



सत्यमेव जयते

File No: 11-30/2011-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 29/06/2026



To,

SH. RAMU KUNDURI,
M/s. INDIAN OIL LNG PRIVATE LIMITED,
Indian OIL Bhavan, 8th Floor 139, Nungambakkam High Road, Chennai, THIRUVALLUR, TAMIL
NADU, 600034
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Subject: Expansion of Ennore LNG Terminal from 5 MMTPA to 10 MMTPA at Ennore, Thiruvallur District, Tamil Nadu of M/s Indianoil LNG Private Limited (IOLPL) - Grant of prior Environmental + CRZ Clearance (EC) to the proposed project.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/TN/IND2/557787/2025 dated 17/11/2025 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC25A0205TN5745854N
(ii) File No.	11-30/2011-IA.III
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	6(a) Pipelines
(vi) Sector	Industrial Projects - 2
(vii) Name of Project	Expansion of Ennore LNG Terminal From 5 MMPTA To 10 MMTPA of M/s. Indianoil LNG Private Limited (IOLPL) at Ennore, Chennai, Tamil Nadu
(viii) Name of Company/Organization	INDIAN OIL LNG PRIVATE LIMITED
(ix) Location of Project (District, State)	THIRUVALLUR, TAMIL NADU
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. The Ministry of Environment, Forest and Climate Change (MoEFCC) has examined the proposal for proposed expansion of Ennore LNG Terminal from 5 MMTPA to 10 MMTPA at Ennore, Thiruvallur District, Tamil Nadu of M/s Indianoil LNG Private Limited (IOLPL).

4. The proposal was considered in EAC (Industry-2) meetings held on 17th – 18th February, 2025 and 12th December, 2025, wherein the project proponent and their accredited Consultant Engineers India Limited (NABET Certificate No. NABET/EIA/24-27/RA0359; validity upto 23/05/2027) made a detailed presentation on the salient features of the project. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code available above.

5. All project/activity are listed at S.N. 6(a) - Oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks/ sanctuaries/ coral reefs/ ecologically sensitive areas including LNG Terminal of Schedule of Environment Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

6. The details of products and capacity are enclosed at Annexure-2.

7. MoEFCC has issued Environmental and CRZ Clearance to the existing LNG terminal vide File No. 10-30/2011-IA.III dated 14/02/2014 to M/s Indian Oil Corporation Ltd (IOCL). Subsequently, EC has been transferred to M/s IOLPL on 22/04/2016. Certified Compliance report of existing ECs has been obtained from Regional Office, Chennai vide File No. EP/12.1/2018-19/21/TN/138 dated 30.01.2025.

8. Standard Terms of Reference have been obtained vide letter F. No. 10-30/2011-IA.III dated 09/09/2021. It is informed that there is no litigation pending against the proposal. Public Hearing for the proposed project had been conducted by the Tamil Nadu Pollution Control Board (TNPCB) on 17/11/2023 at Kalaignar Community Hall, Athipattu village chaired by Collector, Tiruvallur District. The main issues raised during the public hearing and their action plan is enclosed at Annexure-5.

9. Total plant area after expansion will remain same as 139.55 acres. No additional land will be acquired for the proposed expansion as the same will be done within existing plant premises. Out of the total plant area, 42.24 acres (33% of total area) has been developed as greenbelt inside the refinery. The estimated project cost is Rs. 3400 Crores. Capital cost of EMP would be Rs. 40 lakhs and recurring cost for EMP would be Rs. 14 lakhs per annum. Total Employment after expansion will be 60 persons as direct (10) & indirect (50).

10. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors within 10 km distance. There are no Reserve forests/protected forests within 10 km distance. Kosasthalai River is located at a distance of 500 m in West direction of the LNG Terminal.

