ള ഭക്ഷണം ലഭിക്കും. രണ്ട് സ്ഥലങ്ങ ളിലുമായി നാലുവീതം ഹോട്ടലുകൾ ഇതിന് ഹോട്ടൽ ആൻഡ് റസ്റ്റാറൻറ് അസോസിയേഷൻ കണ്ടെത്തി. യിട്ടുണ്ട്. കാക്കനാട് കലക്ടറേറ്റിന് സമീപം അളകാ പൂരി, ലിബ, അയോധ്യ, വാഴക്കാലയിൽ ഗാലക്സി എന്നീ ഹോട്ടലുകളിലാണ് കൂപ്പൺ നൽകി ഭക്ഷണം കഴിക്കാനാകുക. സൗത്തിൽ ആര്യാസ്, അൽസഫ, ആരു ഭവൻ, മുഗൾ എന്നീ ഹോട്ടലുകളിലാണ് സൗജ ന്യഭക്ഷണം.

**Press Clippings** 

കൈയിൽ പണമില്ലെങ്കിൽ ഇനി വിശന്നിരിക്കേണ്ട

### 'നുമ്മ ഊണ്' പദ്ധതിയുമായി ജില്ലാ ഭരണകൂടം

**Press Clippings** 

(+)

പദ്ധതി കാക്കനാടും സൗത്ത് റെയിൽവേ സ്കേഷൻ പരിസരത്തും നിലവിൽ വരും

കാക്കനാട്▶ പണമില്ലെങ്കിലും ഇനി ആരും വിശന്ന് നടക്കേണ്ട. ആരുടെയും മുന്നിൽ കൈ നീട്ടു കയും വേണ്ട. വിശന്നുപൊരിയു ന്ന ഒരു വയറുപോലും ഉണ്ടാക രുതെന്ന ലക്ഷ്യവുമായി ജില്ലാ ഭര ണകുടത്തിന്റെ 'നുമ്മ ഉൗണ്' വി ശവുരഹിത നഗരം പദ്ധതി വരു ന്നു. തിരഞ്ഞെടുത്ത ഹോട്ടലുക ളിൽനിന്ന് ആവശ്യക്കാർക്ക് സൗ ജനമായി ചെയുണ് ലഭ്യമാക്കുന്ന പദ്ധതിക്ക് റിപ്പബ്ലിക് ദിനത്തിൽ മന്ത്രി എ.സി. മൊയ്ക്കീൻ തുടക്കം കൂറിക്കും. ജില്ലാ കളക്ടർ മുഹമ്മദ് വൈ. സഫീറുള്ള മുൻകൈയെടു

#### പദ്ധതി ഫെബ്രുവരി ഒന്നുമുതൽ

ഫെബ്രുവരി ഒന്നുമുതലാണ് പദ്ധതി പ്രാവർത്തികമാകുക. കാക്കനാട് കളക്രറേറ്റിലും എറ ണാകുളം സൗത്ത് റെയിൽവേ സ്റ്റേഷനിലും 'നുമ്മ ഊണി'ന്റെറ കൗണ്ടറുകരം പ്രവർത്തി ക്കും. ഈ കൗണ്ടറുകളിൽ നിന്നു ലഭിക്കുന്ന കുപ്പണുകഠം നൽകിയാൽ കാക്കനാട്ടെയും സൗത്തിലെയും തിരഞ്ഞെടു ത്ത ഹോട്ടലുകളിൽനിന്ന് സൗ ജന്യമായി മികച്ച നിലവാരത്തി ലുള്ള ഭക്ഷണം ലഭിക്കും.

ത്ത് ആവിഷ്യരിച്ച പദ്ധതിക്ക് പെ ട്രോനെറ്റ് എൽ.എൻ.ജി. ഫൗണ്ടേ ഷനും കേരള ഹോടൽ അൻഡ് റസ്കോറൻറ് അസോസിയേഷൻ ജിലാ കമ്മിറ്റിയുമാണ് പിന്തുണ നൽക്ഷന്നത്.

