

F. No. J-11011/386/2016-IA-II(I)  
Government of India  
Ministry of Environment, Forest and Climate Change  
(IA-II Section)

Indira Paryavaran Bhawan  
Jorbagh Road, New Delhi -3

Dated: 7<sup>th</sup> August, 2018

To

M/s HPCL - Mittal Energy Ltd  
Village Phulokhari, Taluka Talwandi Saboo  
District **Bathinda** (Punjab) - 151 301

**Sub: Fuel Quality Upgradation Project at Guru Gobind Singh Refinery, Village Phulo Khari, Tehsil Talwandi Sabo, District Bathinda (Punjab) by M/s HPCL-Mittal Energy Limited (HMEL) - Environmental Clearance- reg.**

Sir,

This has reference to your proposal No. IA/PB/IND2/61343/2016 dated 2<sup>nd</sup> February 2018, submitting the EIA/EMP report on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for fuel quality upgradation from BS-IV to BS-VI at Guru Gobind Singh Refinery of capacity 11.25 MMTPA by M/s HPCL-Mittal Energy Limited (HMEL) at Village Phulo Khari, Tehsil Talwandi Sabo, District Bathinda (Punjab). The project involves installation of one Diesel Hydrotreating (DHDT) unit of 1.9 MMTPA and revamping of existing Hydrogen generation unit (HGU) with capacity enhancement by 2x11 KTA.

3. The existing land area is 787 ha and no additional land will be required for the proposed expansion. Industry will develop greenbelt in an area of 193 ha out of total area of the project. The total project cost is Rs. 1100 crores. Capital cost earmarked towards additional environmental pollution control measures is Rs 0.6 crores and the recurring cost (operation and maintenance) will be Rs 0.05 crores per annum. Additional direct employment will be for 16 persons during operation and indirect employment opportunity will be for 2000-3000 persons during construction phase.

4. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Rivers etc. within 10 km distance of the project site.

5. The existing and proposed products are as under:

S. No.	Product	Present configuration @ 11.25 MMTPA (KTPA)	Post BS-VI configuration @11.25 MMTPA (KTPA)
1	LPG	963.9	963.9
2	Naphtha	871.7	369
3	Gasoline	Bharat IV REG 1306.4 Bharat IV PRE 25	Bharat VI 1540
4	ATF	500	250
5	Kerosene	200	200
6	Diesel	Bharat IV 4842.6	Bharat VI 5018
7	Sulphur	227	245.5

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8	Coke	991.5	943.5
9	Hexane	5	5
10	Motor Turpentine Oil	25	25
11	Polypropylene	500	500
12	Bitumen	520	520

6. Additional water requirement for proposed project is 32 cum/hr. Total water requirement will be 5952 cum/hr (Existing refinery:2420 cum/hr+ Polymer addition project: 3500 cum/hr + Proposed BS VI project:32 cum/hr) and will be met from existing raw water system from Kotla canal. Additional wastewater generation will be 5 cum/hr which will be treated through existing ETP Plant.

Power requirement for the proposed project will be 6.9 MW, which will be met from existing Captive Power Plant. The SO<sub>2</sub> emissions from the proposed project would be 0.16 TPD, and the total emission load from the Guru Gobind Singh Refinery shall be limited to 23.8 TPD.

Hazardous waste will be disposed off in secured landfill inside the refinery/nearby authorized landfill agency. Spent catalysts will be sent back to the original supplier/approved recycler for reprocessing.

7. The project/activity is covered under category A of item 4(a) 'Petroleum refining industry' of the Schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

8. The terms of reference (ToR) for the project was granted on 29<sup>th</sup> April, 2017, exempting public consultation in terms of provisions contained in para 7(ii) of the EIA Notification, 2006.

9. The proposal for environmental clearance (EC) was placed before the EAC (Industry-2) in its meetings held during 26-28 February, 2018 and 29-31 May, 2018 in the Ministry. The project proponent and their consultant M/s Engineers India Limited presented the EIA/EMP report as per the ToR. The committee found the EIA/EMP report satisfactory and in consonance with the ToR, and recommended the proposal for environmental clearance with certain conditions.

10. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **Fuel Quality Upgradation from BS-IV to BS-VI** at Guru Gobind Singh Refinery of 11.25 MMTPA by M/s HPCL-Mittal Energy Limited at Village Phulo Khari, Tehsil Talwandi Sabo, District Bhathinda (Punjab), under the provisions of EIA Notification, 2006 and the amendments made therein, subject to the compliance of terms and conditions, as under:-

- (i) The project proponent shall take stringent mitigating and other remedial measures to minimize the incremental concentration of air pollutants (mainly PM<sub>10</sub> & PM<sub>2.5</sub>) to the extent possible.
- (ii) The project proponent shall develop local air quality management plan in consultation with SPCB and implemented to achieve desired standards.

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- (iii) The incremental ground level concentrations (GLCs) for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> & NO<sub>x</sub> due to the increased vehicular and other allied/developmental activities, shall be analysed and reported for actual impact of the project.
- (iv) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (v) For the fuel quality up-gradation, as already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises
- (vi) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (vii) The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18<sup>th</sup> March, 2008 and G.S.R. 595(E) dated 21<sup>st</sup> August, 2009 as amended time to time shall be followed.
- (viii) Total SO<sub>2</sub> emissions from the Refinery shall not exceed 990 kg/hr.
- (ix) To control source and the fugitive emissions, suitable pollution control devices shall be installed with different stacks (attached to DHDT, HGU, Prime G) to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stacks of adequate height as per CPCB/SPCB guidelines.
- (x) Total fresh water requirement shall not exceed 5952 cum/hr (including 32 cum/hr for the proposed project) to be met from Kotla Canal. Necessary permission in this regard shall be obtained from the concerned regulatory authority.
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.
- (xiii) 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. The ash from boiler shall be sold to brick manufacturers/cement industry.
- (xiv) 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.
- (xv) Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.

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- (xvi) The company shall undertake waste minimization measures as below:-
- (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (c) Use of automated filling to minimize spillage.
  - (d) Use of Close Feed system into batch reactors.
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvii) 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.
- (xviii) At least 0.25 % 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.
- (xix) 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.
- (xx) 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.
- (xxi) 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 install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.
- (xxii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

**10.1.** The grant of environmental clearance is subject to compliance of other generic conditions, as under:-

- (i) The project authorities must strictly adhere to the stipulations made by the State Government, Central Pollution Control Board, State Pollution Control Board and 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 16<sup>th</sup> November, 2009 shall be followed.
- (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 use the same water for the process activities of the project to conserve fresh water.
- (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 also 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 and risk mitigation measures relating to the project shall be implemented.
- (ix) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.
- (x) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (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, Zilla 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.
- (xvi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

11. The Ministry may revoke or suspend the clearance, at subsequent stages, if implementation of any of the above conditions is not satisfactory.


12. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

13. The above conditions will be enforced, *inter alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

  
7/8/2018  
(S. K. Srivastava)  
Scientist E

**Copy to:-**

1. The Additional PCCF (C), MoEF&CC, Regional Office (NZ), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh - 30
2. The Principal Secretary, Department of Science, Technology and Environment, Government of Punjab, Civil Secretariat, Chandigarh
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex East Arjun Nagar, Delhi - 32
4. The Member Secretary, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala (Punjab)
5. Guard File/Monitoring File/Website/Record File

  
7/8/2018  
(S. K. Srivastava)  
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