11. Ambient air quality monitoring was carried out at 8 locations during March to May 2022 and the baseline data indicates the ranges of as: PM10 (57.8-78.7 µg/m³), PM2.5 (26.7-39.5 µg/m³), SO₂ (9.8-15.7 µg/m³) and NO₂ (17.7-26.9 µg/m³). One-month additional air quality data collection was carried out during April 2025 the baseline data indicates the ranges of as: PM10 (42.5-69 µg/m³), PM2.5 (22.5-52.6 µg/m³), SO₂ (16.6-36.6 µg/m³) and NO₂ (20.7-40.2 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would 44.8 µg/m³ with respect to NO_x. The GLC for SO_x will remain same as there will be no SO_x emission from LNG Plant. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

12. Water requirement for expansion project will be 240 m³/day. Total fresh water generation from Ambient Air Heaters is 515 m³/day and the average minimum water consumption is 45 m³/ day. Water will be generated in-house from atmosphere. Domestic sewage will be generated, which is collected and treated in new 40 KLD Sewage Treatment Plant (STP)/Bio-digester which is proposed under expansion project.

13. Total power requirement of LNG terminal post expansion will be 26 MW (Existing 14 MW + 12 MW for proposed expansion) which will be sourced from internal captive power plant through Gas Turbine Generators (GTGs). There are no boilers in the LNG terminal. Presently, 3 Gas Turbine Generators (2 working + 1 standby) are installed at 100% terminal send out. For the expansion case, 3 additional GTGs (2 working + 1 standby) are envisaged. There are 2 DG sets (1010

KVA and 750 KVA) presently working in the terminal for start-up of plant. There is no additional DG sets envisaged for the project and existing DG sets back-up will be utilized.

14. Details of Process emissions generation and its management:

There will be no SOx emission from the LNG Terminal. However, below mitigation measures will be followed to control the process emissions:

- Online stack analyzers for monitoring of NOx and CO emissions.
- Provision of mechanical seals in all the hydrocarbon pumps for reduction of fugitive emissions.
- LDAR surveys will be carried out periodically and corrective actions will be taken.

15. Details of solid waste/Hazardous waste generation and its management:

- Used Lubricating oil will be collected in metal drums kept in secured area and will be recycled/disposed through authorized recyclers.
- Discarded containers/barrels will be disposed as per Solid Waste Management Rules, 2016.

16. During deliberations, following issues were discussed:

- It was informed to the committee that as per OM dated 26th April, 2022 was sent to CRZ Division for comments prior to appraisal by the EAC for all integrated CRZ and EC clearances. The CRZ division noted that the CRZ Notification, 2011 is applicable in the State of Tamil Nadu. The project has also been recommended by the Tamil Nadu SCZMA vide letter dated 26/07/2024. The proposed activity is permissible under Para 3(i)(a) and Para 8 III B (iii) of the CRZ Notification, 2011.

S. No.	ADS	Reply
1.	The project proponent shall submit recommendations of SCZMA for consideration of proposal.	District Coastal Zone Management Authority (DCZMA) for Tiruvallur District, Tamil Nadu considered the proposed expansion of LNG terminal project proposal in their meeting dated 09.02.2024 and recommended the proposal to the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA). The proposal was considered in the 127th meeting of TNSCZMA held on 15.07.2024 and TNSCZMA has recommended the proposal to MoEFCC. CRZ Recommendation letter is also submitted.
2.	PP shall use DG sets complying recent CPCB norms to reduce the NOx emission level.	IOLPL will use DG set's complaint to the CPCB norms for its proposed expansion project. DGs shall be operated for emergency requirements only and are equipped with modern technologies to ensure lower emissions. Also, only BS-VI grade diesel fuel will be used in DG sets to ensure the emissions are within limit and complied to CPCB/TNPCB guidelines.
3.	PP shall completely reuse the treated water generated through condensation plant.	IOLPL will completely reuse the treated water generated through Ambient Air Heaters (AAH) from atmosphere. Water generated from AAHs primarily originates from film condensation of ambient air during the reheating of cold WEG (Water-Ethylene Glycol). This condensate is collected through grated open channels and routed to the Fire Water Pond. From the Fire Water Pond, the water is processed through a multi-stage treatment system, WTP. The treated water from the Water Treatment Plant (WTP) outlet is used for various service water requirements within the terminal, including: - De-icing operations at the Truck Loading Facility (TLF) - Potable water for domestic use - Make-up water for the cooling tower (serving the nitrogen plant and air compressors) - Watering in Green belt areas This integrated water recovery and reuse approach supports sustainable terminal operations by minimizing water wastage and ensuring optimal resource utilization.