കാക്കനാട്ടും സൗത്തിലും നാ ലുവീതം ഹോട്ടലുകരം ഇതിനാ യി ഹോടൽ ആൻഡ് റയോറ ൻറ് അസോസിയേഷൻ കണ്ടെ ത്തിയിട്ടുണ്ട്. കാക്കനാട് കളക്കറേ റ്റിനു സമീപം അളകാപുരി, ലിബ, അയോദ്ധ്യ, വാഴക്കാലയിൽ ഗാല ക്സി എന്നീ ഹോട്ടലുകളിലാണ് കൂപ്പണുകഠം നൽകി ഭക്ഷണം കഴിക്കാനാകുക.

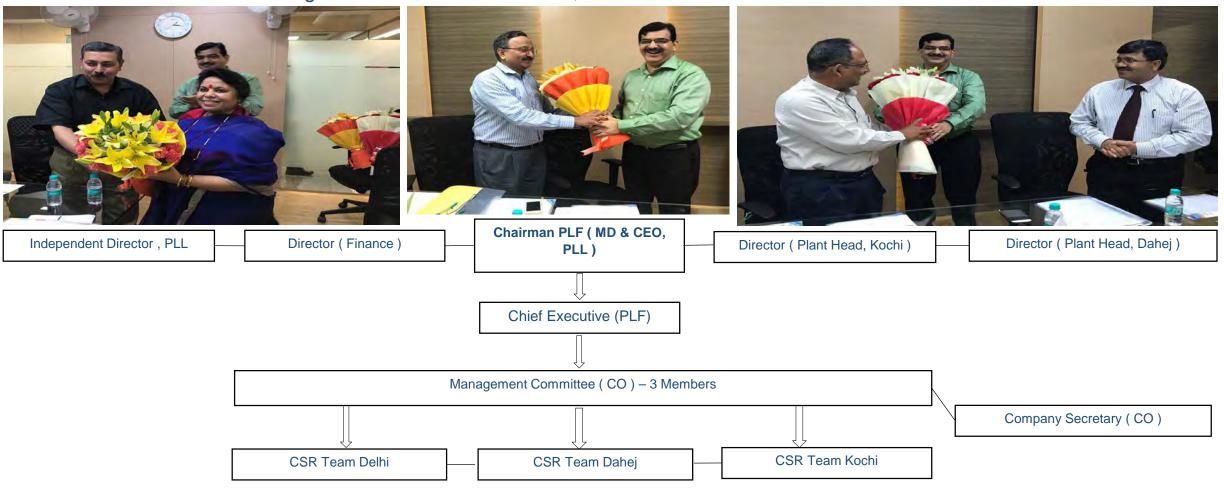
സൗത്തിൽ ആര്യാസ്, അൽ ഫല, ആര്യഭവൻ, മുഗഠം എന്നീ ഹോട്ടലുകളിലാണ് സൗജന്യ



Hon'ble District Collector addressing the gathering on the launch of the Programme on 26th January at Collectorate

# PLF and Execution Meetings

- □ Petronet LNG Foundation (PLF) [ An Organisation Committed to Sustainable Social Growth ] A separate Company under Sec 8 of Companies Act Formed (CSR Arm of PLL)
- □ 1st 2nd and 3rd Board Meeting of PLF held on 21.04.2017, 15.06.2017 and 3.11.2017 at New Delhi



## Media & Accolades

### പ്രഥമ ശുശ്രൂഷാ ക്ലാസ്

വൈപ്പിൻ • ചെറായി സഹോ ദരൻ മെമ്മോറിയൽ എൽപി സ്കൂളിൽപെട്രോനെറ്റ്എൽഎൻ ജിയുടെ നേതൃത്വത്തിൽ അത്യാ ഹിത പ്രഥമ ശുശ്രൂഷാ കാസ് നടത്തി. ഡോ.എ.പി.വർമ കാസെ

ടുത്തു. കമ്പനി പ്രതിനിധി ദീപാ ഞ്ജൻ ബദോപാധ്യായ, മാത്യ സംഗമം അധ്യക്ഷ ഷാഹിന, പ്ര ധാനാധ്യാപിക കെ.അനുപ, ഹു സ്നാബീഗം, സി.ബി.ഉണ്ണിക്കൂ ഷ്ണൻ എന്നിവർ പ്രസംഗിച്ചു.

