

File No: 10/31/2021-IA.III

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



Date 18/01/2024



To,

Peter Fernandes

PETRONET LNG LIMITED (PLL)

1st Floor, World Trade Center, Babar Road, Barakhamba Lane, New Delhi, CENTRAL, DELHI,

World Trade Center, 110001 peterfernandes@petronetlng.in

Subject:

Grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 -regarding.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/GJ/INFRA1/446380/2023 dated 27/12/2023 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. EC23A3501GJ5232235N

(ii) File No. 10/31/2021-IA.III

(iii) Clearance Type Fresh EC

(iv) Category A

(v) Project/Activity Included Schedule No. 7(e) Ports, harbors, breakwaters, dredging

(vi) Sector INFRA-1

(vii) Name of Project Third Berth (Jetty) at PLL LNG Terminal

(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

No

3. The proposed proposal is for 'expansion for construction of "Third Berth (Jetty)" at Petronet LNG Terminal, Dahej, Bharuch, Gujarat by M/s Petronet LNG Limited (PLL)'. The co-ordinates of the jetty head (point of intersection of berthing line and centerline of unloading platform) is 2397642.35 N and 242319.618 E. The existing onshore facilities are spread over an area of 132.27 Hectares. Proposed Jetty length: 2492 m and Proposed Tugboat Area: 216 Sqm. The berth

will be connected to the shore by an approach trestle. The landfall point of the trestle is proposed at the point of intersection of the existing battery limit wall line and the line between the LNG storage tank T-105 and T-106. The coordinates of landfall point are 2398348.00 N and 244750.00 E.

- 4. Following facilities are proposed as part of expansion proposal:
- (i) Construction of new Jetty having the length of 2492 m and Proposed Tugboat Area: 216 Sqm.
- (ii) Facilities to berth tankers of 65,000m3 to 266,000m3 capacity.
- (iii) Avg.LNG unloading rate of 12,000 m3/hr; Ethane & propane: 4000m3/hr
- (iv) Approach trestle of length approx.2.5km with Jetty Control Room;
- (v) 3 No's 16"x20" LNG/Ethane unloading Arms.
- (vi) 2no's 12" Propane Unloading Arms.
- (vii) 1No.16"x20" Vapour Return Arm for NG/Ethane vapour.
- (viii) 1x 10" NG Vapour Return line.
- (ix) 2x32" LNG Unloading Lines.
- (x) 2x20" Liquid Ethane Unloading Lines.
- (xi) 1x8" Ethane Vapour Return Line.
- (xii) 2x20" Propane unloading lines.
- 5. The proposed project falls under Schedule 7(e) Ports and Harbors, Category 'A' as per the EIA Notification 14th September 2006. The total project is for 1,700 crores.
- 6. Terms of References (ToR) details: The ToR proposal was considered in the 266th EAC Meeting held on 12th July 2021 in the Ministry of Environment, Forest and Climate Change, New Delhi. ToR was granted on 4th August 2021.
- 7. Public Hearing: Public hearing was conducted on Bharuch, District, Gujarat. The details are as following:

Date of Hearing	of	Public	Venue				District an State	Chaired by	
23.08.202	2		Plot no. 7-A,	GIDC Estate,	DahejTa.Vagra,	Bharuch	Bharuch,	Additional	District
23.06.202	22		(Project site)				Gujarat	Magistrate	

8. Land use/Land cover of project site:

S. no.	Land use/Landcover	Area (ha)	Percentage (%)	Remarks, if any
	Private land	132.27	100	
	Government land	0	0	CGRE
	Forest land	0	0	-
	Total	132.27	100	-