S. No.	ADS	Reply
4.	PP shall replace the existing soak pits and septic tanks into STP.	For the expansion project, packaged STP or biodigester shall be installed in the complex. Existing soak pits and septic tank networks will be connected to the new STP or biodigester.
5.	PP shall re-conduct one-month ambient air quality monitoring, with one additional location at the project site, as per CPCB guidelines.	Additional One-month AAQ monitoring is conducted at 8 locations during the month of April 2025. Parameters like PM10, PM2.5, SO2, NO2, Benzene and NH3 were analysed on 24 hourly basis, whereas CO and Ozone on 8 hourly basis. The baseline data indicates the ranges of as: PM10 (42.5-69 g/m3), PM2.5 (22.5-52.6 g/m3), SO2 (16.6-36.6 g/m3) and NO2 (20.7-40.2 g/m3). All above parameters are found well within NAAQS, 2009. The baseline data is submitted on parivesh portal.
6.	PP shall submit an action plan for the risk assessment and management especially for explosion related risks.	<p>Rapid Risk Assessment study is carried out for the proposed expansion project. The detailed consequence analysis of release of hydrocarbon in case of major credible scenarios are modelled in terms of release rate, dispersion, flammability and toxic characteristics. The different consequences (Flash fire, pool fire, jet fire and Explosion effects) are considered during consequence analysis modelling. The following mitigative measures are recommended.</p> <ul style="list-style-type: none"> · Provide sufficient number of hydrocarbon detectors near new LP LNG Pump for early leak detection and develop interlocks, procedures to stop rotating equipment & inventory isolation and for safe evacuation of personnel in case of loss of containment. · To enable rapid detection of leak/ fire, HC (point or open path) gas and UV/IR Flame detectors shall be located in strategic location in the facility. · Active fire protection system shall be provided throughout the facility for preventing escalation of fire. · In order to prevent secondary incident arising from any failure scenario, it is recommended that sprinklers and other protective devices provided on the tanks to be regularly checked to ensure that they are functional. · It shall be ensured that all the vehicles entering the plant shall be provided with spark arrestors at the exhaust. · Recommended to use portable HC detector during sampling and maintenance etc. · Emergency response and evacuation procedure with the following measures will be prepared and persons will be trained. · Restrict vehicle movements on the road on the eastern, western and northern side of the HP Pumps through suitable means. Only emergency vehicles or authorized vehicles shall be allowed on this road. · Proper checking of truck drivers and all persons entering to the terminal premises for Smoking or Inflammable materials to be ensured at entry gates to avoid presence of any unidentified source of ignition. · Employees and Truck drivers must be well trained and must be aware of the hazards involved in the loading operation. · Mock drills to be organized at organization level to ensure preparation of the personnel's working in premises for handling any hazardous situation.
7.	PP shall allocate Rs. 7.5 Crores towards Extended EMP. Accordingly revise and resubmit the Extended EMP with monitorable targets and timelines	The project proponent has allocated the budget as per issues raised during public consultation which is held on 17/11/2023. Various activities will be carried out by M/s IOLPL in the vicinity of proposed project area based on the outcome of public hearing as per prevailing MoEFCC guidelines on CER with a total budget provision of Rs. 7.5 Crores.
8.	PP shall share the details of the sensors used to detect gas leaks.	A hydrocarbon detector is a device that senses and measures the concentration of hydrocarbon gases and vapours to prevent hazardous events like fires and explosions. A flame detector is a sensor designed to detect and respond to the presence of a flame or fire, allowing flame detection. An LNG spill detector, also known as a gas leak detector, identifies leaks of liquefied natural gas (LNG) by

