

## **File No:** IA-J-11011/345/2022-IA-II(I)

# Government of India Ministry of Environment, Forest and Climate Change IA Division

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Date 08/03/2024



To,

Shri. Peter Fernandes

M/s. PETRONET LNG LIMITED (PLL)

1st Floor, World Trade Center, Babar Road, Barakhamba Lane, New Delhi, Delhi, NORTH EAST,

DELHI, World Trade Center, 110001 peterfernandes@petronetlng.in

**Subject:** 

Setting up Petrochemical Complex at Luvara village, Vagra tehsil, Bharuch district, Gujarat by M/s. Petronet LNG Limited (PLL)— Consideration of Environmental and CRZ Clearance regarding.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/GJ/IND2/456957/2024 for grant of prior Environmental Clearance (EC) and CRZ 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. EC24A2101GJ5957048N (ii) File No. IA-J-11011/345/2022-IA-II(I)

(iii) Clearance Type Fresh EC

(iv) Category

(v) Project/Activity Included Schedule No. 5(c) Petro-chemical complexes (industries based on

processing of petroleum fractions

(vi) Sector Industrial Projects - 2

Setting up Petrochemical Complex at Dahej,

(vii) Name of Project District - Bharuch, Gujarat by Petronet LNG

Limited

(viii) Name of Company/Organization PETRONET LNG LIMITED (PLL)

(ix) Location of Project (District, State) BHARUCH, GUJARAT

(x) Issuing Authority MoEF&CC

(xi) Applicability of General Conditions as per

EIA Notification, 2006

- 3. The Ministry of Environment, Forest and Climate Change has examined the proposal for the establishment of petrochemical Complex at Luvara village, Vagra tehsil, Bharuch district, Gujarat by M/s. Petronet LNG Limited (PLL).
  - 4. The proposal was considered in EAC (Ind-2) meetings held on 16th February, 2024 and 29th February, 2024 wherein the project proponent and their accredited Consultant M/s. Engineers India Limited (NABET certificate no. NABET/EIA/21-24/SA0214 and validity 22/05/2024) 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 the PARIVESH portal which can be accessed by scanning the QR Code available above or through the following web link <u>click here</u>.
  - 5. All project/activity are listed at S.N. 5(c) Petro-chemical complexes of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at the Central Level by the Expert Appraisal Committee (EAC).
  - 6. The details of products and capacity are enclosed at Annexure-2.
  - 7. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in Meeting ID: IA/IND2/13342/26/09/2022 held during 26-28th September 2022. Terms of Reference (TOR) have been issued vide F. No. IA-J11011/345/2022-IA-II(I) dated 25th October, 2022. TOR was amended vide TOR Identification No. TO23A2101GJ5669871A dated 21/09/2023 for Public Hearing exemption as the proposed project is located in Gujarat Industrial Development Corporation (GIDC) Dahej Industrial Estate, Dahej which is a notified industrial area. The Industrial Estate of GIDC is a part of notified Petroleum, Chemical and Petro-chemical Investment Region (PCPIR), Dahej for which Environmental & CRZ Clearance was granted by MoEFCC vide letter no. F. No. 21-49/2010-IA-III dated 14/09/2017 (item 7(c) of the schedule of EIA Notification 2006). It was informed that no litigation is pending against the project.
  - 8. The proposed green field Petrochemical complex will be set up in 47.73 Ha of land located adjacent to the existing LNG Complex of PLL. All the process units, associated control rooms, storage and associated facilities will be located in the area. As the project is located adjacent to the existing LNG terminal, in order to optimize the usage of resources and to adopt sustainable practices, some of the utilities of the existing LNG Terminal i.e. water treatment block, firefighting facilities, flare systems, electrical substation, warehouse, admin building etc. would be modified/augmented suitably. A total of developed in which 6.0 Ha inside the complex. Additionally, 50 ha green development shall be exclusively done for this proposal by the M/s. Petronet LNG Limited and not by any other Industries. The estimated project cost is Rs. 20685 Crores and the project schedule is 48 months. The capital cost of EMP would be Rs. 33 Crore and the recurring cost for EMP would be Rs. 1 Crore per annum. Industry proposes to allocate Rs. 5 Crore towards Corporate Environment Responsibility. Total Employment during the operation stage will about 2000 persons considering direct (250) & indirect (about 1750).
  - 9. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors within 10 km distance. Lakhigam RF (0.437 Km) and Dahej RF (2.80 Km) are present in the north direction. Gulf of Khambhat (0.2 km), Narmada River (1.36 Km, SE), Ban Khadi (5.53 Km, N) and Ghughar Khadi (6.53 Km N) are present within 10 km radius of the proposed project.
  - 10. Ambient air quality monitoring was carried out at 8 locations during November 2022 to January 2023 and the baseline data indicates the ranges of concentrations as: PM10 (77.6-88.6 g/m3), PM2.5 (39.6-52.2 g/m3), SO2 (12.2-16.2 g/m3) and NO2 (21.9-35 g/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would 16.73  $\mu$ g/m3 and 39.94  $\mu$ g/m3 with respect to SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
  - 11. Total fresh water requirement for the proposed project will be 15600 m3 /day and sourced from the Gujarat Industrial Development Corporation (GIDC) water supply system. NOC has been obtained from GIDC vide letter no. GIDC/DEE/WS/BRH/138 dated 03.02.2023. Effluent generation from the complex will be 840 m3/day and will be treated in Effluent Treatment Plant. Treated Effluents will be discharged to common effluent channel of GIDC through

