



**File No. J-11011/215/2010-IA II(I)**  
Government of India  
Ministry of Environment, Forest & Climate Change  
Impact Assessment Division

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

Dated: 19<sup>th</sup> January, 2021

To,

**M/s Mangalore Refinery and Petrochemicals limited,**  
Kuthethoor/Bala Village, Dakshina Kannada District,  
Mangalore, Karnataka

**Sub: Modernization Project at MRPL, Mangalore by M/s Mangalore Refinery and Petrochemicals limited located at Kuthethoor/Bala Village, Mangalore, Karnataka - Consideration of Environmental Clearance regarding.**

Sir,

This has reference to your online proposal No. IA/KA/IND2/176690/2020 dated 01<sup>th</sup> October, 2020 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to modernization Project at MRPL, Mangalore by M/s Mangalore Refinery and Petrochemicals Limited located at Kuthethoor/Bala Village, Mangalore, Karnataka.

3. The details of products and capacity are as under:

S. No.	Product Details	Existing Quantity, in MTPA	Proposed Quantity, in MTPA	Total Quantity, in MTPA
1	LPG	0.797	0.00	0.797
2	Naphtha	1.281	0.00	1.281
3	Motor Spirit	1.407	0.00	1.407
4	Kerosene	0.537	0.00	0.537
5	ATF	1.595	0.00	1.595
6	Diesel	6.434	0.00	6.434
7	Fuel Oil	2.305	0.00	<b>2.161</b>
8	Bitumen	0.345	<b>0.144</b>	<b>0.489</b>
10	Sulphur	0.195	0.00	0.195
11	Mixed Xylene	0.350	0.00	0.350
12	Pet Coke	0.674	0.00	0.674

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13	Polypropylene	0.380	0.00	0.380
14	VGO	0.086	0.00	0.086
15	Fuel and loss	0.214	0.00	0.214
<b>Total Products including Fuel &amp; Loss</b>				<b>16.600</b>

**4.** Existing land area is 1592 Acre; additional 0.82 Acre land will be used for proposed modernization project within the Refinery complex premises. The Industry has already developed greenbelt in an area 492 acre. Industry will develop greenbelt in an area of 33(% i.e. 525 acres out of 1592-acre area of the project. Industry will undertake compensatory afforestation; in case the land is not available for green belt development at existing industry premises. The estimated project cost is Rs. 415 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 120 crores and the Recurring cost (operation and maintenance) will be about Rs. 10 crores per annum. Total Employment will be 10 persons as direct & 10 persons indirect after expansion. Industry proposes to allocate Rs. 3.11 crores @ of 0.75 % towards Corporate Environment Responsibility.

**5.** Total water requirement for the proposed facilities is 61 m<sup>3</sup>/hr will be met from Treated Sewage effluent from Mangalore Special Economic Zone Limited (MSEZL). No additional river water is used for said proposed project. Effluent of 41 m<sup>3</sup>/hr quantity will be treated in existing Waste Water Treatment Plant (WWTP) with RO and recycled to existing cooling towers. No increase in total permitted treated effluent discharge of 446 m<sup>3</sup>/hr to Sea through a pipeline.


**6.** MRPL Modernization project includes the following facilities:

- LPG Amine Treatment of 1365 KTPA capacity at PFCC Unit
- Wet Gas scrubber of 2992 KTPA capacity at PFCC Unit
- New Bitumen train of 144 KTPA capacity
- CCR-1 regenerator revamp
- Natural Gas facility of 1.2 MMCMD capacity - an alternative fuel / feed

**7.** The existing power requirement for normal operation of the refinery is 180 MW and 0.77 MW additional power will be required for the proposed project and will be met from existing captive power plants. Existing unit has 10 DG sets of 16,850 KVA capacity, no additional DG sets will be required as standby during power failure. Stack height as per CPCB norms have been provided for the existing DG sets. Steam requirement for the proposed project is 9.2 TPH and will be met from existing Boilers. No additional liquid/gas fired boilers will be installed.