S. No.	ADS	Reply
		detecting high concentrations of methane or other combustible gases. IndianOil LNG Private Limited (IOLPL) Terminal is having hydrocarbon detector, fire detector and LNG spill detector in place to detect leak, so that immediate steps can be taken. A total of 260 hydrocarbon detectors, 110 fire detectors and 160 LNG Spill detectors are installed in the terminal to detect any kind of leaks and fire.
9.	PP shall install 10% of the total power requirement in the form of solar power inside plant premises/adjacent/nearby areas.	The proposed expansion requires 12 MW power which will be generated through Internal Gas Turbine Generators (GTG) with Natural Gas (NG) firing. Huge area will be required to install 10% of the total power requirement (i.e.1.2 MW), which is not available presently with IOLPL. IOLPL will explore and carry out a feasibility study to install solar panels on non-process buildings (i.e. Admin building, canteen, service building etc.) inside the LNG terminal.
10.	PP shall allocate budget for Public Hearing Action plan with monitorable targets and timelines.	Public Hearing for the proposed project was conducted by the Tamil Nadu Pollution Control Board (TNPCB) on 17/11/2023 at Kalaignar Community Hall, Athipattu village chaired by Collector, Tiruvallur District. The main issues raised during the public hearing and their action plan with budgetary provision and timeline are provided.
11.	PP shall submit an undertaking that no written representations/objections/grievances/complaints have been received during public hearing.	Four written representations were received during public hearing of which one is connected with the providing of TNPCB control room at Athipattu and remaining three are connected to issues such as employment and developmental activities in the villages.

EAC found the above information satisfactory.

17. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

18. The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of Environmental + CRZ Clearance.

19. The Environmental Clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

20. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords **Environmental + CRZ Clearance to the project proposed**

expansion of Ennore LNG Terminal from 5 MMTPA to 10 MMTPA at Ennore, Thiruvallur District, Tamil Nadu of M/s Indianoil LNG Private Limited (IOLPL), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions enclosed at Annexure-1.

21. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the Environmental Clearance, if implementation of any of the above conditions is not found satisfactory.

22. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

23. Any appeal against this Environmental 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.

24. The above conditions will be enforced, *inter alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

25. This issues with the approval of the Competent Authority.

Copy To

1. The Member Secretary, CGWA, 18/11 Jamnagar House Man Singh Road, Central, Delhi, cgwa@nic.in
2. The Monitoring Cell MoEFCC, Compliance & Monitoring Division, Indira Paryavaran Bhawan Jor Bagh Road New Delhi, South, Delhi, moefcc-monitoring@gov.in
3. The Deputy Director General, Regional Office, Deputy Director General Of Forests (C) Ministry Of Environment Forest And Climate Change क्षेत्रीय कार्यालय प्रथम तल जीपीओए के लिए अतिरिक्त कार्यालय ब्लॉक शास्त्री भवन हैडोज़ रोड नुंगमबककम चेन्नई -600006, N/A, N/A, ro.moefccc@gov.in
4. The District Collector, DC Office, District Collector Thiruvallur, Thiruvallur, Tamil Nadu, collrtlr@nic.in
5. The Member Secretary, SPCB/PCC, No. 76 Mount Salai Guindy, Chennai, Tamil Nadu, memsec@tnpcb.gov.in

Annexure 1

Specific EC Conditions for (Pipelines)

1. Pipelines

S. No	EC Conditions
1.1	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
1.2	Total water requirement for the expansion shall be 240 kLD which which will be generated in house from atmosphere. Domestic sewage generated shall be treated in proposed 40 KLD Sewage Treatment Plant (STP)/Bio-digester. No other emission, effluent or solid waste shall be generated from the operation of the LNG Terminal.
1.3	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

