

No.IA-J-11011/140/2018-IA-II(I)
Government of India
Minister of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Vayu Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110003
24 May 2018

To,

M/s INDIAN OIL CORPORATION LIMITED PIPELINES DIVISION
INDIANOIL BHAWAN,
Gautam Buddha Nagar-201301
Uttar Pradesh

Tel.No.0120-2448614; Email:kumaram@indianoil.in

Sir/Madam,

This has reference to the proposal submitted in the Ministry of Environment, Forest and Climate Change to prescribe the Terms of Reference (TOR) for undertaking detailed EIA study for the purpose of obtaining Environmental Clearance in accordance with the provisions of the EIA Notification, 2006. For this purpose, the proponent had submitted online information in the prescribed format (Form-1) along with a Pre-feasibility Report. The details of the proposal are given below:

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|---|--|
| 1. Proposal No.: | IA/AP/IND2/74035/2018 |
| 2. Name of the Proposal: | Thiruvallur Bengaluru Pipeline section of ETBPNMTPL |
| 3. Category of the Proposal: | Industrial Projects - 2 |
| 4. Project/Activity applied for: | 6(a) Oil & gas transportation pipe line (crude and refinery/ petrochemical |
| 5. Date of submission for TOR: | 13 Apr 2018 |

In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation as follows:

**STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR
PROJECTS/ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE**

6(a): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR OIL & GAS TRANSPORTATION PIPE LINE (CRUDE AND REFINERY/PETROCHEMICAL PRODUCTS), PASSING THROUGH NATIONAL PARKS/SANCTUARIES/CORAL REEFS/ECOLOGICALLY SENSITIVE AREAS INCLUDING LNG TERMINAL INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

1. Justification of the project
2. Route map indicating project location.
3. Details of land to be acquired. Details of projects vis-à-vis Ecological Sensitive Areas and approvals thereof.
4. Project location along with map of 1 km area (500 meters on either side of the pipeline from centerline) and site details providing various industries, surface water bodies, forests etc.
5. Analysis of alternative sites and Technology.
6. Location of National Park/Wild life sanctuary/Reserve Forest within 10 km radius of the project.
7. Status of clearance from NBWL for pipeline passing through wildlife sanctuary/ Eco-logical sensitive area.
8. Recommendation of SCZMA /CRZ clearance for the proposed pipeline (if applicable) .
9. Present land use based on satellite imagery for the study area of 10 km radius.
10. Details of applications filed for forest clearance to be obtained for the project for the forest land involved in the project along with details of the compensatory afforestation.
11. Process Description along with Process Flow Diagram.
12. Details of associated facilities/utilities to be installed.
13. Details of water consumption and source of water supply, waste water generation, treatment and effluent disposal.
14. Detailed solid & Hazardous waste generation, collection, segregation, its recycling and reuse, treatment and disposal.
15. Total cost of the project along with total capital cost and recurring cost/annum for environmental pollution control measures.
16. Site-specific micro-meteorological data for temperature, relative humidity, hourly wind speed and direction and rainfall for one season at one location.
17. Ambient air quality monitoring within the study area of 500 m along the pipeline route and around the pumping station and delivery station for PM2.5, PM10, SO₂ , NO_x, CO, HC, VOC for one

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- season(Non Monsoon) taking into account the pre-dominant wind direction at the representative locations covering population zone and sensitive receptors including reserved forests.
18. Determination of atmospheric inversion level and assessment of ground level concentration of pollutants. Air quality modelling for proposed project.
 19. Water monitoring to be conducted including surface & ground water for one season (Non Monsoon).
 20. Soil sample analysis within the study area for one season (Non Monsoon).
 21. Noise Monitoring will be taken up for one season (Non Monsoon)
 22. Demography & socio-economics of the study area.
 23. Ecological features (terrestrial& Aquatic) of the study area for one season (Non Monsoon)
 24. Assessment of impact on air, water, soil, solid/hazardous waste and noise levels.
 25. A detailed note on method to be used for crossing road, nalla, stream, rivers, railway line etc.
 26. Air pollution control measures proposed for the effective control of gaseous emissions within permissible limits.
 27. Details of proposed preventive measures for leakages and accident.
 28. Risk assessment including Hazard identification, Consequence Analysis, Risk Assessment and preparation of Disaster Management Plan as per Regulations.
 29. Corrosion Management of Pipeline
 30. Details of proper restoration of land after laying the pipelines.
 31. Details of proposed Occupational Health Surveillance program for the employees and other labour
 32. Detailed Environment management Plan (EMP) with specific reference to Energy conservation and natural resource conservation, details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure will be provided.