- 9. Terrain and topographical features: Topographically the area is slightly undulating, and the elevation of the onshore facility is +12mCD and offshore facility is between -16 to -17m CD.
- 10. Details of water bodies, impact on drainage: Water Bodies are present within the 10 km radius i.e., Gulf of Khambhat (0 Km), Narmada River (1.36 Km, SE), Ban Khadi (5.53 Km, N) & Ghughar Khadi (6.53 Km N). There shall be no major impact on the drainage system.
- 11. Water requirement: For construction Phase there will be requirement of 43 KLD of water (Domestic: 23 KLD & Construction: 20 KLD). Water required for labours and construction work shall be sourced from GIDC supply and tanker supply. Also, water from condensate water reservoir (moisture in air get condensed during the regasification of LNG) can be used for construction purpose. Mobile toilets shall be provided for the labour at the project site and this fecal waste shall be disposed of through STP. Operational Phase: Petronet LNG terminal doesn't require industrial water for regasification, only domestic water is required by the terminal. Since there is no major increase in manpower for proposed expansion, domestic water requirement shall be limited to 170 KLD only. Presently there is no requirement of fresh water in the plant from outside sources, as condensate water obtained during regassification is totally conserved. However, in case a need arises to procure fresh water, the same shall be sourced through GIDC. PLL has installed Condensate water

treatment plant of 300 KLD capacity which treat condensate (water) generated from regasification system into Portable water. Treated water meets all parameters of IS10500. This system has reduced dependency on GIDC supply. Potable water will be supplied to the proposed jetty from the existing potable water system onshore at 2.5 bargpressure under ambient temperature via a 1.5" diameter supply line. No ground water will be extracted.

12. Diversion of forest land: Diversion of 10.7849 ha. of forest land for development of LNG terminal under Rajpipla West, Division at Luwara, TalukaVagara, District Bharuch was obtained by the Ministry vide letter no 8C/007/2001-FCW/2037 dated 21.06.2001. Diversion of 22.62ha of reserve forest land for construction of LNG tanks, regassification, truck loading facility and associated utilities at village –Luvara, Ta-Vagra, in favour of Petronet LNG Limited in Bharuch District of Gujarat. The instant proposal does not involved any forest land. The project site does not fall within 10 km radius of national parks, sanctuaries and tiger reserves. Details of protected forest and reserved forest falling within 10 km is given below.

Forest Ares	Lakhigam Reserved Forest- 0.437 km, N Dahej Reserved Forest – 2.80 km, N
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- 13. Waste management: There is no continuous source of Hazardous waste generation from the terminal. Very minimal waste is generated from different activities. All waste is disposed as per the Hazardous & Other Waste (Management and Transboundary Movement) Amendment Rules, 2021. No additional hazardous waste generation is expected due to the proposed jetty, waste will be limited within the existing permitted quantity. STP Details: Sewage Treatment Plant of capacity 100 KLD based on MBR (Membrane Bioreactor) has been installed in the terminal for domestic wastewater treatment. Treated water from STP is being reused in gardening. Solid waste generation will Collection, Storage, Transportation & Disposal at TSDF for incineration. The entire treated water shall be reused for flushing and landscaping purpose.
- 14. Details of tree cutting and green belt development: No trees cutting is involved and the total green belt area of approx. 1,96,000 sqm has been allocated in and around periphery wall. In addition to this, 1150 Ha mangrove plantation undertaken along the Gujarat Coast. Total 10500 no. of trees have been developed in the green area.
- 15. Details of CRZ: The proposed project falls under CRZ-IA, CRZ-IB, CRZ-IVA, CRZ-IA as per CRZ Notification, 2011. As per the CRZ map prepared by Institute of Remote Sensing (IRS), anna University, Chennai CRZ classification details area as following:

S.no	CRZ Classification	Length in Meters
1	CRZ-IA	1478.29
2	CRZ-IB	696.49
3	CRZ-IV A	317.22
Total		2492.00

Recommendation from GCZMA has already been obtained vide F.No. ENV-10-2022-74-T dated 3rd November 2023.