S. No	EC Conditions
1.4	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.
1.5	The project authorities shall provide a SCADA-based monitoring and control system integrated with GPS and a dedicated optical fiber-based communication network for the safe operation of LNG terminal facilities, including storage, regasification, and transfer systems. An effective leak detection and emergency shutdown system shall be installed, and adequate isolation/shut-off valves shall be provided at critical locations, including near habitation and sensitive areas, to minimize LNG/gas release into the atmosphere in the event of system failure.
1.6	Necessary approvals from Chief Controller of Explosives must be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented. Regular VOC monitoring shall be done at vulnerable points.
1.7	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.
1.8	<p>The company shall undertake waste minimization measures as below:</p> <ul style="list-style-type: none"> (a) Metering and control of quantities of active ingredients to minimize waste. (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment cleaning etc. to reduce wastewater generation.
1.9	<p>Greenbelt of at least 5-10 m width has already been developed in 42.24 acres, i.e., ~33% of total project which shall be densified @ 2500 trees per hectares, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. The PP shall annually submit the audited statement along with geotagging, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year. Trees shall be planted in the Green Belt under the campaign #Plant4Mother #एक पेड़ माँ के नाम and uploaded on the MeriLiFE portal (https://merilife.nic.in/).</p>
1.10	The unit shall install 03 CAAQMS in consultation with SPCB to monitor the parameters as specified in NAAQS, 2009.
1.11	PP proposed to allocate Rs. 7.5 Crores towards Extended EMP which shall be implemented as per plan submitted in consultation with District Administration.
1.12	A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering /specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

S. No	EC Conditions
1.13	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
1.14	PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
1.15	Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.
1.16	PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12 th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

2. General Conditions

S. No	EC Conditions
2.1	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
2.2	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
2.3	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
2.4	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. Extended EMP activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
2.5	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
2.6	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom

S. No	EC Conditions
	suggestions/ representations, if any, were received while processing the proposal.
2.7	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
2.8	The environmental statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted 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 environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
2.9	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/ . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
2.10	The project authorities 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 the project.
2.11	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

Details of Products & By-products:

The proposed configuration to augment the capacity of existing Ennore LNG Terminal from 5 MMTPA to 10 MMTPA (20 MMSCMD to 40 MMSCMD) has the following components.

Major Facilities:

- LNG storage tanks and associated facilities
- Regasification facilities, including offsites and utility blocks

Expansion Components:

- Storage system comprising LNG storage tanks and low-pressure LNG pumps
- High-pressure LNG pumps
- Vaporizers
- Metering system and final pressure adjustment units
- Fuel gas / natural gas system
- Relief and drain system

Product Pattern:

Products	Unit	Base Case	Post Expansion
Re-gasified Liquefied Natural Gas	MMTPA	5	10

Details of capital and recurring cost of EMP:

The total estimated budget for implementation of EMP is worked out as Rs. 40 Lakhs towards capital cost and Rs. 14 Lakhs towards recurring cost per annum.

Budget of Environmental Management Plan (Capital Cost)

Sl. No.	Activity	Cost
		(Rupees in Lakhs)
1.0	Air Environment	

1.1	Plantation Activities	15.0
1.2	Online analyzers & monitoring	10.0
2.0	Noise Environment	
2.1	Audiometric tests	5.0
3.0	Water Environment	
3.1	Rain water Harvesting pits	5.0
4.0	Land Environment	
4.2	Soil Sampling & analysis	5.0
5.0	Biological Environment	
5.1	Additional Plantation Activities	Included in 1.1
	Budget for EMP (Capital Cost)	40.0

Budget of Environmental Management Plan (Recurring Cost per Annum)

Sl. No.	Activity	Cost
		(Rupees in Lakhs)
1.0	Air Environment	
1.1	Additional Plantation Activities	5.0
1.2	Air quality monitoring	3.0
2.0	Noise Environment	
2.2	Audiometric tests	2.0
3.0	Water Environment	
3.1	Rain water Harvesting pits	2.0
4.0	Land Environment	
4.2	Soil Sampling & analysis	2.0
5.0	Biological Environment	
5.1	Additional Plantation Activities	Included in 1.1
	Budget for EMP (Recurring Cost per Annum)	14.0

Details of extended EMP with proposed activities and budgetary allocation: The project proponent has allocated the budget as per issues raised during public consultation which is held on 17/11/2023 & the budgetary cost estimates have been addressed below. Various activities will be carried out by M/s IOLPL in the vicinity of proposed project area based on the outcome of public hearing as per prevailing MoEFCC guidelines on CER with a total budget provision of Rs. 7.5 Crores.

