

S.No. /
No. J-11011/6/89-IA-II

Government of India
Ministry of Environment & Forests
Department of Environment, Forests & Wildlife,
(IA-II-Section)

Paryavaran Bhavan,
CGO Complex, Lodi Road
New Delhi-110003

Dated: 1.2.1991

OFFICE MEMORANDUM

Subject: New Refinery at Mangalore-Mangalore Refineries and Petrochemicals Ltd:- Environmental Clearance.

The undersigned is directed to refer to the above proposal and to state that the environmental aspects of the project have been examined and the project is cleared from environmental angle subject to the following stipulations:-

1. The project authority must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government and a comprehensive EIA will be submitted within 18 months.
2. Any expansion of the plant, either with the existing product mix or new products can be taken up only with the prior approval of this Ministry.
3. The gaseous emissions from various process units should conform to the standard prescribed by the concerned authorities, from time to time. At no time the emission level should go beyond the stipulated standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.
4. Adequate number (a minimum of 5) of air quality monitoring stations should be set up in the downwind direction as well as where maximum ground level concentration is anticipated. Also, stack emission should be monitored by setting up of automatic stack monitoring unit. The data on stack emission should be submitted to State Pollution Control Board once in three months and to this Ministry once in six months along with the statistical analysis. The air quality monitoring station should be selected on the basis of modelling exercise to represent the short-term ground level concentration.

5. There should be no change in the stack design without the approval of State Pollution Control Board. Alternate Pollution Control System and proper design (Steam injection system) in the stack should be provided to take care of excess emissions due to failure in any system of the plant.
6. The project authority should recycle the waste to the maximum extent. The recycling plan should be submitted within one year. Liquid effluent coming out of plants should meet the stipulated standards and disposed only into the identified outfall point in the sea as recommended in the NIO study after using for green belt development to the maximum extent possible.
7. Adequate number of effluent quality monitoring stations must be set up in consultation with the State Pollution Control Board and the effluents monitored, and, should be statistically analysed and the report sent to this Ministry once in six month and to the Pollution Control Board once in three months. If the effluent quality at any time, exceeds the standards prescribed, the corresponding units of the plant which are contributing to the excessive pollutant load shall be immediately stopped from operation till the quality of pollutants discharged from the units are brought down to the required level.
8. The project authority should prepare a well designed scheme for solid waste disposal generated during various processes operation or in treatment plant. The plan for disposal should be submitted to the Ministry within six months.
9. An ecological study at the marine outfall point should be initiated immediately and report submitted within three years. The terms of reference of this study should be finalised in consultation with this Ministry.
10. The project authority will relocate residential complexes in keeping with the State Government stipulations and will prepare a well designed township for displaced persons and will submit within six months to this Ministry for review.
11. The project proponent must take up with the Government of Karnataka for restriction urban sprawl and growth of ancillaries and growth of informal sector within 5 KMS of project site. A master plan/land use plan must be submitted within one year.
12. The project authority will submit to this Ministry for review a well designed plan for afforestation in the hill slopes of plateau within six months and will afforest all vacant lands which are not used for plant utility. The land shown for further expansion must also be afforested in consultation with Forests Department. The minimum tree density should be 1000 per acre. A detailed green belt plan which interalia including type of plants, plantations schedule and a monitoring programme (preferably with physical inspection every six month) and indicating milestones on a PERT CHART should be submitted to this department within six months.

13. The project authorities will maximise the use of well designed pipeline for the transport of input material and finished product to avoid road congestion.

14. A detailed risk analysis based on Maximum Credible accident analysis should be done once the process design and lay-out is frozen. Based on this a disaster management plan has to be prepared and after approval by the concerned nodal agency, should be submitted to this Ministry within six months.

15. The project authority must set up a laboratory facility for collection and analysis of samples under the supervision of competent technical personnel who will directly report to the Chief Executive.

16. A separate environmental management cell with suitably qualified people to carry out various functions should be set up under the control of senior executive who will report directly to the head of the organisation.

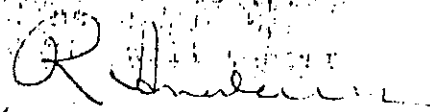
17. The funds earmarked for the environmental protection measures should not be diverted for other purposes and year-wise expenditure should be reported to this Ministry.

II

II. The Ministry or any other competent authority may stipulate any further condition after reviewing the comprehensive impact assessment report or any other reports prepared by project authorities.

III. The Ministry may revoke clearance if implementation of the conditions is not satisfactory.

IV. The above conditions will be enforced interalia along with the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, and Environment (Protection) Act, 1986, along with their amendments.



(R. ANANDAKUMAR)
SCIENTIST 'SF'

To,
The Secretary,
Deptt. of Petroleum & Natural Gas,
Ministry of Petroleum & Chemicals,
Shastri Bhavan,
New Delhi-110 001.

1/3

- Copy to:-
1. Chairman & Managing Director, Mangalore Refineries & Chemicals Ltd, 91 Sakhar Bhavan, 230, Nariman Point Bombay-40 0021. (Two copies)
 2. Chairman, Karnataka State Pollution Control Board, 6, 7 & 8th Floor, Public Utility Building, Mahatma Gandhi Road, Bangalore-560001.
 3. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex East Arjun Nagar, Shandara Delhi-110 032.
 4. Chief Conservator of Forests, Regional Office(SZ) No.463 First Main 3rd Block, 3rd Stage, Vasaveswara Nagar, Banagalore-560 007.
 5. Director (Regional Office Cell) Ministry of Environme & Forests, Paryavaran Bhavan, New Delhi.
 6. Adviser (Power & Energy) Planning Commission, Yojana Bhavan, Parliament Street New Delhi.
 7. Adviser(PAD) Planning Commission, Yojana Bhavan, New Delhi,
 8. Secretary, Deptt. of Ecology & Environment, Govt. of Karnataka, Vidhan Soudha, Bangalore-560001.
 9. Guard file.