**8.** The project/activity is covered under category A of items 4(a) - Petroleum Refining Industry and 5(c) - Petro-chemical complexes of Schedule of Environmental Impact Assessment (EIA) Notification 2006 and requires appraisal at Central Level by Expert Appraisal Committee (EAC).

**9.** The proposal has been submitted under para 7(ii) (b) of MoEF&CC notification S.O. 3518 (E) dated 23.11.2016 for consideration without any ToR, Public hearing and EIA/EMP report. No litigation is pending against the proposal.



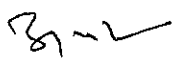
**10.** The proposal was considered by the EAC in its 24<sup>th</sup> meeting held on 19<sup>th</sup> October, 2020 in the Ministry, wherein the project proponent M/s. Mangalore Refinery and Petrochemicals Limited, presented made a detailed presentation on the salient features of the project.

**11.** 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.

**12.** 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 CER plan and found to be addressing the issues in the study area. Additional information submitted by the project proponent found to be satisfactory and addressing the concerns of the Committee. 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 Clearance (EC).

**13.** 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.

**14.** 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 **modernization project at MRPL, Mangalore by M/s Mangalore Refinery and Petrochemicals Limited located at Kuthethoor/Bala Village, Mangalore, Karnataka**, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

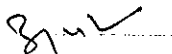


### **A. Specific Conditions:**

- (i). They should submit latest certified compliance report within Six months in the Ministry. An undertaking letter/ certificate should be submitted by PP accordingly. While issuing latest CCR, RO, MoEF shall review conditions of all existing clearances and recommend a consolidated EC by merging all conditions and removing redundant and repetitive conditions based on field inspection.
- (ii). 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.
- (iii). The treated effluent of 446 m<sup>3</sup>/hr shall be sent for deep sea discharge through diffuser recommended by NIO.
- (iv). The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18<sup>th</sup> March, 2008 and G.S.R.595(E) dated 21<sup>st</sup> August, 2009 as amended from time to time, shall be followed.
- (v). 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.
- (vi). Total water requirement for the proposed project shall not exceed 61 m<sup>3</sup>/hr to be met from Treated Sewage effluent from Mangalore Special Economic Zone Limited (MSEZL). Necessary permission in this regard shall be obtained from the concerned regulatory authority.
- (vii). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (viii). 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.
- (ix). 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.
- (x). 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 ash & dust should be avoided. The ash from boiler shall be sold to brick manufacturers/cement industry.

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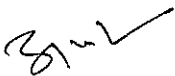
- (xi). The company shall undertake waste minimization measures as below: -
- a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - c. Use of automated filling 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 wastewater generation.
- (xii). 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.
- (xiii). 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 if any in CER shall be spent during execution of the project and shall not be linked with the CSR.
- (xiv). 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.
- (xv). 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.
- (xvi). 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.
- (xvii). Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xviii). Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.



- (xix). 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.

**14.1. General conditions:**

- (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 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.

- (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.

**15.** 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.

**16.** 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.

**17.** 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.

**18.** 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.

**19.** This issues with the approval of the competent authority.

*31-19.01.2021*  
**(Ashok Kr. Pateshwary)**  
**Director**

**Copy to: -**

1. The Secretary, Department of Forest, Environment & Ecology, Government of

Karnataka, Room No. 708, Gate 2, Multi Storey Building, Dr. Ambedkar Veedhi,  
**Bangalore** - 1

2. The Deputy DGF (C), MoEF&CC Regional Office (SZ), Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wings, 17<sup>th</sup> Main Road, Koramangala II Block, **Bangalore** - 34 [**While issuing latest CCR, RO, MoEF is directed to review conditions of all existing clearances and recommend a consolidated EC by merging all conditions and removing redundant and repetitive conditions based on field inspection so that Ministry can consider to issue a single EC.**]
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex East Arjun Nagar, **Delhi** - 32
4. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavan, #49, 4<sup>th</sup>& 5<sup>th</sup> Floor, Church Street, **Bangalore** -1
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indra Paryavaran Bhawan, Jor Bagh Road, New Delhi
6. The District Collector, District Dakshina Kannada, Karnataka
7. Guard File/Monitoring File/Parivesh portal/Record File

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