Sl. No.	Programme	Proposed Activities	Proposed Villages	Allocated Budget (Rs. in Lakhs)	Timelines
1.	Education and Skill Development	Provide Interactive smart class equipment's/gadgets like desktop computers, projectors, Interactive White Boards and distributing study materials in ITI Centres and Schools, Distribution of school bags, sports equipment to students, Seating Benches, construction of sanitized toilets etc.	Athipattu, Kattupalli, Minjur Ennore	100	FY 2025-26 To FY 2029-30
2.	Rainwater Harvesting & development of drainage system	Rainwater harvesting structures in villages wherever it is not there. Drainage system to be developed in the villages, all waste water to be channelized	Athipattu, Kattupalli, Minjur Ennore	75	FY 2025-26 To FY 2026-27
3.	Improvement of Healthcare Facilitates	Providing medical instruments, medical kits, medicines, improving medical infrastructure in nearby primary Health Centers of different villages.	Athipattu, Kattupalli, Minjur Ennore	150	FY 2025-26 To FY 2029-30
4.	Support in Infrastructure projects in surrounding villages	Upgradation of road infrastructure, Kuchha roads to be made pucca roads, construction of cemented roads in low lying areas, construction of water tanks, installation of solar street lights,	Athipattu, Kattupalli, Minjur Ennore	100	FY 2025-26 To FY 2028-29

Sl. No.	Programme	Proposed Activities	Proposed Villages	Allocated Budget (Rs. in Lakhs)	Timelines
		improvement in community centres			
5.	Solid Waste Management	Collection bins at villages, construction of compost pit, providing waste disposal vehicle to Panchayat office, sanitation awareness to villagers	Athipattu, Kattupalli, Minjur, Ennore	70	FY 2025-26 To FY 2026-27
6.	Drinking Water facilities for surrounding villages	Providing pipeline water connection to villagers, installation of water pipeline network, providing RO system for clean water	Athipattu, Kattupalli, Minjur, Ennore	200	FY 2025-26 To FY 2029-30
7.	Support to farmers and local fishermen	Providing high quality seeds and fertilizer to farmers, distribution of fishing nets, construction of fish landing platforms for fishermen, monetary support purchase equipment for agriculture, support to local fishermen for purchase of boats	Athipattu, Kattupalli, Minjur, Ennore	55	FY 2025-26 To FY 2027-28
Total Expense (Rs. in Lakhs)				750.0	
Total Expense (Rs. in Crores)				7.5	

Annexure-5

The main issues raised during the public hearing and their action plan:

Sl. No.	Issues/suggestions/ representations made during Public Hearing	Action Plan/replies by Project Proponent	Time Line and Financial Provision
	In Ennore, Minjur & Athipattu areas, due to the operation of ports and thermal power stations, the water bodies are polluted and became unfit for	There is no thermal power station in the existing terminal. There will be no SOx emission and Industrial effluent generation from the terminal. Domestic effluent will be treated in STP and	For the proposed project, M/s IOLPL will spend Rs. 55 lakhs under

