


EC Conditions Six Monthly Compliance Report

(by Project Proponent)



Proposal No : IA/KL/MIS/10670/2002

1. Name of the Entity / Corporate Office :

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|------------------------------------------------|-----------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
| File No. : | J-16011/26/2001-IA.III | Proposal Name : | Construction of LNG Import Terminal at Puthuvypeen Island, Kochi, Kerala. |
| Date Of EC. : | 02 Jun 2003 | EC Letter : |  |
| Name of the Entity / Corporate Office : | PETRONET LNG LIMITED (PLL) | Email Address : | peterfernandes@petronetlng.in |
| Address : | 1st Floor, World Trade Center, Babar Road, Barakhamba Lane, New Delhi | Mobile No : | 9999016499 |

2. Proponent Details :

| | | | |
|-------------------------|--------------------|------------------------|------------------------------------------|
| Proponent Name : | Yogananda | Designation : | Chief General Manager and Vice President |
| Telephone No : | 0484-2502259 | Mobile No : | +91 9048844443 |
| Fax No : | 0484- | Email Address : | yoganandareddy@petronetlng.in |
| Website : | www.petronetlng.in | Pin Code : | 682508 |
| State : | Kerala | District : | Ernakulam |
| Village/Town : | | | |

3. Compliance Letter/Report (Proponent):

| | | | |
|-----------------------------------------|-----------------------------------|--------------------------------------|--------------------------|
| Compliance Period : | 2022 / 01 Dec (01 April - 30 Sep) | Compliance Submission Date : | 02 Dec 2022 11:47:02:043 |
| Remarks : | | | |
| Site Visit Report : | N/A | Site Visit Date : | N/A |
| ATR Report : | N/A | ATR Date : | N/A |
| Additional Attachment (If Any) : | N/A | Additional Remarks (If Any) : | |



4. Summary Status of Compliance :


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|---------------------------|----|-----------------------------|---|
| Total Condition : | 44 | | |
| Complied : | 44 | Being Complied : | 0 |
| Not Complied : | 0 | Partially Complied : | 0 |
| Agreed to Comply : | 0 | | |

5. Details of Production and Project Area :

| Date of Commencement of Project/Activity : | 20 Aug 2013 | Project Area as Per EC Granted (In Case of Mine Lease): | 33.4 | |
|---------------------------------------------|---------------------|---------------------------------------------------------|-------------------|---------------------------------------|
| Actual Project Area(In Case of Mine Lease): | 33.4 | | | |
| PRODUCTION CAPACITY : | | | | |
| S.No | Name of the Product | Units | As per EC granted | Production during last financial year |
| 1 | LNG | Tons per Annum (TPA) | 5 MMTPA | 1.04 MMTPA |

6. Specific Conditions (Proponent) :

| S.No | Condition | Self Declaration | Remarks / Reason | Supporting Documents | Observation of IRO |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------|
| 1 | 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 | Complied | Site ERDMP submitted to MoEF&CC vide letter dated 22nd September-2011 and with the HYCR dated 05th April-2013. Safety norms for ship movements as received from CoPT are included in the ERDMP. | N/A | |
| 2 | Marine environment shall be periodically monitored to assess changes, if any, in the ecology and suitable remedial measures, if any required, shall be taken. | Complied | Marine water analysis is being carried out once in 6 months through a PCB approved lab. As per report, there are no adverse changes observed in the marine water quality. Latest report is attached. |  | |
| 3 | All the conditions stipulated by the Science Technology and Environment Department, Government of Kerala vide their Letter No. 4215/B1/2000/STED, dated 9th February-2001 should be effectively implemented. | Complied | Letter No. 4215/B1/2000/STED dated 9th February 2001 does not specify any conditions for compliance. Conditions mentioned in the Letter No.1143/A2/2005/ dated 14.10.2005 from KCZMA are complied |  | |
| 4 | No change in scope of work shall be made without prior approval of this ministry. | Complied | Any change in scope would be carried out only with the prior approval of the Ministry. | N/A | |
| 5 | Project proponent shall take all safety measures and take into account the dynamics of the marine / Coastal area | Complied | Location and size of basin finalized after detailed study done by | N/A | |