pipeline. Domestic wastewater will be treated in STP having 120 KLD capacity.

- 12. Total power requirement for petrochemical complex will be 161 MW which will be sourced from Gujarat Energy Transmission Corporation Limited (GETCO). Intimation letter issued to PLL from GETCO vide letter no. CE(R&C)/EE C/DE/27/3279 dated: 24.06.2022 to cater additional demand of power supply from state grid. Gas based steam boiler 60 TPH capacity (1+1) will be installed. A stack of height of 60 m will be installed with the proposed boilers and furnaces for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. DG set will be used as standby during power failure and adequate stack height will be provided as per CPCB norms.
- 13. Details of Process emissions generation and its management:

The overall SOx emission from Petrochemical complex will be 0.19 TPD. However, below mitigation measures will be followed to control the process emissions:

- · Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- · Low NOx burners will be used in all process heaters, furnaces and boilers.
- · RLNG and Natural Gas will be used as fuel in Process fired heaters and Boilers.
- · Adequate stacks height will be provided for better dispersion of flue gases and controlling the particulate emissions.
- · Online stack analyzers will be provided in all furnaces/boilers.
- · Installation of internal floating roof with double seals in all Class-A tanks for reduction of fugitive emissions.
- · Provision of mechanical seals in all the hydrocarbon pumps for reduction of fugitive emissions.
- · LDAR surveys will be carried out periodically.
- 14. 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/ liners contaminated with hazardous waste Will be disposed as per Hazardous Waste Rules, 2016.
- · Spent catalyst will be disposed through authorized recyclers.
- 15. It was informed to the EAC project plant layout has been revised by PP, relocating proposed activities from CRZ IA area to other areas has been forwarded to the CRZ division. The comments of the CRZ division are placed below:
- "1. The instant matter pertains to proposal received in Industry-II sector for combined EC+CRZ Clearance for Setting up Petrochemical Complex at Dahej, District Bharuch, Gujarat by M/s. Petronet LNG Limited.
- 2. The project has been granted ToR by the Ministry vide letter dated 25/10/2022 and the same has been amended vide letter dated 21/09/2023.
- 3. As per the revised CRZ report and Map prepared by IRS Anna University, the project activity fall partially in CRZ-IB, CRZ-III(NDZ), CRZ-III (200m to 500 m HTL) with remaining area outside CRZ as per approved CZMP (Map No. GJ 84) vide CRZ Notification 2011.
- 4. The Gujarat CZMA has recommended the proposal to the Ministry vide letter dated 12/02/2024 as per para 8 III A (iii) e (CRZ-III NDZ) of CRZ notification, 2011 and same is reproduced below:
- "Proposed activities (excluding utilities of petrochemical complex) are classified as permitted activities as per Clause 8 III A (iii) (e) of CRZ Notification, 2011. Here all process units and utilities of petrochemical complex are proposed outside CRZ areas."
- 5. However, project activities also fall in CRZ-III (area between 200 to 500m). Thus it is submitted that as per Para 8 III A (iii) (e) and 8 III B (ii), facilities for receipt and storage of petroleum products and liquefied natural gas as specified in Annexure-II are permissible in CRZ-III (NDZ) and CRZ-III (area between 200 to 500m) respectively.