Sl. No.	Issues/suggestions/ representations made during Public Hearing	Action Plan/replies by Project Proponent	Time Line and Financial Provision
	fishing. It has also destroyed the agriculture lands.	<p>treated water will be re-used in green belt areas. Solid waste will be disposed off as per Solid Waste Management Rules, 2016.</p> <p>Regarding operation of the existing port and thermal power station, the issue may please be taken up with the District Administration.</p>	<p>support to farmers and local fishermen in the vicinity of project area.</p> <p>Timeline: FY 2025-26 To FY 2027-28</p>
	Employment was not given to a single person from Ennore. Temporary and contract jobs are given. Permanent jobs are not given to the local people. Only 17 persons were given employment instead of 48.	During the construction stage of Phase – I, employment was given to 150 persons, of whom 48 persons are employed at Ennore and records are available, that can be verified. Local persons will be given preference in construction phase of the proposed expansion project. In operation phase of the project, persons will be recruited as per prevailing Government Rules & Regulations.	-
	The explosion of the tanks would be fatal to the surrounding people, there are records of such incidents in America, wastes are disposed into river, project would cause pollution and hence should not be permitted.	Storage tanks have 3 wall arrangement, with 1 m thick RCC outer wall, 1 m thick Perlite layer and then the inner 9% nickel steel tank for holding LNG and the Regasification facilities are designed and constructed as per International and National guidelines such as PNGRB, OISD, PESO etc., LNG/RLNG pipeline systems are provided without flanges, all systems are equipped with facilities to remotely isolate the area, automated and linked with the terminal's F&G system, in the event of a leakage. The facility is provided with 160 numbers of LNG detectors, 260 Hydrocarbon detectors and 110 flame detectors and they are synchronized to the control room and any leakage is detected, the flow would cut-off immediately as per the	-

Sl. No.	Issues/suggestions/ representations made during Public Hearing	Action Plan/replies by Project Proponent	Time Line and Financial Provision
		<p>automated system. Also, the system is designed with PSVs and automated central control systems. There is minimal possibility of any tank explosion.</p> <p>As per Rapid Risk Assessment report, all risk contours are within the boundary premises of LNG Terminal.</p>	
	<p>Public hearing was not properly communicated to the Kattupalli village Also, It is conducted in Athipattu village.</p>	<p>Public hearing was chosen taking into consideration, the availability of infrastructure to conduct the public hearing, even during unfavorable climatic conditions. The public notice to conduct public hearing were made before 30 days one in English and one in Tamil daily newspapers. Copy of the public notices were sent to Kattupalli Panchayat, with a request to display the same in the notice board of the Panchayat. TNPCB selected the venue i.e. Athipattu village after discussion with District Collector.</p>	-
	<p>Villages are fertile areas and as various projects establishment in that area has led to cutting of trees and natural resources, damage to the ecosystem of Buckingham canal, Ash from power plants are affecting agriculture yield, cause skin diseases.</p>	<p>The proposed expansion of LNG Terminal project is located within the plot available with IOLPL in Kamarajar Port Area and no new area is being acquired. Hence, no cutting of trees and damage to natural resources due to the project is envisaged. Further, no emission, effluent or solid waste shall be generated from the operation of the LNG Terminal. No coal is used in the terminal. No fly ash is generated during operation of the LNG terminal. Hence, it will not make any damage to the ecosystem of Buckingham canal and nearby agricultural fields.</p>	<p>M/s IOLPL will spend Rs. 150 lakhs under improvement of health care facilities in the vicinity of project area.</p> <p>Timeline: FY 2025-26 To FY 2029-30</p>
	<p>The operation of the industries located in the surrounding areas are discharging ash and coal dust in the atmosphere and</p>	<p>The proposed LNG Terminal expansion will be carried out by additional two LNG tanks and associated facilities. There will be no</p>	-

