F. No. 11-30/2011-IA.III Government of India Ministry of Environment & Forests (IA-III Section)

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

Dated: February 10, 2014

To Executive Director (Gas). M/s Indian Oil Corporation Ltd., Corporate Office, Scope Complex, Cor-2, 7th Floor, BD (Gas), 7, Institutional Area, Lodhi Road, New Delhi - 110 003

Contact Person Details: Shri A.K. Marchanda, Tel: 011-24321704 Email:marchandaak@iocl.co.in ED (Ell-Ges) V. Damdom
13/02/2014

Subject: Environmental and CRZ Clearance for setting up of LNG terminal at Ennore, Tamil Nadu by M/s Indian Oil Corporation Ltd. - Reg.

This has reference to your letter No: BD/GAS/37.0/EIA/06 dated 24.09.2013 and your subsequent letter dated 21.10.2013 seeking prior Environmental and CRZ Clearance under the Environment Impact Assessment 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 Environment Impact Assessment Notification, 2006 and Coastal Regulation Zone Notification, 2011 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire recommendation of the State Coastal Zone Management Authority, EIA, EMP, Public Hearing proceedings and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 28th - 30th October, 2013 and 20th - 23rd November, 2013.

It is interalia, noted that the proposal involves setting up of LNG terminal at Village Vallur, Tehsil Minjur, Dist. Thiruvallur, Ennore, Tamil Nadu. As a part of diversification strategy to provide complete fuel solutions to it's customers, IOCL started RLNG marketing in the year 2004, as one of the major off takers of RLNG from Dahej LNG import terminal of Petronet LNG Limited (PLL- a Joint Venture Company of IOCL, BPCL, GAIL and ONGC). IOCL also has a marketing share of 30% of RLNG in the upcoming PLL's Kochi LNG terminal. Ennore Port is an all weather port with all the infrastructure facilities already in place. Ennore Port has already earmarked water front for LNG Jetty and land for LNG storage and re-gasification terminal with in the port premises in their master plan. On completion of the project RLNG would reach the gas starved Southern states of India particularly Tamil Nadu and some parts of Karnataka and Andhra Pradesh.

RLNG from the terminal is proposed to be supplied to customers through extensive pipeline network to the existing and new power plants, Fertilizer plants, existing and new industries, CNG/LCNG, etc. LNG would also be supplied by road through cryogenic LNG road tankers to customers who are far away and not connected with gas pipeline networks. Capital cost is Rs. 4,320 Crore.

The Terminal will receive LNG through ships, which will be unloaded in Storage Tanks. LNG will be vaporized and delivered to industries and domestic sectors by pipeline. LNG may also be sold through Road Tankers. LNG receiving jetty and storage and regas Terminal will be constructed in Ennore Port. Water will be required for process, makeup of fire-water and domestic purpose, which will be met through nearby sources. Regasified LNG will be used as fuel. There is no waste affluent generated and release in the process. Domestic sewage from water closets, showers, kitchen and cleaner's sinks will be sent to septic tanks in conformity with requirements of the Local Authority.

- 3. The IRS, Anna University, an authorised agency has demarcated the HTL/LTL for the area. The Tamil Nadu Coastal Zone Management Authority (TNCZMA) has recommended the project vide letter No. 5132/EC.3/2013-1 dated 20.09.2013. As per the TNCZMA, the site is in CRZ-I-B (intertidal area), CRZ-III, CRZ-IV.
- 4. The proposal was examined by the EAC in its meeting held in August, 2011 which finalized ToRs including conduct of Public Hearing. Public Hearing was conducted on 13.09.2012 inside the Ennore Port by the Tamil Nadu Pollution Control Board. Major issues raised during the Public Hearing are that emergency precautionary measures, employment etc. Project Proponent presented the compliance to ToRs including the studies carried out and the response/action plan on each issue raised during public hearing.
- 5. 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 accords necessary Environmental and CRZ Clearance for the above project as per the provisions of Environment Impact Assessment Notification, 2006 and CRZ Notification, 2011 and its

subsequent amendments, subject to strict compliance of the terms and conditions as follows:

