

F. No. J-11011/78/2018- IA II(I)

Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Vayu Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110 003

Dated: 25th November, 2019

To,

M/s Indian Oil Corporation Ltd (IOCL)
Panipat Refinery & Petrochemical Complex,
Panipat, Haryana

Sub: Setting up 128 KL per day Ethanol production plant by M/s Indian Oil Corporation Ltd. (IOCL) in Panipat Refinery & Petrochemical Complex at Panipat, Haryana - Environmental Clearance regarding

Sir,

This has reference to your online proposal No. IA/HR/IND2/73149/2018 dated 28th June, 2019 for environmental clearance to the above project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for setting up 128 KL per day Ethanol production plant from Pressure Swing Adsorption (PSA) off gases (containing CO, H₂ & CO₂) from Hydrogen Generation Unit (HGU) using gas fermentation technology by M/s Indian Oil Corporation Ltd (IOCL) in Panipat Refinery & Petrochemical Complex at Panipat (Haryana).

3. Project proponent reported that the existing land area is 59200 sq. m (5.92 Ha). No additional land will be used for proposed project. Greenbelt will be developed in an area of 33% i.e. 19500 sq. m (1.95 Ha) out of total area of the project. The estimated project cost is Rs. 598.2 crore with +/- 30% accuracy. Total capital cost earmarked towards environmental pollution control measures is Rs. 0.2 crore and the recurring cost (O&M) will be about Rs. 0.05 crore per annum.

4. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within the 10 km of the project site. Total water requirement will be 3600 cum/day (150m³/hr.) proposed to be met from Munak Regulator on Western Yamuna Canal. Effluent of 209 cum/day will be treated in existing ETP-III (PTA-ETP) of Panipat Refinery Effluent Treatment Plant. Power requirement will be 12 kVA, proposed to be met through existing captive power plant.

5. The project/activity is covered under category A of item 4 (a) 'Petroleum refining industry' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal/approval at central level in the Ministry. Standard Terms of Reference for the project was granted by the Ministry on 3rd May, 2018. Public Hearing for the proposed project was conducted by the State Pollution Control Board on 27th March, 2019.

6. The proposal for environmental clearance was considered by the EAC (Industry-2) in its meeting held on 28-29 August, 2019, wherein the project proponent and their accredited consultant presented the EIA/EMP report. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

7. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **setting up 128 KL per day Ethanol production plant from Pressure Swing Adsorption (PSA) off gases (containing CO, H₂ & CO₂) from Hydrogen Generation Unit (HGU) using gas fermentation technology by M/s Indian Oil Corporation Ltd (IOCL) in Panipat Refinery & Petrochemical Complex at Panipat, Haryana**, under the provisions of the EIA Notification, 2006, read with subsequent amendments therein, subject to compliance of the terms and conditions as environmental safeguards, as under:-

- (a) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.
- (b) Effluent of 209 cum/day shall be treated in existing Effluent Treatment Plant of Panipat Refinery and Panipat Refinery will not exceed the permissible discharge as allowed to Panipat Refinery while granting environmental clearance vide letter dated 26th March, 2018.
- (c) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (d) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (e) Odour shall be prevented at the source and effective odour management scheme shall be implemented.
- (f) Total fresh water requirement shall not exceed 3600 m³/day, proposed to be met from Munak Regulator on Western Yamuna Canal. Prior permission shall be obtained from the concerned regulatory authority.
- (g) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- (h) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (i) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (j) The company shall undertake waste minimization measures as below:-
 - (i). Metering and control of quantities of active ingredients to minimize waste.
 - (ii). Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (iii). Use of automated filling to minimize spillage.

- (iv). Use of Close Feed system into batch reactors.
 - (v). Venting equipment through vapour recovery system.
 - (vi). Use of high pressure hoses for equipment clearing to reduce wastewater generation.
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- (k) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
 - (l) All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.
 - (m) At least 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Priority shall be given for construction/repair of the village roads.
 - (n) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
 - (o) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
 - (p) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
 - (q) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
 - (r) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall online pH ,TSS, BOD, COD and flow meter at the ETP outlet.
 - (s) The unit shall comply with NGT Order and shall not damage environment any further including ground water.
 - (t) The unit shall take precautionary measure for control of VOCs and shall follow CPCB guidelines and norms.
- 8.** The project proponent shall strictly comply the sector specific conditions as mentioned in the Ministry's Office Memorandum No. 22-34/2018-IA.III, dated 9th August, 2018. The said OM is available at the Ministry's website. The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-
- (i) The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.



- (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
- (v) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (viii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing shall be implemented.
- (ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
- (x) A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban local Body and the local NGO,

if any, from whom suggestions/ representations, if any, were received while processing the proposal.

- (xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xiv) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 environmental clearance conditions and shall also be sent to the respective Regional offices of MoEF&CC by e-mail.
- (xv) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://moef.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional office of the Ministry.


9. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

10. 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.

11. Any appeal against this environmental 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.

12. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

13. This issues with the approval of the competent authority.


(Dr. R. B. Lal)

Scientist 'E'/Additional Director

Copy to: -

1. The Secretary, Ministry of Petroleum and Natural Gas, Shastri Bhavan, New Delhi - 110 001

(डा. आर. बी. लाल)
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Min. of Environment, Forest and Climate Change
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2. The Principal Secretary, Department of Environment, Government of Haryana, SCO 1-2-3, Sector 17 (D), 2nd Floor, **Chandigarh**, Haryana
3. The Additional PPCF(C), MoEF&CC, Regional Office (NZ), Bays No.24-25, Sector 31-A, Dakshin Marg, **Chandigarh** – 160030
4. The Member Secretary, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** - 32
5. The Member Secretary, Haryana State Pollution Control Board, C-11, Sector-6, **Panchkula**, Haryana - 134109.
6. Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Man Singh Road, **New Delhi**-110011
7. District Collector, **Panipat** (Haryana)
8. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhawan, Jor bagh Road, New Delhi
9. Guard File
10. Record File
11. Monitoring File
12. Parivesh Portal


(Dr. R. B. Lal)
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