6. Green belt of 83517.04 sq.m is proposed in CRZ-IB area. Since CRZ-IB is inter-tidal area (area between LTL and HTL) having regular tidal fluctuations, development of green belt in CRZ-IB areas is not feasible. Hence, it is proposed that concern EAC may be requested to examine this issue in detail while deliberation"

Based on the above, EAC suggested PP to submit the following information:

- PP submitted that a plot area measuring about 20 Ha. of land is located adjacent to the LNG terminal, for which they have already received in-principal approval from the Gujarat Maritime Board (GMB) to utilize the plot. The said area will be developed as a green belt including the existing LNG terminal to increase the total green belt up to at least 25% green belt area. However, as per the comments of the CRZ Division, that area falls under CRZ-IB, and being an inter-tidal area the development of a green belt in CRZ-IB areas is not feasible. In this regard, EAC suggested PP to avoid inclusion of greenbelt in the said area.
- Further, PP has informed that greenbelt shall be developed in area of 7.3 within in the proposed plot. It was noted that 1.3 ha of proposed greenbelt area is not in possession of Industry. Hence, after deducting the said area, total area proposed under the greenbelt is 6.0 ha. Additionally, 50 ha area outside the plant shall be developed in collaboration with the Forest Dept. which is around 10 km from the proposed site. In this regard, EAC suggested that Industry shall obtain a confirmation with the forest dept. that the proposed 50 ha green development shall be exclusively done for this proposal by the M/s. Petronet LNG Limited and not by any other Industries. PP has accepted the suggestion of EAC to maximize the greenbelt development within the project site in addition to 50 hectares being developed outside the project area and indigenous species must be considered for the plantation. PP has submitted MoU done by the Industry with Forest Dept. stating that Forest Dept. shall carry out plantation activities with the corpus of Rs. 08.00 Crore funded by M/s. Petronet LNG Limited.
- PP shall ensure that an overall green area of at-least 33% is developed Industrial Estate for EC dated 14.09.2017 as per Ministry's OM F. No. 19-74/2020-IA.III dated 27th October, 2020.

PP agreed to abide by & incorporate the above suggestions made by the Committee.

- 16. 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 the desired form along with EIA/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 EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental and CRZ Clearance given, if any, will be revoked at the risk and cost of the project proponent.
- 17. 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.
- 18. The Committee noted that as per the extant rules of the Ministry, the projects involving Environmental & CRZ clearance has been examined as per the CRZ Notification, 2011/2019. The Committee has taken cognizance of the recommendations of the GCZMA & inputs of CRZ division.
- 19. The environmental and CRZ 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), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project proposed establishment of petrochemical Complex at Luvara village, Vagra tehsil, Bharuch district, Gujarat by M/s. Petronet LNG Limited (PLL), 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 the 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 Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar 382 010 (Gujarat)
- 2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Gandhi Nagar, A wing- 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10 A, Gandhi Nagar-382010
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32.
- 4. The Member Secretary, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat).
- 5. Compliance & Monitoring Division, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
- 6. The District Collector, Bharuch, Gujarat
- 7. Guard File/Monitoring File/Parivesh portal/Record File.

