

**F.No.11-63/2011-IA-III**  
**Government of India**  
**Ministry of Environment & Forests**  
**(IA Division)**

**Paryavaran Bhawan,**  
**CGO Complex, Lodhi Road,**  
**New Delhi - 110 003.**

**Dated: 26<sup>th</sup> February, 2014**

**To,**  
**The President (Technical),**  
**M/s Petronet LNG Ltd.,**  
**World Trade Centre, 1<sup>st</sup> Floor,**  
**Babar Road, Barakhamba Lane,**  
**New Delhi - 110 001**

**Contact Person Details:**  
**Shri M.M. Ahuja,**  
**Tel: 23411411, 23472525,**  
**Fax: 23472550**

**Subject: Environmental and CRZ Clearance for installation of terminal facilities to handle 10 MMTPA of additional LNG at PLL, Dahej, Gujarat by M/s Petronet LNG Limited - Reg.**

This has reference to your letter No: PLL/DAHEJ/MOEF/2013 dated 23.09.2013 seeking prior Environmental and CRZ Clearance for the above project under the EIA Notification - 2006 and Coastal Regulation Zone (CRZ) Notification, 2011. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification - 2006 and Coastal Regulation Zone Notification, 2011 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, recommendation of State Coastal Zone Management Authority, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meeting held on 26<sup>th</sup> - 28<sup>th</sup> December, 2013.

2. It is interalia, noted that the proposal involves installation of terminal facilities to handle 10 MMTPA of additional LNG at Petronet LNG Ltd, Taluka Vagra, District, Bharuch Dahej, Gujarat. Dahej LNG Terminal is presently operating at its full capacity of 10 Million Tonnes Per Annum (MMTPA). The plant has one jetty, four LNG tanks (each having a gross capacity of 160,000 cubic meter) and regasification facilities along with associated utilities (sized for handling 10 MMTPA of LNG). In view of the market scenario and availability of domestic gas and to meet the increased requirement, PLL has planned to augment the capacity of Dahej LNG Terminal from 10 MMTPA to 20 MMTPA (Phase III expansion). Total installed capacity shall be 20 MMTPA after expansion, with provisions to carry out the same in a phased manner, Phase-III(A) (10 to 15 MMTPA) estimated to be completed by end 2016 and Phase-III(B) (15 to 20 MMTPA) by end 2020. Utilities and other associated





facilities shall be installed for 20 MMTPA capacity in Phase-III(A) itself. The land requirement for the proposed expansion is 58.62 ha. The total cost of the project for Phase-III(A) is Rs. 2950 crores and for Phase-III(B) is Rs. 2700 crores.

3. The Major additional equipment/facilities proposed are LNG Storage Tanks (each of 180,000 cbm gross capacity), In-Tank Pumps, BOG Compressors, BOG recondensor, HP Pumps, STV, STV (cogen), Send out metering, Fuel gas station, Air heaters, Glycol Water pumps, Hot water pumps, GW expansion vessel, GTG, Nitrogen unit etc. According to Project Proponent, proposed expansion will be constructed in accordance with the NFPA 59 A- Standard for the Production, storage and handling of liquefied Natural gas, IOSD-194- Standard for Storage and handling of LNG, EN 1473- Installation and equipment for LNG- Design of onshore installations. Existing facilities are in compliance with M.B. Lal Committee report and same will be followed for the proposed project. The Risk Assessment/Hazard analysis has been done for various scenarios of associated risks and the local meteorology. LNG release modelled for gaseous dispersion using the model ALOHA- Area Locations of Hazardous Atmospheres developed by National Ocean Atmospheric Administration - USA (NOAA) and US Environmental Protection Agency (USEPA). In all scenario, the risk contours will remain well within the plant boundary limit. The modelling suggested that maximum vulnerable heat radiation will not spread beyond 181 m, nearest village is at 1.5 km from the proposed expansion facility. Hence, human habitation will not be affected.