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| | 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. | | CWPRS and revalidation by HR Wallingford. The dredged material is being disposed of at the locations identified by Cochin Port trust. | | |
| 6 | 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. Expansion of existing service road in the Coastal Regulation Zone-I shall not be carried out. | Complied | PLL is not in the mangrove area & is at about 100m from the buffer zone. The existing service road belongs to Panchayat. PLL will not carry out any expansion of existing service road into CRZ Zone 1(i) | N/A | |
| 7 | 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. | Complied | 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. | N/A | |
| 8 | 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. | Complied | Compliance status of conditions mentioned by KSPCB in the CTE No. PCB/NOC/EK/117/ dated 17.09.99 is enclosed as Annexure 2. |  | |
| 9 | The budget allocated for environment safeguard measures shall not be diverted for any other purpose. | Complied | Budget allocated for environment safeguard will not be diverted for other purposes. | N/A | |
| 10 | 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. | Complied | Comprehensive EIA for 2.5 MMTPA Terminal capacity was submitted at MoEF&CC on 16th February-2001. EIA, QRA and Site emergency response plan (ERDMP) were submitted at MoEF&CC on 22nd September-2011. | N/A | |
| 11 | The Bathymetric survey of the dredged material disposal site should be carried out regularly and it should be ensured that there | Complied | The Bathymetric survey is being carried out by Cochin Port Trust. The | N/A | |


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| | 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. | | dredged material is being disposed of at the locations identified by Cochin Port trust. | | |
| 12 | 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. | Complied | PLL had submitted to MoEF&CC the change in the regasification process of the terminal and Sea water intake is not required in Shell and Tube Vaporizers. So, this condition remains not applicable. | N/A | |
| 13 | 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. | Complied | PLL had submitted to MoEF&CC the change in the regasification process of the terminal and Sea water intake is not required in Shell and Tube Vaporizers. So, this condition remains not applicable. | N/A | |
| 14 | 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. | Complied | LNG Pipelines are laid above ground along the jetty trestle. PLL is not taking sea water for its process and No effluent is getting discharged in to the sea. | N/A | |
| 15 | Regular surveys shall be conducted to identify changes in the channel morphology so that navigational hazards are minimal. | Complied | The channel is belonging to Cochin Port and its Morphology survey has been carrying out by Cochin Port Trust. | N/A | |
| 16 | Specific arrangement for rainwater harvesting should be made in the project design and the rainwater so harvested should be optimally utilized. | Complied | Rainwater collection system is in place above LNG storage tanks and the water collected is being used in the terminal. | N/A | |
| 17 | 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. | Complied | Detailed plan submitted with HYCR dated 30th September-2013. Petronet had spent Rs.60.00 lakh for Mangrove Afforestation Project till date | N/A | |

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| | | | and the details submitted along with HYCR up to march 2020. | | |
| 18 | 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. | Complied | Terminal construction and laying of pipelines were carried out as per applicable regulations. Safety and warning systems are installed and the details were submitted with HYCR up to 30.09.2013. | N/A | |
| 19 | No groundwater shall be tapped for the project. | Complied | Groundwater is not required during construction stage and operation phase. Water requirement during operation of the terminal is being met by the condensed water from air heater & by purchasing. | N/A | |

7. General Conditions (Proponent) :

| S.No | Condition | Self Declaration | Remarks / Reason | Supporting Documents | Observation of IRO |
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| 1 | 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. | Complied | Quarrying material was sourced from Government approved quarries during terminal construction. Details regarding this are submitted with six monthly compliance reports dated on 05th April 2013. | N/A | |
| 2 | 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 | Complied | Terminal construction was carried out as per applicable central & local regulations like KSPCB, PESO, F&B, Fire dept., KCZMA etc. All the statutory approvals are submitted with HYCR dated 05.04.2013. | N/A | |

| | State Government Departments/Agencies. | | | | |
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| 3 | 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. | Complied | Dredging approval has been taken from MoEF&CC vide their order No. J-16011/26/2001-IA-III dated 16th November-2010. Dredging completed & maintenance dredging is carrying out by ensuring all safeguards. | N/A | |
| 4 | 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 | Complied | A laboratory with equipment's for water quality analysis and qualified employees is in place. Air quality monitoring is carrying out with the help of a PCB approved third party lab. Reports attached. |  | |
| 5 | 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. | Complied | Ground water wells are installed for ground water quality monitoring. Ground water analysis report is attached. |  | |
| 6 | 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 | Complied | During construction, PLL has provided adequate infrastructure facilities such as water supply, fuel for cooking, sanitation, etc. to the labourers. Labour colonies were not located in CRZ area. | N/A | |
| 7 | Minor oil spills are likely to be 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 | Complied | Oil spill contingency plan is in place as prepared by CoPT. Any kind of spillage incidents will be handled by Cochin Port Trust. Details regarding this submitted along with HYCR up to 05.04.2013. | N/A | |