6. SPECIFIC CONDITIONS:

- (i) 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.
- (ii) Oil Spill Contingency Management Plan shall be put in place.
- (iii) Mooring hooks shall be provided with online sensor for load monitoring as committed.
- (iv) No R& R is involved and no livelihood is affected since the facilities are within the existing Port.
- (v) 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.
- (vi) All the conditions stipulated by the Tamil Nadu Coastal Zone Management Authority (TNCZMA) vide letter No. 5132/EC.3/2013-1 dated 20.09.2013, shall be complied with.
- (vii) Mock drill shall be conducted in collaboration with State Disaster Management Authority or National Disaster Management Authority.
- (viii) Tie-up with specialized hospitals for handling any disaster situation. Earmarking of identified beds in burns ward be done.
- (ix) Onsite Emergency Management Plan shall be put in place.
- (x) All the issues raised in the public hearing shall be incorporated and complied with strictly.
- (xi) No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (xii) NOC/Clearance shall be obtained confirming that all the fire fighting provisions are as per standards specified by the Chief Controller of Explosives/Petroleum & Explosives Safety Organization (PESO) for the additional storage tanks.



- (xiii) Leak detection/warning system shall be provided at strategic locations. Necessary control measures capable of remote operation to shut down the leakage, if any, should be provided.
- (xiv) The smooth and safe operation of the system will be ensured by incorporating a computerized SCADA (Supervisor Control And Data Acquisition) system. Any leakage in the pipeline shall be immediately detected by the Computer system and product pumping shall be immediately cut off.
- (xv) Regular patrolling of the pipelines needs to be done. This will help in identifying any activity that have the potential to cause pipeline damage or to identify small leaks whose effects are too small to be detected by instrument.
- (xvi) The project shall be carried out as per international standards in vogue and duly certified by competent authorities before commissioning.
- (xvii) Oil Spill Contingency Management Plan shall be put in place along with the dedicated staff to deal with Oil spill in and around the port area shall be provided in the port. No oily wastes shall be discharged into the water bodies/mangrove areas.
- (xviii) 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.
- (xix) The project proponent shall take up mangrove plantation/green belt in the project area, wherever possible. Adequate budget shall be provided in the Environment Management Plan for such mangrove development.
- (xx) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.

7. GENERAL CONDITIONS:

- (i) Adequate provision for infrastructure facilities including water supply fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.
- (ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.

- (iii) Full support shall be extended to the officers of this Ministry/Regional Office at Bangalore 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.
- (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) Tamil Nadu Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office/Tehsildar's office for 30 days.
- 8. 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.
- 9. 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.
- 10. 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 Tamil Nadu 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 Bangalore.

- 11. 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.
- 11. 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.
- 13. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- 14. The proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- 15. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- 16. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of Clearance conditions and shall also be sent to the respective Regional Office of MoEF by e-mail.

(Lalit Kapur) Director (IA-III)

Copy to:

(1) The Principal Secretary, Department of Environment and Forests, First Floor, Panagal Building, Saidapet, Chennai – 600 015, Tamil Nadu.

(2) The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 110032.

- (3) The Director, Department of Environment, Government of Tamilnadu, Panagal Building, Ground Floor, Saidapet, Chennai-15, Tamil Nadu.
- (4) The Chairman, Tamil Nadu Pollution Control Board, No. 76, Mount Salai, Gundy, Chennai, Tamil Nadu.
- (5) The CCF, Regional Office, Ministry of Environment & Forests (SZ), Kendriya Sadan, IVth floor, E&F wings, 17th Main Road, Koramangala II Block, Bangalore 560 034.
- (6) Guard File.
- (7) Monitoring Cell.

(Lalit Kapur) Director (IA-III)