#### **Press Clippings - First Aid Awareness Programme**



ജില്ലാ ഭരണകുടം നടപ്പാക്കുന്ന സൗജന്യ ഉച്ചഭക്ഷണ പദ്ധത്ത് 'നുമ്മ ഈണി' ന്റെ ഉദ്ഘാടനം മന്ത്രി എസി. മൊയ്തിൻ നിർവഹിക്കുന്നു. അസി. കലക്ടർ ഈഗാ പ്രിയ, ഡിസിപി കറുപ്പുസാമി, പെട്ടോ നെറ്റ് എംഡി ടിഎൻ. നീലകണ്ടൻ, ജോൺ ഫെർണാണ്ടസ് എംഎൻഎ, കലക്ടർ മൃഹമ്മർ സഹിച്ച ല പിടി തോണ് എഎത്എ കെ അസിസ് എന്നിവർ സമീപം

## സൗജന്യ ഭക്ഷണം: 'നുമ്മ ഊണ' പദ്ധതിക്കു തുടക്കം

സൗജന്യ കൂഷൺ കലക്ടറേറിലും സൗത്ത് റെയിൽവേ സ്റ്റേഷനിലും ലഭ്യം

കാരാനാട് കലക്ടാന്റിലുംഎറ ണാകുളം സൗത്ത് റെയിത്രോ സ്റേഷനിലും സൗജന്യ ഉച്ചഭ ഷണം നൽകുന്ന 'നുമ ഊണ് പദ്ധതി മന്ത്രി എ.സി. മൊയ്തിൻ ത്ത് റെയിൽവേ സ്റ്റേഷനിലും ലുകൾ ഇതിനായി കണ്ടെത്തിന ഉദ്ഘാടനം ചെയ്തു

മസ്,ജോൺഫെർണാണ്ടസ്,കല ഫോട്ടലുകളിൽ പോയി ഊണ കടർ മുഹാമദ് സഹിരുല്ല അസി കലക്ടർ ഈശാ പ്രിയ പെട്രോ നെറ് എത്എന്ജി വൈസ് പ്രസി ഡന്ടി എൻ നീലകണ്ഠൻ ഹോട്ടൽ ആൻഡ് റസ്റ്റന്റ് അസേ ട്ടത് ആൻഡ് റസ്റ്റററ്റ് അസോസി സിയേഷൻ ജില്ലാ കമ്മിറ്റിയുട യേഷൻ പ്രസിധന്റ് കെ അസിസ് യും സഹകരണത്തോടെയാണ തുടങ്ങിയവർ പ്രസംഗിച്ചു

പണം ഇല്ലാതെ വലയുന്ന യാ തക്കാർക്കു കലക്ടറേറ്റിലും സൗ സൗത്തിലും നാലു വീതം ഹോ സൗജന്യമായി ലഭിക്കുന്ന കൂപ്പ ട്യൂണ്ട്

എംഎൽഎമാരായ പിടി തോ ണുമായി അതിൽ പറഞ്ഞിട്ടുള്ള കഴിക്കാവുന്നതാണു പദ്ധതി

പെട്രൊനെറ്റ് എൽഎൻജി ഫൗണ്ടേഷന്റെയും കേരള ഹോ പദ്ധതി നടപ്പാക്കുന്നത്

കാക്കനാട്ടും എറണാകുള

Press Clipping of the Numma Onnu Project - Hunger **Free City** 



**Future Group Award for Best emerging CSR Brand** 





Sr. VP ( Plant Head ) receiving the Recognition from UK Minister



ഫയർ ആൻഡ് സേഫ്റ്റി ബോധവൽക്കരണ ക്ലാസ്

ാവെപ്പിൻ ചോതി എസ്എം ടേണ്ട മാർഗങ്ങൾ സിക്ഷിക്കേ ഫ്റ്റിൽ വാർത്മാൻ കേ ഹരിഷ് എത്.പി സ്കൂൾ പിടിഎ ജെ മുൻക്കുതലുകൾ എന്നിവ എന്നിവർക്കാരുടുത്തു ാതുസാലം എന്നിവയുടെ നേ ആവശ്യമായ ഉപകരണങ്ങളുടെ പിടിഎ പ്രസിധർ കെ ഉണ്ണി ത്യത്താനിൽ ഫയർ ആൻഡ് സഹായത്തോടെ അവതരിപ്പിച്ചു. ക്കൂഷ്ണൻ പിടിഎ പതിനിധി സഹ്റ്റി ബോധവരിക്കാണെ എതിഎൻജി ടെർമിനത്.ഓഫി കൾ, രക്ഷാകർത്താക്കർ പദ്ധ സർ കെ. ദീപാണ്ജൻ, ഫയർ ടുത്തു.