- 16. Dredging details: Proposed project is for the construction of jetty. There is no dredging involved in the project. Proposed jetty will handle LNG/Ethane/Propane. No dust is generated during the loading/unloading. Oil Spill Contingent Management plan is in place. The project does not involves Marine disposal.
- 17. Certified Compliance Report of earlier EC has been issued by IRO; MoEF&CC vide File No. J-11/104-2022-IROGNR dated 13.01.2023.
- 18. Land acquisition and R&R issues involved: Land is already in possession of Petronet. The land for LNG terminal is taken from Gujarat Industrial Development Corporation (GIDC), Forest department and Gujarat Maritime Board (GMB) and no R&R is involved. No additional land will be required for proposed expansion and onshore facilities.
- 19. Employment potential: During construction/installation phase 1500 no. of temporary labours will be supplied by contractor/supplier and during the operational phase, the existing manpower of the terminal is 265 nos. There will be a

requirement of only additional 150 no. of employees after installation of third berth during operation.

- 20. Benefits of the project: Considering the increase in demand of Natural Gas in the country and proposed expansion of LNG terminal from 17.5 MMTPA to 20 MMTPA, PLL has now proposed to construct third berth (Jetty) of 2.5 Km adjacent to the existing second berth for unloading of LNG, Ethane, and Propane. This jetty will also act as a risk mitigation measure in case existing berths are unable to operate for any extended period or to cater the anticipated number of ships at a time.
- 21. Details of Court Cases: No court case involved.
- 22. The EAC, taking into account the submission made by the project proponent, had a detailed deliberation in its 347th meeting on 28th November, 2023 and **recommended** the proposal for the grant of Environmental and CRZ Clearance with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects.
- 23. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee(Infrastructure, CRZ and other miscellaneous projects) and hereby decided to grant Environmental Clearance for the Proposed expansion for 'construction of "Third Berth (Jetty)" at Petronet LNG Terminal, Dahej, Bharuch, Gujarat by M/s Petronet LNG Limited (PLL)' under the EIA Notification, 2006 as amended and CRZ Notification 2011, subject to strict compliance of the following specific conditions, in addition to all standard conditions applicable for such projects.
- 23. This issues with the approval of the Competent Authority

Copy To

- 1. The Secretary, Forest, Forests & Environment Department, Government of Gujarat, Block 14, 8th floor, Sachivalaya, Gandhinagar 382 010. Gujarat.
- 2. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Gandhi Nagar, A wing- 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar-382010.
- 3. The Chairman, Central Pollution Control Board, PariveshBhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi 32.
- 4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10A, Gandhinagar-382010.
- 5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 6. PARIVESH Portal.
- 7. Guard File/Record File.

Annexure 1

Specific EC Conditions for (Ports, Harbors, Breakwaters, Dredging)

1. Specific Conditions

S. No	EC Conditions
1.1	 Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area. All the recommendations and conditions specified by the Gujarat State Coastal Zone Management Authority (GCZMA) vide letter no. ENV-10-2022-74-T dated 3rd November 2023, 2022 shall be complied with.

S. No **EC Conditions** 3. Proposed Tugboat MD-South at CRZ-IA over an area of 108.00 Sq.m is not permissible PP shall shift towards North side outside of the CRZ-IA area. 4. The berth shall be connected to the shore by an approach trestle. 5. Risk assessment for spill scenarios and Disaster Management Plan as prepared shall be in place in the environment Management cell with all SOP's for various scenarios. 6. Considering the recent cyclonesnatural calamity emergency management plan shall be in place before the start of the project. 7. Spillage of fuel/engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage. 8. Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers. 9. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water. 10. The proponent shall put in place the detailed on site and off site Emergency Management Plan as per the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, as amended to date which may cover the natural disasters also. 11. The PP shall develop a contingency plan for H2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H2S detectors in locations of high risk of exposure along with self containing breathing apparatus. 12. Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India. 13. The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained. 14. No underwater blasting is permitted. 15. Sediment analysis of harbor at identified locations shall be analyzed and records for past and present period shall be maintained. 16. Necessary approvals be taken during implementation and commissioning from statutory bodies concerned. 17. A site-specific biodiversity conservation plan including mitigation measures to be developed from competent nationally/internationally recognized institute with appropriate financial allocation for its implementation prior to commissioning of the third berth. The implementation status of the same shall be submitted along with the certified compliance report to the concern IRO of this Ministry. 18. Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report. 19. A continuous monitoring programme covering all the seasons on various aspects of the coastal and marine environsneed to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. Monitoring should include sea weeds, sea grasses, mudflats, sand dunes, fisheries, mangroves and other marine biodiversity components as part of the management plan. The implementation status of the same shall be submitted along with the certified compliance report to the concern IRO of this Ministry. 20. Necessary arrangements for the treatment of the effluents and solid wastes/ facilitation of reception facilities under MARPOL must be made and it must be ensured that they conform to