Sl. No.	Issues/suggestions/ representations made during Public Hearing	Action Plan/replies by Project Proponent	Time Line and Financial Provision
	Athipattu is most affected area by the surrounding industries. Also, because of the ash and coal dust emission, the rain water got contaminated and ground water became salty.	SOx emission and Industrial effluent generation from the terminal. Domestic effluent will be treated in STP/Bio-digester and treated water will be re-used. Solid waste will be disposed off as per Solid Waste Management Rules, 2016. No fly ash is generated during operation of the LNG terminal and no coal is used in the terminal.	
	Pipeline for the project is laid over water bodies which will affect livelihood of the fisherman, the Ennore area is an air pollution area, this project having the potential threat of accidents and due to the release of methane gas, health of the public affected.	LNG is much safer than LPG and that LNG is stored at -162 °C, once exposed to ambient condition, the same is vaporized and it dissipates in air. Further, flangeless, welded pipelines are used and hence there is very rare possibilities of leakage. Adequate measures are taken in the LNG Terminal for any type of accidents.	-
	The oil spillage occurred from a ship, some four years ago and as such the project would enhance the possibility of some mishaps and hence the project should be stopped.	IOLPL has already prepared Emergency Response & Disaster Management Plan document for Ennore Terminal complex as per Petroleum and Natural Gas Regulatory Board Act, 2006 and as per PNGRB amendment regulations dated 17th September, 2020. The ERDMP covers all emergencies relating to operations and maintenance, personnel, properties including serious accidents, explosions, floods, fire and bomb threat, etc. as mentioned in the regulations.	-
	Thanked the district administration and the nearby industries for the support extended during Covid pandemic, thanked the project proponent in improving the road, requested that the tsunami houses be improved to permanent RCC structured houses and requested to finalize	IOLPL is ready to help the local people through its CSR, by providing facilities based on the needs of that area, in consultation with District Administration.	For the proposed project, M/s IOLPL will spend Rs. 7.5 crores under various programmes in the vicinity of project area.

Sl. No.	Issues/suggestions/ representations made during Public Hearing	Action Plan/replies by Project Proponent	Time Line and Financial Provision
	the percentage of employment to be allotted for the villagers of Kattupalli and other nearby villages.		Timeline: FY 2025-26 To FY 2029-30
	LNG has executed many schemes under CSR fund, the number of jobs given to Athipattu is not correct, permanent jobs, at least 30 to the youth and women of Athipattu village, be given.	During the construction stage of Phase – I, employment was given to 150 persons, of whom 48 persons are employed at Ennore and records are available, that can be verified. Local persons will be given preference in construction phase of the proposed expansion project. In operation phase of the project, persons will be recruited as per prevailing Government Rules & Regulations.	-
	Athipattu welcomed the project as the same would create opportunities and pointed out the proposed employment potential is not mentioned.	This Project required a preparation phase of a minimum 4 years from the date of approval from the board and once the project is started, permanent jobs will be advertised through newspapers and given to eligible candidates.	-
	Permanent employment opportunities are given to locals and a Skill development center to be started in this area to increase the employability of the local youth.	Permanent jobs will be advertised through newspapers and given to eligible candidates and as per Government guidelines. The local ITI centers to be upgraded with providing requisite equipment and instruments.	For the proposed project, M/s IOLPL will spend Rs. 100 lakhs under Education and Skill Development in the vicinity of project area. Timeline: FY 2025-26 To

Sl. No.	Issues/suggestions/ representations made during Public Hearing	Action Plan/replies by Project Proponent	Time Line and Financial Provision
			FY 2027-28
	Vehicular movement in Athipattu, carrying fly ash, coal etc. plying through Athipattu and as such the pollution levels is high, so industries should improve their green belt.	No fly ash is generated during operation of the LNG terminal. The vehicles which will ply to the LNG Terminal containing construction material/waste for the project shall be completely covered. Green Belt development in an area of 42.24 acres is already there in the LNG Terminal and it will be further strengthened by gap filling of plants.	Capital cost of Rs.15 lakhs is allocated for the green belt development under proposed expansion project.
	The lorries carrying ash are to be completely covered to prevent the spreading of ash.	No fly ash will be generated during operation of the LNG terminal. Any truck carrying construction material will be covered completely.	-
	Socio – economic development could be achieved only with employment and therefore all the possible employment opportunities be given only to the local people, including women.	Permanent jobs will be advertised through local newspapers and given to eligible candidates.	-
	Employment opportunities to be given to the local villagers only.	Priority would be given to local villagers in all employment as per the prevailing Government guidelines.	-