Annexure 1

Specific EC Conditions for (Petro-chemical Complexes (Industries Based On Processing Of Petroleum Fractions)

#### 1. Petro-chemical Complexes

S. No	EC Conditions	
1.1	PP shall comply with all the conditions stipulated in the recommendations of GCZMA vide letter	

S. No	EC Conditions
	ENV-10-2023-114-T dated 12.02.2024 & letter no. AU/IRS/KSR/6956/164-2023-REV1 dated 22 <sup>nd</sup> February 2024 adhering to GCZMA recommendations.
1.2	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.
1.3	All pollution control and monitoring equipments shall be installed, tested and interlocked with the process. SPCB shall grant 'Consent to Operate' after ensuring that all the mentioned pollution control equipments, construction of storm water drain, Greenbelt, uploading of compliance report on the website etc have been implemented.
1.4	Total fresh water requirement shall not exceed 15600 m <sup>3</sup> /day, proposed to be met from from Gujarat Industrial Development Corporation (GIDC) water supply system. Necessary permission in this regard shall be obtained from the concerned regulatory authority. The fresh water requirement shall be reduced after installation of rainwater harvesting system in the unit/project area.
1.5	All the effluent generated from the proposed unit shall be treated in the efficient ETP. Effort shall be made to recycle the treated effluent for cooling make up water and process. Treated Effluents shall not exceed 840 m <sup>3</sup> /day which shall be discharged to common effluent channel of GIDC through pipeline.
1.6	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
1.7	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.
1.8	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.
1.9	Regular VOC monitoring shall be done at vulnerable points.
1.10	The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bioremediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.
1.11	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system and other safety requirements shall be as per the PNGRB norms (LNG T4S Regulations, Petroleum Installations T4S Regulations & ERDMP Regulations) and applicable provisions of OISD. PESO certificate shall be obtained. Location of Ethane, Propane, Propylene, Hydrogen storage facilities (DWST/Mounded Bullets & Bullet etc.) shall be placed in such a way that in the event of any fire, accident, explosion or any unforeseen conditions the impact of such event shall not go beyond the boundary of the plant i.e. the risk should be tolerable (acceptable) at the boundary of the plant.
1.12	Company shall determine the distance of fire hydrant while finalizing its location from ethanol storage tanks or any other hazardous storage substance shall be based on dispersion of Thermal

S. No	EC Conditions		
	Radiation so that during any unforeseen situation fire hydrant is always available to operate manually.		
1.13	Company shall maintain an Emergency Response Decision support system in such a way so that identification of the detector's network for the location of the leak source and the probable leaked quantity in real-time, followed by modelling of the dispersion of the plume and consequences as forecast is done in advance and thus, no leak accident may go unattended. Accordingly, Risk Mitigation plan shall be in place.		
1.14	Cumulative and Societal risk be determined considering at least two most predominant wind directions and accordingly industry to put in place its response plan for an effective emergency response management. QRA shall be undertaken by the accredited consultant.		
1.15	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.		
1.16	The company shall undertake waste minimization measures as below:  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.		
1.17	Industry shall develop that greenbelt in an area of 6.0 ha (i.e., 12.57 % of total project area) within in the proposed plot with tree density @2500 trees per hectare, mainly along the plant periphery. Additionally, 50 ha area outside the plant shall be developed in collaboration with Forest Dept which is around 10 km from the proposed site. As committed, PP shall obtain confirmation letter that 50 ha green development proposed outside the plant shall be exclusively done for this proposal by the M/s. Petronet LNG Limited and not by any other Industries. Indigenous species shall only be planted as part of greenbelt and non-indigenous / alien species shall be replaced with native species. 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. Greenbelt development shall be completed before commissioning of the plant.		
1.18	The proposed 50 ha area proposed for greenbelt outside the project area which is located at a distance of 10 km shall be geotagged. PP shall provide update of the progress and maintenance of the same while submitting 6 monthly compliance report along with photographs.		
1.19	PP shall ensure that an overall green area of at-least 33% is developed in the Industrial Estate for EC dated 14.09.2017 as per Ministry's OM F. No. 19-74/2020-IA.III dated 27 <sup>th</sup> October, 2020.		
1.20	PP proposed to allocate Rs. 5.00 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.		
1.21	A separate Environmental Management Cell (having qualified person with Environmental Science/		

S. No	EC Conditions	
	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.	
1.22	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.	
1.23	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.	
1.24	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.	
1.25	The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9 <sup>th</sup> November, 2012 as amended time to time shall be followed.	
1.26	Recommendations of mitigation measures from possible accident shall be implemented based on Risk Assessment studies conducted for worst case scenarios using latest techniques.	
1.27	The project proponent shall develop R& D facilities to develop their own technologies for propylene and polypropylene processing.	
1.28	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 <sup>th</sup> 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	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.		
2.2	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).		
2.3	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.		

