OFFICE MEMORANDUM

Subject: Catalytic Reformer at Barauni Refinery of Indian Oil Corporation Environmental clearance.

This is reference to your letter No. PJ/CAT/R/2, dated 20th April 1989 in regard to the above subject. The environmental aspect of the project has been examined by the Ministry and clearance is accorded from environment angle subject to following conditions:

(i) The project authority must strictly adhere to stipulations made by the State Government and the State Pollution Control Board.

(ii) The project authority will not increase the throughput capacity of the refinery from the existing level.

(iii) The project authority must submit a rapid EIA report within 6 months and comprehensive EIA report within 18 months to this Ministry for review.

(iv) Gaseous emissions of sulphur dioxide, hydrocarbons and oxides of nitrogen should not exceed the standard prescribed by the Central/State Pollution Control Board. At no time the emission level should be beyond the stipulated standard. 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 systems are modified to achieve the desired efficiency.

(v) The project authority will recycle the effluent to the maximum extent possible either as a process water or for reutilisation.

(vi) The entire quantity of liquid effluent coming out of the complex should conform to MINAS both in terms of quantity and quality before discharging into the drainage system. The process plant effluent should be discharged through pipeline/closed channel.
(vii) The project authority must set up minimum of four air quality monitoring stations at different locations of the plant and in the nearby areas. The air quality will be monitored as per standard procedure. The monitoring of gaseous emissions should also include oxides of nitrogen and hydrocarbons. All the stacks of the plant must be provided with continuous automatic stack monitoring equipment and stacks emission levels must be recorded and furnished to the State Pollution Control Board once in three months and to this Ministry once in six months.

(viii) The liquid effluent quality must be measured on daily basis. At least five water quality monitoring stations must be set up in consultation with the State Pollution Control Board. This should include monitoring of oil content in the river. If the effluent quality exceeds the standard prescribed at any time, the corresponding units of the plant which are contributing to the excessive pollutant loads shall be immediately stopped and operation must not be restarted till the quality of effluent discharged from the units are brought down to the required levels.

(ix) The project authority will ensure that the effluent treatment plant will be commissioned and operational within the next three months.

(x) The project authority must submit a disaster management plan duly approved by the nodal agency of the State within a period of three months. Disaster management plan should include the worst accident scenario and its probable consequences.

(xi) The project authority will start construction only after the approval of Chief Controller of Explosive and a copy of consent letter should be made available to this Ministry.

(xii) No change in design of stacks should be made without the prior approval of the State Pollution Control Board. Alternate pollution control system and/or proper design (flare injection system) of the stacks should be made to minimise hydrocarbon emission due to failure in the flare system in the plant.
(xiii) The project authority must provide necessary infrastructural facilities to the construction worker during construction.

(xiv) The project authority must take adequate measure to bring down the noise level. The protective measures taken by the project authority should be made available to this Ministry.

(xv) The project authority will assess the impact on ground water contamination by the leachates and the remedial measures taken by the project authority should be submitted to this Ministry for review. The project authority will also monitor the quality of ground water in the nearby areas and report should be submitted to the State Pollution Control Board once in every three months and to this Ministry once in six months.

(xvi) The project authority must set up laboratory facilities in the existing premises for testing and analysing gaseous emissions and water quality.

(xvii) The project authority must submit a revised green belt design for the plant and township to this Ministry within three months for approval. The green belt should be with a minimum tree density of 1000 trees per acre.

(xviii) Additional area under the control of the project which is not being used for the plant utilities should be afforested and funds for this purpose should be suitably provided.

(xix) A separate environmental management cell with suitably qualified people to carry out various functions related to environmental management should be set up under the control of a senior technical person who will directly report to the head of the organization.

(xx) The fund provision (capital and recurring expenditure) for the environmental control measure should not be diverted for any other purpose. The implementation schedule for environmental control measure should be strictly followed.
2. The Ministry of Environment and Forest or any other competent authority may stipulate any further conditions after reviewing the impact assessment report or any other report prepared by the project authority.

3. The above conditions will be enforced, inter-alia, under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986.

4. The Ministry reserves the right to withdraw the clearance as and when necessary in the interest of environmental protection.

[Signature]

(M. PARABRAHMAM)
DIRECTOR (IA-II)

[Signature]

Secretary,
Ministry of Petroleum & Natural Gas,
Shaastri Bhawan,
New Delhi-110 001.

Copy to:
1. Chairman, Indian Oil Corporation Limited, Scope Complex, Core-2, 7, Institutional Area, Lodi Road, New Delhi-110 001.
2. Secretary, Department of Environment, Government of India, Third Secretariat Building, Patna.
3. Chairman, Central Pollution Control Board, 60- Skyline Building, Nehru Place, New Delhi-110019.
4. Chairman, Bihar State Pollution Control Board, Boring Road, Patna.
5. Director, Regional Office Cell, Ministry of Environment and Forests, New Delhi.

[Signature]

(M. PARABRAHMAM) 26/7/85
DIRECTOR (IA-II)