Press Clippings Of The Fire Training provided at the peripheral schools



Rotary Club Memento to PLL CSR



**Future Group Trophy to PLL** 



ള്പോടത. ചെയ്യനാ; പിഎൻ ഗ്രൻപ് ഇഎൻ ഗാട്രഷാത്തൻ, എപ് ലാല്യ കെടി ബിൻഷ്, മെ സ്യാഷ്, എൻ സ്യഷാട്, കെടക സ്വേളിയൻ, കെ അന്തക്യമൻ കൈപ് കുമാർ എത്തിവർ

#### ലാസ്റ്റ് ഗ്രേഡ് സർവൻ് തസ്തിക സൗജന്യ ഓൺലൈൻ റജിസ്പ്രേഷൻ കൗണ്ടർ തുടങ്ങി

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www.socope share and merce social merce and social mercent and mer ത്ത് സ്ത്രീരിലുള്ള അവ തന്റെ പ്രത്യൂള്ള പ്രസ്ത് പ്രത്യേഷ സ്ത്രേഷ വർത്വില് കാട്ട് എട്ടുവാത്തുണ്ട കളെ ത്ര ഉത്യോഗിയില്ലെ കരിലാക് അവക്ഷ് നർക്ഷ് ചട്ടിൽ നടന്നു softened transcentrates and to lead in revenue come beedless palacement

ச்சையில் ஆம்மாற்கள் **க**ார்க்க

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Press Clipping for the Kabaddi Promotion

Annexure-09



## ENVIRONMENT MANAGEMENT CELL



**Prepared By** 

Approved By

Issued By

Heady

Sign- WID ITHITIV

Sign-

Sterl

Sign-

Date - 20'04'2018

Date - 23/4/18

Date - 23.4-18

#### **REVISION HISTORY**

| Date of Issue | Revision /<br>Amendment | Details   | Page No |
|---------------|-------------------------|---|---------|
| 10-02-2014    | Rev-00                  |   |         |
| 26-08-2016    | Rev-01                  | Inclusion of Sr.Mgr(Operations) and Change of Head (HSE) and Head (Projects)  | 02      |
| 20-03-2017    | Rev-02                  | Inclusion of Mgr.(Materials) & Mgr.(Technical)  | 04      |
| 03.06.2017    | Rev-03                  | Inclusion of GM (O&M) and Ms. Selsa<br>Rajesh name is replaced with Mr.Biju<br>from Lab   | 04      |
| 01.05.2018    | Rev-04                  | 1. VP (O & M) is replaced with Sr VP (plant head) and Inclusion of Sr Officer (HR) 2. Environment management cell structure also reorganised. | 04      |

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#### 1. PURPOSE:

Purpose of this document is to establish an Environment Management to monitor all plant activities, in order to ensure that they are carried out in an environmentally friendly manner.

#### 2. SCOPE:

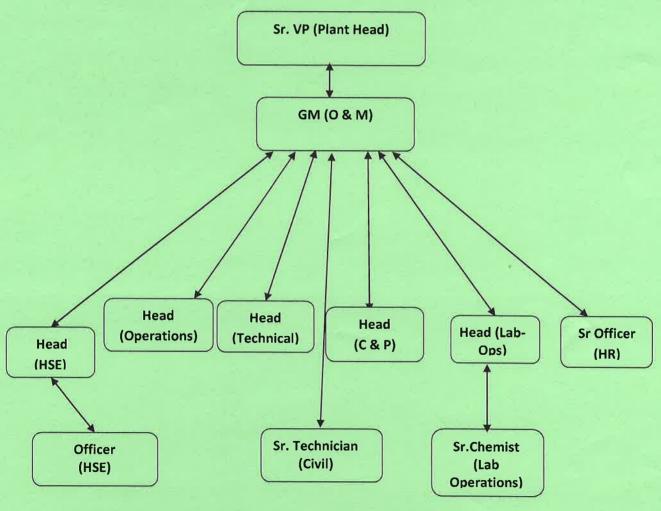
This document outlines the different aspect of the Environment management like its members, structure, roles and responsibility and mode of functioning.