S. No	EC Conditions		
2.4	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER 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, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom 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 <sup>st</sup> 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 the Project**

S. No.	Particulars	Details		
a.	Details of the Project	Setting up Petrochemical Complex at Dahej , District - Bharuch, Gujarat by Petronet LNG Limited		
b.	Latitude and Longitude of the project site	21.66393384746456,72.53929862410071 21.67118405442203,72.54757884788812		
		Nature of Land involved	Area in Ha	
	Land Requirement (in Ha) of the project or activity	Non-Forest Land (A)	47.7	
c.		Forest Land (B)	2	
		Total Land (A+B)	49.7	
d.	Date of Public Consultation	Public consultation for the project was held on		
e.	Rehabilitation and Resettlement (R&R) involvement	NO	SO	
f.	Project Cost (in lacs)	1888634		
g.	EMP Cost (in lacs)	3300		
h.	Employment Details	PART STATE		

# **Details of Products & By-products**

Name of the product /By- product	Product / By- product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Ethane	Product	700	KTPA	<mark>Pi</mark> pe Conveyor	Pipeline
Propane	Product	100	KTPA	Pipe Conveyor	Pipeline
Hydrogen	Product	32	KTPA	Road	Tankers
Propylene	Product	250	KTPA	Road	Tankers
Polypropylene	Product	500	KTPA	Road	Tankers
C4 LPG	Product	36	KTPA	Road	Tankers

## **Details of capital and recurring cost of EMP:**

1. Budget of Environmental Management Plan - Capital Cost

Sl. No.	Activity	Capital Cost (Rupees in Lakhs)
1.0	Air Environment	
1.1	Plantation Activities (Trees and Shrubs)	600
1.2	Air quality monitoring	50
2.0	Noise Environment	
2.1	Additional Plantation Activities	Included in 1.1
2.2	Audiometric tests	5
3.0	Water Environment	
3.1	New Packaged STP	100
3.2	New Packaged ETP and Recycle Plant 2500	
4.0	Land Environment	
4.1	Additional Plantation Activities	Included in 1.1
4.2	Solid Waste Management	45
5.0	Biological Environment	
5.1	Additional Plantation Activities	Included in 1.1
	Budget for EMP (Capital Cost)	3300

2. Budget of Environmental Management Plan – Recurring Cost per Annum

Sl. No.	Activity	Recurring Cost per Annum (Rupees in Lakhs)
1.0	Air Environment	,0 <sup>CC</sup>
1.1	Additional Plantation Activities (Trees and Shrubs) & maintenance	35
1.2	Air Quality Monitoring	30
2.0	Noise Environment	•
2.1	Additional Plantation Activities	Included in 1.1
2.2	Audiometric Tests	3
Sl. No.	Activity	Recurring Cost per Annum (Rupees in Lakhs)
3.0	Water Environment	
3.1	Additional Storage Tank for Treated Wastewater and Distribution Network	Not applicable

3.2	Maintenance of New ETP & Recycle Plant 20	
4.0	Land Environment	
4.1	Additional Plantation Activities	Included in 1.1
4.2	Solid Waste Management	12
5.0	Biological Environment	
5.1	Additional Plantation Activities	Included in 1.1
	<b>Budget for EMP (Recurring Cost per Annum)</b>	100

## **ANNEXURE-4**

# **Details of CER with proposed activities and budgetary allocation:**

S. No.	Proposed Activities	Proposed Budget (Lakh)
1	Education and Skill Development for Local Youths / peoples	30.0
2	Abatement in environmental pollution for surrounding villages	70.0
3	Avenue Plantation & Pond Rejuvenation etc.	80.0
4	Improvement in healthcare facilitates in nearby villages	150.0
5	Development of infrastructure facilities in surrounding villages	50.0
6	Programs for solar electrification and solid waste management	30.0
7	Drinking water facilities for surrounding villagers	90.0
	Total Budget	500.0

e-Payments