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Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan,
Jal Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110 003

Dated:13th October, 2020

To,

M/s Chennai Petroleum Corporation Limited,
Panangudi Village,
Tehsil & District Nagapattinam, Tamil Nadu

Sub: Installation of 9 MMTPA Grass root Cauvery Basin Refinery by M/s Chennai Petroleum Corporation Limited located at Panangudi Village, Tehsil & District Nagapattinam, Tamil Nadu - Environmental and CRZ Clearance regarding

Sir,

This has reference to your online proposal No. IA/TN/IND2/76843/2018 dated 18th May, 2020 for environmental clearance to the above mentioned project.

- The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental and CRZ clearance to the project for Installation of 9 MMTPA Grass root Cauvery Basin Refinery by M/s Chennai Petroleum Corporation Limited located at Panangudi Village, Tehsil & District Nagapattinam, Tamil Nadu.
- The details of products and capacity as under:

S. No.	FEEDS	KTPA
1	LPG	676
2	Polypropylene	532
3	BS VI Regular Gasoline	1260
4	BS VI Premium Gasoline	540
5	Total Gasoline	1800
6	ATF	300
7	BS VI Diesel	3998
8	Sulphur	238
9	DCU Coke	221
10	Fuel & Loss	1253
Total Products including Fuel & Loss		9018

- Total area requirement for Cauvery Basin Refinery is 1338.29 acres in Tamil Nadu State and 6.33 acres in Karaikal region in Puducherry UT (for Pipeline corridor). The existing refinery area is 618.29 acres. Balance land of 726.33 acres (720 acres in Tamil Nadu & 6.33 acres in Karaikal district of Puducherry UT) is under acquisition by CPCL. 436.5 acres covering 33.5 % of the total complex area (1303 acres). The existing 324 acres greenbelt area within the refinery will be retained and utmost care will be taken to protect the existing greenbelt.

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The estimated project cost is Rs. 32908 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 199.40 crores and the recurring cost (operation and maintenance) will be about Rs.3 crores per annum. Direct employment will be 600 persons & indirect employments will be 1000 persons during operation phase of the refinery.

5. Total water requirement is 3300 cum/hr will be met from Desalination Plant with a design capacity of 3300 cum/hr. Effluent will be treated in a new Effluent Treatment Plant of capacity 550 cum/hr and then treated water will be routed to RO-DM facility. The RO reject of 360 cum/hr will be routed to Desalination Plant. There will be a discharge of 5923 cum/hr to Sea through a pipeline.

6. Power requirement will be 205 MW and will be met from internal Captive Power Plant (170 MW) and Tamil Nadu State electricity grid (35 MW). Unit will have additionally 02 DG sets of 5 MVA each will be used as standby during power failure. Adequate Stack height (15m) will be provided as per CPCB norms.

7. The project/activity is covered under category A of items 4(a) "Petroleum Refining Industry", 5(c) "Petro-chemical complexes" and 6(a) "Oil & Gas transportation pipeline" of the Schedule the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

8. The Standard ToR for the project was issued vide letter dated 11th October, 2018 for the proposed project. Public Hearing for the proposed project has been conducted by the Tamil Nadu Pollution Control Board on 20.09.2019 at CPCL Township, Tehsil & District-Nagapattinam near to the existing refinery. The hearing was presided over by the District Collector, Nagapattinam. The main issues raised during the public hearing were related to employment generation, socio economic development, infrastructure development and environment only.

9. The proposal was considered by the EAC in its meetings held on 18th June, 2020 & 20th August, 2020, wherein the project proponent and their consultant M/s Engineers India Limited presented made a detailed presentation on the salient features of the project.

10. 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 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 Clearance given, if any, will be revoked at the risk and cost of the project proponent.

11. 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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. 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 and CRZ Clearance (EC).

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12. 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.

13. 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 clearance to the project for **Installation of 9 MMTPA Grass root Cauvery Basin Refinery by M/s Chennai Petroleum Corporation Limited located at Panangudi Village, Tehsil & District Nagapattinam, Tamil Nadu** under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

A. Specific Conditions:

- (i) 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.
- (ii) The treated effluent of 5923 cum/hr shall be discharge in sea through pipeline.
- (iii) The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R.595(E) dated 21st August, 2009 as amended from time to time, shall be followed.
- (iv) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. For emission control and management, use of FG/NG in heater as fuel, adequate stack height, use of Low NOX burners in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed/ensured.
- (v) Total fresh water requirement for the proposed project shall not exceed 3300 cum/hr to be met from Sea water. Necessary permission in this regard shall be obtained from the concerned regulatory authority.
- (vi) Process effluent/any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (vii) 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.
- (viii) 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.
- (ix) Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly

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ash & dust should be avoided. The ash from boiler shall be sold to brick manufacturers/cement industry.

- (x) 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 clearing to reduce waste water generation.
- (xi) The green belt of 5-10 m width shall be developed in the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. The project proponent shall ensure 33% greenbelt area vis-à-vis the project area through afforestation in the degraded area. The Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xii) As proposed 0.25% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including education/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR.
- (xiii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xiv) 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.
- (xv) 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. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.
- (xvi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xvii) Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (xviii) The PP should improve the efficiency of ETP Plant and the water discharge should be as per prescribed CPCB Norms. They should also install 24x7 hours monitoring system (of the discharge) and the same should be connected to the server of SCPB/CPCB.

13.1. General conditions:

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- (i) 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.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) 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).
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) The environmental statement for each financial year ending 31st 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.
- (ix) 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.
- (x) 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.
- (xi) 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.

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14. 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.

15. 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.

16. 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.

17. 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.

18. This issues with the approval of the competent authority.

Ashok Kr Pateshwary
13.10.2020

(Ashok Kr Pateshwary)
Director

Copy to: -

1. The Principal Secretary, Department of Environment, Ground Floor, Panagal Buildings 1, Jeenis Road, Saidapet, Chennai - 600 015.
2. The Dy. Director General of Forest, MoEF&CC, Regional Office (SEZ), 1st and 2nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, **Chennai-34**
3. The Member Secretary, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** - 32
4. Member Secretary, Tamil Nadu Pollution Control Board, 76, Anna Salai, Guindy Industrial Estate, Race View Colony, Guindy, **Chennai** - 32 (Tamil Nadu)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, **New Delhi**
6. District Collector, Nagapattinam, Tamil Nadu
7. Guard File / Monitoring File / Parivesh Portal / Record File

Ashok Kr Pateshwary
13.10.2020

(Ashok Kr Pateshwary)
Director