#### 3. ENVIRONMENT MANAGEMENT CELL:

#### A) Members of Environment Management Cell:

Environment management will be headed by Sr. VP (Pant Head) and other members are Head (Operations), Head (HSE), Head (Technical), Head (C & P), Head of Lab Operations, Sr Officer (HR), Officer (HSE), Chemist (Lab Operations) and Sr. Technician (Civil); the cell will be reporting to Sr. Vice President (Plant Head).

### B) Structure of Environment Management Cell:



**Environment Management Cell** 

### C) Roles and Responsibility of Environment Management Cell:

Roles and responsibility of Environment management cell are listed below, but not limited to:

- Advice management on issues related to environment.
- Identify activities which have potential to harm environment and to suggest measures to mitigate them.
- ➤ Create awareness among employees, contractors, visitors and public regarding the importance of environment protection and means to protect it by conducting tree plantations, campaigns, training programs, posters etc.
- > Develop and implement the plans in order to reduce, reuse and recycle wastes.
- ➤ Plan, develop and implement environment management projects by coordinating with different departments, government agencies, NGO etc.
- Monitor and review different environment monitoring reports of ambient air, noise, vibration, stack emission, liquid effluents, and will take measures to ensure it is well below the permissible limit prescribed by central/ Kerala state pollution control board.
- Take review of the status of solid waste, hazardous wastes, biological waste, food waste, etc. that are generated either by operation or domestic activities of our plant.
- Ensure all activities of the plant are carried out in an environmentally safe manner and as mentioned in consent to establish and operate.
- Ensure Environment related statutory compliance, i.e. MoEF, CRZ clearance, KSPCB etc.
- Ensure adequate vegetation cover in the premise by develop and maintain green belt.
- Ensure plant and its premises are kept clean from waste.
- Ensure that all liquid effluent generated as a result of operation or domestic activities of our plant should be treated well to the standard as prescribed by central/ Kerala state pollution control board before discharging.
- > Take measure to prevent/minimize/control plant fugitive emission, if any.
- Ensures proper handling (collecting and segregating), storage and disposal of hazardous wastes i.e. used oil, solid and biological waste.
- ➤ Identifying contactors qualified by central/ Kerala state pollution control board for disposing different categories of waste.
- Carry our work environment/industrial hygiene survey internally or externally for health hazards for employees.
- > Arranging World Environment Day (WED) celebrations every year.

### D) Functioning of Environment Management Cell:

- > Environment management cell shall meet once in a month.
- ➤ Date, time, venue and the agenda of the meeting will be identified by Head Operations and the same will be informed to its members, at least one day in advance.
- The meeting shall be convened by the GM (O &M), initial discussion will be on the agenda, then on the progress of the decision taken on the previous meeting.
- Members can share any other information or raise any concern pertaining to the environment and the same will be discussed in detail.
- Minutes of the meeting points shall be recorded and a report for the same will be prepared and documented.
- Meeting minutes shall be reviewed and concluded by the Head of the Environment Management Cell after listing out the outcome of the meeting and setting of goals.
- Members shall be responsible to execute the decision taken in the meeting, by coordinating with different departments, and the progress has to be reported in the next meeting.

### E) List of team members & designation:

- 1. Shri. Yogananda Reddy GM (O&M)
- 2. Mr. Veerasamy Manimaran Sr. Manager (Operations)
- 3. Mr. Suresh P Manager (C&P)
- 4. Mr. Jaiganesh Dakshinamurthy Manager (Technical)
- 5. Mr. L.S.Raja Dy. Manager (Lab Operations)
- 6. Mr. Vijith T V Dy. Manager (HSE)
- 7. Mr. Hevin Verghese Sr Officer (HR)
- 8. Mr. Nishant A Officer (HSE)
- 9. Mr. Anish Kumar Sr. Technician (Civil)
- 10. Mr. Biju K J— Sr. Chemist (Lab Operations)

Note: EMC group common e mail id <a href="mailto:emc-kochi@petronetlng.com">emc-kochi@petronetlng.com</a> is created for internal communication.