4. The ToRs were finalised by EAC in its 108<sup>th</sup> meeting held on 10<sup>th</sup> - 11<sup>th</sup> January, 2012 including conduct of Public Hearing. Public Hearing was conducted on 19.06.2013 at the site. In general, the public welcomed the project. The issues raised during the Public Hearing were infrastructure facilities such as Schools, roads for the nearby villages and employment for the educated and skilled persons. The responses provided by the Project Proponent were examined by the EAC. The Committee was satisfied with the response. The Project Proponent informed that compliance of EC, are being regularly submitted to the RO, MoEF. The inspection report submitted by the Gujarat Pollution Control Board dated 24.05.2013, shows compliance with the consent conditions. 10m width of green belt on sea side and 50m on other three sides will be developed. The Project Proponent committed to plant mangroves in 1050 ha by 2015 and already plantation in an area of 650 ha has been developed in consultation with State Forests Department/ Gujarat Ecological Commission.

5. HTL/LTL demarcation has been carried out by IRS, Anna University and according to the demarcation, there is no eco-sensitive area in the study area. The Forests and Environment Department, Government of Gujarat has granted approval on 30.10.2013 for diversion of 22.62 ha forests land based on the formal approval of MoEF, RO, Bhopal dated 05.08.2013. The Gujarat Coastal Zone Management Authority has recommended the project vide letter no. ENV-10-2013-71-E dated 13.01.2014.



6. The details presented by the Project Proponent were examined by the EAC in its 129<sup>th</sup> EAC in December, 2013. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental and CRZ Clearance for the project. Accordingly, the Ministry hereby accord necessary Environmental and CRZ Clearance for the above project as per the provisions of Environmental Impact Assessment Notification - 2006 and Coastal Regulation Zone Notification, 2011, subject to strict compliance of the terms and conditions as follows:

**7. SPECIFIC CONDITIONS:**

- (i) "Consent for Establishment" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- (ii) All the recommendations and conditions stipulated by the Gujarat Coastal Zone Management Authority vide letter no. ENV-10-2013-71-E dated 13.01.2014, shall be strictly complied with.
- (iii) The facility shall be constructed in accordance with the NFPA 59 A- Standard for the Production, storage and handling of liquefied Natural gas, IOSD-194- Standard for Storage and handling of LNG, EN 1473 - Installation and equipment for LNG - Design of onshore installations and M.B.Lal Committee report.
- (iv) Precautionary measures shall be put in place to prevent leakage of LNG due to any disasters including tidal/tsunami wave, seismic and other natural calamities. Disaster Management Plan shall put in place to manage emergencies.
- (v) Oil Spill Contingency Management Plan shall be put in place.
- (vi) Online sensor for load monitoring shall be provided, as committed.
- (vii) Temperature sensors, gas detectors, spill detectors shall be installed to take care of any type of spillage or leakage of the gas from the plant and the trucks.
- (viii) Project proponent shall explore training the local population with the help of training institutes like ITI etc, to make them suitable for employment in the facility.
- (ix) All the recommendation of the EMP, Risk Assessment and Disaster Management Plan shall be complied within letter and spirit. All the mitigation measures submitted in the EMP/DMP report shall be prepared in a matrix format and the compliance



for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.

- (x) A separate Environment Monitoring Cell shall be set up especially for this plant and details shall be submitted to the Ministry prior to the commencement of operation.
- (xi) Construction activity shall be carried out strictly as per the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (xii) No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (xiii) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (xiv) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.

**8. GENERAL CONDITIONS:**

- (i) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (ii) Full support shall be extended to the officers of this Ministry/Regional Office at Bhopal by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
- (iii) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.
- (iv) Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (v) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.





- (vi) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.
- (vii) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (viii) A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been made received while processing the proposal.
- (ix) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's office for 30 days.

9. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.

10. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

11. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.

12. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

13. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

14. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.



15. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZillaParisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

16. The proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

17. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of Clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.



**(Lalit Kapur)**  
**Director (IA-III)**

Copy to:

1. The Principal Secretary, Department of Forests & Environment and Chairman, GCZMA, Govt. of Gujarat, Sachivalaya, Gandhinagar, Gujarat.
2. The Director, Forests & Environment Department, Govt. of Gujarat, Block No.14, 8<sup>th</sup> Floor, Sachivalaya, Gandhinagar - 382 010.
3. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhinagar-382 010.
5. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No. 3, Ravishankar Nagar, Bhopal-462016 (M.P.)
6. Guard File.
7. Monitoring Cell, MoEF.



**(Lalit Kapur)**  
**Director (IA-III)**