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| | ensure full preparedness to undertake all combat operations. | | | | |
| 8 | 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. | Complied | Fixed DCP fire extinguishing system & DCP extinguishers are provided at jetty. Water spray and curtain system is provided at jetty and other locations. Details submitted with HYCR up to 30.09.2013. | N/A | |
| 9 | 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. | Complied | CSR projects are being undertaken by PLL for community development and welfare in nearby villages using a separate CSR fund. CSR report & expenditures during the period, April to September attached. |  | |
| 10 | 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 | Complied | Plant operations being carried out in accordance with all applicable regulations. All the approvals and licenses obtained from statutory bodies were submitted with HYCR dated 5-4-2013. | N/A | |
| 11 | Control room/tower should be equipped with modern communication and control device to act instantaneously if spill/leakage occurs. At the jetty, loading arm 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 | Complied | Control room is equipped with modern communication and control facilities like detectors & ESD systems for act during leakage or spills. Loading arms are equipped with Emergency release systems. | N/A | |
| 12 | The recommendations made in the Environment Management Plan and | Complied | All the recommendations | N/A | |

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| | Disaster Management Plan, as contained in the Environmental Impact Assessment and Risk Analysis Reports of the project shall be effectively implemented. | | are implemented. | | |
| 13 | For employing unskilled, semi-skilled and skilled workers for the project, preference shall be given to local people. | Complied | 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. | N/A | |
| 14 | 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 | Complied | Wastes generated by vessels and tugs are handled & disposed by them as per the guidelines of Annex V of Marpol (IMO). We have already submitted related details with HYCR 5-4-2013 | N/A | |
| 15 | 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 | Complied | All the navigation related requirements are maintained by Cochin Port Trust. | N/A | |
| 16 | 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. | Complied | STP and septic tanks are provided for treating sewages from buildings. No sewage or waste from PLL are allowed to enter in water bodies. Treated water from STP is used for gardening purpose. | N/A | |
| 17 | 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. | Complied | PLL has set up an Environment Management Cell (EMC) under Chief General Manager & Vice President (Plant Head) with members from plant departments. | N/A | |
| 18 | The project affected people, if any should be properly compensated and rehabilitated. | Complied | No people affected directly as the project was on uninhabited land. | N/A | |

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| 19 | This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary for environmental protection, which shall be complied with. | Complied | PLL will comply with additional conditions, if any suggested by the ministry or any other competent authority in writing. | N/A | |
| 20 | 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.envfor.nic.in . The advertisement should be made within 7 | Complied | Advertised in two local newspapers widely circulated in the region around the project. Copy of advertisement submitted along with the six-monthly compliance report dated 30th September-2013. | N/A | |
| 21 | 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. | Complied | The fund earmarked for environment management is included in the budget and will not be diverted for other purposes. Environment expenses for FY 2021-22 is submitted along with HYCR for Oct21-Mar22. | N/A | |
| 22 | 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. | Complied | PLL had informed the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project vide letter dated 5th Sept-2008, from Director(Technical | N/A | |
| 23 | 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 new ones for ensuring environmental protection. The project proponents should be responsible for implementing the suggested safeguard measures. | Complied | 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 prior to any deviation, alteration and modification. | N/A | |
| 24 | This Ministry reserves the right to revoke this clearance, if any of the | Complied | Noted. PLL will abide by all Environment | N/A | |

| | conditions stipulated are not complied with to the satisfaction of this Ministry. | | clearance conditions. | | |
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| 25 | 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 mitigative measures and other environmental protection activities. | Complied | PLL extend its full support to the officers of this ministry's Regional Office, Bengaluru and the officers of the Central and State Pollution Control Board during the inspection for monitoring purpose. | N/A | |

I ' PETRONET LNG LIMITED (PLL) ' hereby give undertaking that the specific / general condition is entered by me is correct.

E-Sign
PETRONET LNG LIMITED (PLL)
Date : 02 Dec 2022 11:47:02:043

****Note : N/A - Not Available**

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