

J-11011/177/2016-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

Indira Paryavaran Bhawan
Aliganj, Jorbagh Road
New Delhi – 110 003
Dated: 24th November, 2016

To,

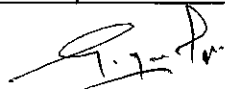
Shri Hari
DGM(HS&E)
M/s IOCL
Panipat Refinery
Dist:Panipat-132140

Subject: BS-VI Fuel Quality Up-gradation, Capacity Expansion of PX/PTA, NCU, MEG, HDPE, PP Units & New Catalyst Manufacturing Unit at Panipat Refinery by M/s IOCL – Terms of Reference-reg.

Sir,

Kindly refer your proposal no IA/HR/IND2/56442/2016; dated 24th June, 2016 along with project documents including Form-I, Pre-feasibility Report and draft 'Terms of Reference' as per the EIA Notification, 2006. It is noted that the proposal is for BS-VI Fuel Quality Up-gradation, Capacity Expansion of PX/PTA, NCU, MEG, HDPE, PP Units & New Catalyst Manufacturing Unit at Panipat Refinery BY M/s IOCL. Followings are the existing and proposed facilities:

<i>SN</i>	<i>Facilities</i>	<i>Existing Capacity</i>	<i>New Capacity</i>	<i>Remarks</i>
1	Diesel Hydro De-Sulphurisation (DHDS)	700 kTA	1000 kTA	Revamp
2	Prime-G	370 kTA	445 kTA	Revamp
3	Diesel Hydro-Treater (DHDT)		2200 kTA	New
4	Hydrogen Generation Unit		44 kTA of hydrogen production	New
5	Tertiary Amyl Methyl Ether		33 kTA	New
6	OCTAMAX		115 kTA	New
7	Sulphur Recovery Unit (SRU) with Tail Gas Treating Unit (TGTU)		225 T/Day Sulphur production	New
8	Amine Regeneration Unit (ARU)		188.9 T/hr	New
	Sour Water Stripper (SWS)		56.7 T/hr	New
9	DHDT feed tank		20,000 KL	New
10	Para Xylene Unit	363 kTA	460 kTA	Revamp
11	Purified Terephthalic Acid Unit (PTA)	553 kTA	700 kTA	Revamp



A. Specific TOR

1. Complete process flow diagram describing each unit, its capacity along-with material and energy balance.
2. Details of intermediate product, their storages and final products to be manufactured.
3. Sulphur balance giving input from crude, refinery fuel (if used) and any other outside fuel and output in various products and emissions.
4. Details of proposed source-specific pollution control schemes and equipment to meet the national standards for petroleum refinery.
5. Details of emissions from all the stacks including volumetric flow rate.
6. Details on availability of raw materials (crude oil, natural gas, chemicals, *etc.*), its source and storage at the plant.
7. Details on mode of transportation of crude and products.
8. Details of storage capacity of crude and products.
9. Ambient air quality data should include hydrocarbon (methane and non-methane), VOC, Ni & V etc.
10. Efforts to minimize water consumption, effluent discharge and to maintain quality of receiving water body.
11. Details of effluent treatment plant, inlet and treated water quality with specific efficiency of each treatment unit in reduction in respect of all concerned/regulated environmental parameters. Also, include treatment details such as primary (physico- chemical), secondary (biological) and tertiary (activated carbon filters) treatment systems.
12. Storm water management plan.
13. Estimation SO₂ and NO_x emissions load.
14. Details on flaring system.
15. Details of VOC recovery devices in the storage tanks.
16. Arrangement for spill management.
17. Oily sludge management plan.
18. Risk Assessment & Disaster Management Plan
 - i. Identification of hazards
 - ii. Consequence Analysis
 - iii. Risk assessment should also include leakages and location near to refinery & proposed measures for risk reduction.
 - iv. Arrangement for fire protection and control.

B. Additional TOR

- I. Public hearing exempted as para 7(ii) of EIA, Notification 2006.
- II. A separate chapter on status of compliance of Environmental Conditions granted by Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA-EMP report.

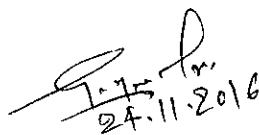
3.0 These 'TORs' should be considered for the preparation of EIA/EMP for BS-VI Fuel Quality Up-gradation, Capacity Expansion of PX/PTA, NCU, MEG, HDPE, PP Units & New Catalyst Manufacturing Unit at Panipat Refinery by M/s IOCL in addition to all the relevant



information as per the 'General Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Public hearing exempted as para 7(ii) of EIA, Notification 2006.

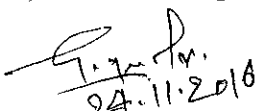
4.0 You are requested to kindly submit the final EIA/EMP prepared as per TORs to the Ministry for considering the proposal for environmental clearance ***within 3 years as per the MoEF O.M. No. J-11013/41/2006-IA.II (I) dated 8th October, 2014.***

5.0 The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India/ National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc.


24.11.2016
(Yogendra Pal Singh)
Scientist 'D'

Copy to:

- 1 The Chairman, Haryana State Pollution Control Board, C-11, Sec-6, panchkula-134109, Haryana
- 2 The Additional Principal Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (NZ), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh – 160030.


24.11.2016
(Yogendra Pal Singh)
Scientist 'D'