S. No	EC Conditions
	the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986. The provisions of Solid Waste Management Rules, 2016. E- Waste Management Rules, 2016, and Plastic Waste Management Rules, 2016 shall be complied with. 21. All the commitments made to the public during public hearing/public consultation meeting shall be satisfactorily implemented and adequate budget provision shall be made accordingly. 22. All the recommendations mentioned in the risk assessment report, disaster management plan and safety guidelines shall be implemented. 23. Wastes discharged from ships will be handed over to the port's licensed waste disposal contractors. 24. Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974. 25. As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory Aforestationetc, either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.

Standard EC Conditions for (Ports, harbors, breakwaters, dredging)

1. Statutory Compliance

S. No	EC Conditions
1.1	Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011 and the State Coastal Zone Management Plan as drawn up by the State Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
1.2	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
1.3	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

2. Air Quality Monitoring And Preservation

S. No	EC Conditions		
2.1	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in		

S. No	EC Conditions
	reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.
2.2	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.
2.3	Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.
2.4	Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.
2.5	The Vessels shall comply the emission norms prescribed from time to time.
2.6	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
2.7	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
3.2	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.
3.3	No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.
3.4	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo

S. No	EC Conditions
	handle.
3.5	The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.
3.6	Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
3.7	Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
3.8	Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression.
3.9	A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
3.10	No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.
3.11	All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.

4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
4.2	Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
4.3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
4.4	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

5. Energy Conservation Measures

S. No	EC Conditions
5.1	Provide solar power generation on roof tops of buildings, for solar light system for all common

S. No	EC Conditions
	areas, street lights, parking around project area and maintain the same regularly;
5.2	Provide LED lights in offices and project areas.

6. Waste Management

S. No	EC Conditions
6.1	Dredged material shall be disposed safely in the designated areas.
6.2	Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring reports.
6.3	Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
6.4	The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
6.5	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
6.6	A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
6.7	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
6.8	Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered.

7. Green Belt

S. No	EC Conditions
7.1	Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines.
7.2	Top soil shall be separately stored and used in the development of green belt.

8. Marine Ecology

S. No	EC Conditions
8.1	Dredging shall not be carried out during the fish breeding and spawning seasons.
8.2	Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.
8.3	The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
8.4	While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
8.5	A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.
8.6	Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.
8.7	The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

9. Public Hearing And Human Health Issues

S. No	EC Conditions
9.1	The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.
9.2	Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.
9.3	In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.
9.4	Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/

S. No	EC Conditions
	accidents.
9.5	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
9.6	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
9.7	Occupational health surveillance of the workers shall be done on a regular basis.

10. Environment Responsibility

S. No	EC Conditions
10.1	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
10.2	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
10.3	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
10.4	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

11. Miscellaneous

S. No	EC Conditions
11.1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
11.2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the

S. No	EC Conditions
	Government who in turn has to display the same for 30 days from the date of receipt.
11.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
11.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
11.5	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
11.6	The criteria pollutant levels namely; PM2.5, PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
11.7	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11.8	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
11.9	No further expansion or modifications in the project shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
11.10	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11.11	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
11.12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
11.13	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
11.14	The above conditions shall 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, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

S. No	EC Conditions
11.15	Any appeal against this EC 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.

12. Specific Conditions

S. No	EC Conditions
12.1	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.

