F.No. 11-3/2019-IA-III Government of India Ministry of Environment, Forest and Climate Change

Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110003 Dated: 18.04.2019

To.

Mangalore Refinery and Petrochemicals Ltd. Kuthethoor P.O Via Katipalla, Mangalore - 575030

Sub: CRZ Clearance for setting up of 70 MLD Desalination Plant at Taneerbavi village, in Mangalore - reg.

Sir,

This has reference to your letter No. MRPL/HSE/DESAL/2019/5949 dated 16.01.2019, received in this Ministry seeking CRZ Clearance for setting up of 70 MLD Desalination Plant at Taneerbavi village, in Mangalore, in accordance with the provisions of the Coastal Regulation Zone (CRZ) Notification, 2011 issued under the Environment (Protection) Act, 1986.

- 2. The proposal was considered in the 207th meeting held on 25.01.2019. The project has been recommended for CRZ clearance by the Expert Appraisal Committee (EAC) Infrastructure Development, Coastal Regulation Zone. The details of the project, as per the documents submitted by you and as informed to the EAC are noted as under:
- i) MRPL implemented the diesel quality improvement project along with enhancement of refinery capacity to 13.6 MMTPA crude oil processing to meet BS III & BS IV specification of auto-fuels (MS & HSD).
- ii) The overall water requirement in the existing plant is 4386 m³/h, which includes treated sewage of 908 m³/h, and recycled treated effluent of 820 m³/h.
- iii) MRPL has consent for withdrawal of freshwater from Irrigation Department, Govt. of Karnataka from Sarapady pumping station, which is about 45 km from MRPL refinery, on Netravati River and 1242 m³/h quantum of water is abstracted from the said source. Another source of fresh water is taken from MSEZL with quantity of 1416 m³/h. MSEZL also provides treated sewage of 908 m³/h for the refinery. The source of water to the refinery is Netravati River.
- iv) The capacity of the said plant for the Ultimate Phase will be 15 MGD to cater to the water demand for Refinery Operations, of which 6 MGD shall be the water demand for present Refinery Operations and balance for upcoming expansions. If the total water supply to Mangalore City Corporation (MCC) is not enhanced, the city shall have a deficit in supply to meet the city's water demand. Hence a minimum capacity of 6 MGD (30 MLD) is required to meet the current phase demand to have production in line with the designed refinery capacity. Therefore, a Sea Water Desalination Plant of 15 MGD (70 MLD), Ultimate Capacity is planned.
- v) The proposed Land Fall Points (LFPs) along the shoreline for seawater intake and marine outfall have been planned at 1.7 km south of the southern breakwaters of the New Mangalore Port at Panambur, in Mangalore. Gurpur river runs on the eastern side the proposed LFPs.

- vi) Seawater will be drawn from the adjacent Arabian Sea and will be carried to the desalination plant located within the project premises on the western side of the plant. The brine reject coming out from the desalination plant will be routed through pipeline back to the sea. Desalination Plant will have a pretreatment plant, filtration plant, reverse osmosis including high pressure pump, energy recovery system and outfall.
- vii) The seawater requirement for the RO (Reverse Osmosis) plant will be 187 MLD~7792 m³/hour ~ 2.165 m³/s.
- viii) The seawater intake head will be located at the selected distance of 950 m from the shore at 7.7 m CD (Chart Datum) water depth. The intake pipeline will be made of HDPE material and it will be laid on the seabed. The entire pipeline will be buried in such a way that the top of pipeline will remain at minimum 2 m below the sea floor.
- ix) The salinity of the brine reject released into the sea will be 65 ppt, which will have the salinity difference of 30 ppt higher than the seawater ambient salinity of 35 ppt.
- x) The brine discharge into the sea from the desalination plant will be 117 MLD \sim 4875 m³/hour \sim 1.35 m³/s.
- xi) The outfall diffuser will be located at 1050 m distance from the shoreline at a water depth of 8 m CD. The outfall pipeline will be laid on the seabed where the top of pipeline will be buried 2.0 m below the seafloor.
- xii) The Seawater intake pipeline will have a length of 950m and the outfall pipeline length will be 1050 m.
- xiii) The desalination plant will be in CRZ-II areas but the pipelines will traverse through CRZ-IV, CRZ-II and CRZ-I.
- xiv) Cost of the project will be Rs 595 crores.
- xv) KCZMA has recommended CRZ clearance vide its letter no. FEE 194 CRZ 2018, dated 22.12.2018.
- 3. Based on the information submitted by you as at para no. 2 above and presentation made before the EAC (Infrastructure Development, Coastal Regulation Zone, Building / Construction and Miscellaneous projects) in its 207th meeting held on 25.012019, and in acceptance of the recommendation of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords CRZ Clearance to the above project viz 'CRZ Clearance for setting up of 70 MLD Desalination Plant at Taneerbavi village, in Mangalore, subject to the following specific and general conditions:

PART A - SPECIFIC CONDITIONS:

- (i) The project proponent shall ensure that the temporary structures installed for laying of pipe lines are removed within one months of accomplishment of the work.
- (ii) Solid waste shall be collected, treated and disposed of in accordance with the Solid Waste Management Rules, 2016.
- (iii) Appropriate financial allocation as per the Office Memorandum issued by the Ministry, dated 01.05.2018, on CER, for activities to be undertaken under CER shall be earmarked and detailed plan of action contemplated shall be submitted to the concerned agencies within six months of receipt of clearance letter.
- (iv) The project proponent shall submit an undertaking to the KCZMA before commencement of work of the proposed plant stating that it shall bear full cost of

- environmental damage (if any) and restitution arising due to setting up of the proposed 70 MLD desalination plant.
- (v) All conditions/recommendations stipulated by the Karnataka Coastal Zone Management Authority (KCZMA) vide its letter no. FEE 194 CRZ 2018, dated 22.12.2018, shall strictly be complied with.
- (vi) 'NOC' from Karnataka Pollution Control Board for discharge of brine water into the sea after necessary safeguards shall be obtained prior to commencement of operation.
- (vii) 'Consent to Establish' and /or 'Consent to Operate' shall be obtained from State Pollution Control Board under the provisions of Air (Prevention and Control of Pollution) Act, 1981 and / or the Water (Prevention and Control of Pollution) Act, 1974, as may be applicable.
- (viii) The construction in CRZ areas shall be done strictly in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.
- (ix) There shall be no dressing or alteration of the sand dunes, natural features including landscape changes for beautification, recreation and other such purpose.
- (x) Soil and ground water samples in and around the Desalination Plant shall be tested regularly to ascertain that there is no threat to ground water quality through ingress/leaching of sea water.

PART B - GENERAL CONDITIONS:

- (i) A copy of the clearance letter shall be uploaded on the websites of the Company/Proponent and concerned State Pollution Control Board. The Clearance letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
- (ii) The funds earmarked for environmental protection measures shall be kept in a separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
- (iii) 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.
- (iv) Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.
- (v) A six-monthly monitoring report shall need to be submitted by the project proponent to the concerned regional Office of this Ministry regarding the implementation of the stipulated conditions.



- (vi) The Ministry of Environment, Forest & Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (vii) 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.
- (viii) The above stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991, the EIA Notification, 2006 and the CRZ Notification, 2011.
- Full co-operation shall be extended to the officials from the Regional Office of MoEF&CC, during monitoring of implementation of environmental safeguards stipulated. It shall be ensured that documents/data sought pertinent is made available to the monitoring team. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the concerned Regional Office of MoEF&CC.
- (x) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
- (xi) The Ministry reserves the right to add additional safeguard measures subsequently, if considered necessary, and to take action to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner, including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, for non compliance.
- (xii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponent from the respective competent authorities.
- (xiii) The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board (SPCB) and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at http://www.envfor.nic.in. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the concerned Regional Office of this Ministry.
 - 4. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
 - 5. Any appeal against this 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.

- 6. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- 7. The proponent shall upload the status of compliance of the stipulated conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.
- 8. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent 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 clearance conditions and shall also be sent to the respective Regional Office of the Ministry by e-mail.

(W. Bharat Singh)
Director (CRZ)

Copy to:

1. The Secretary, Ecology and Environment, Forest, Ecology and Environment Department, Government of Karnataka, Secretariat, Bengaluru.

2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD- cum-Office Complex, East Arjun Nagar, Delhi - 110032.

3. The Chairman, Karnataka State Pollution Control Board,

4. The Member Secretary, Karnataka Coastal Zone Management Authority, Karnataka Government secretariat, M.S. Building, Bangalore.

5. The APCCF (C), MoEF&CC, Regional Office (SZ), Kendriya Sadan, 4th floor, E&F wing, 17th Main Road, Koramangala II Block, Bangalore - 34

6. Guard File.

(W. Bharat Singh)
Director (CRZ)

