

F. No. J-11011/266/2017-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: 12th December, 2017

To

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

Sub: Polymer Addition Project at Guru Gobind Singh Refinery Complex in District Bathinda (Punjab) by M/s HPCL - Mittal Energy Ltd (HMEL) - Environmental Clearance- reg.

Sir,

This has reference to your proposal No. IA/PB/IND2/64796/2017 dated 17th August, 2017, 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 Polymer Addition Project at Guru Gobind Singh Refinery Complex in District Bathinda (Punjab) by M/s HPCL - Mittal Energy Ltd (HMEL).

3. The existing land area is 787 ha. No additional land will be required for the proposed project. Industry will develop greenbelt in an area of 193 ha out of total area of the project. The cost of the project is Rs.19, 635 crores. The project will provide employment to 600 persons as direct (during operation) and 20000-25000 persons as indirect during construction phase.

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

5. The existing and proposed products are as under:

S.No.	Products	Existing Capacity (KTPA)	Proposed Capacity (KTPA)
1	HDPE/ LLDPE	-	1195.3
2	PP-Regular	-	324.6
3	PP-Impact	-	150
4	Benzene	-	79
5	Mixed Xylenes	-	161
6	Low Sulphur Fuel Oil	-	15
7	LPG	807	593.3
8	Naphtha	237	0

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9	Hexane	5	5
10	Gasoline	1533	993.3
11	Kerosene	200	100
12	Aviation Turbine Fuel	303.3	400
13	MTO	25	25
14	Diesel	4955	3946
15	Bitumen	500	500
16	Coke	598	565
17	Sulphur	209.5	213.5
18	PP-Regular	466.7	466.7

6. The additional units proposed in the project are as under:-.

S. No.	Proposed Unit	Capacity
1	Dual Feed Cracker Unit: Steam Cracking Unit Refinery Off gas treatment unit Total Hydrogenation unit Pyrolysis Gasoline Hydrogenation Unit Benzene Extraction Unit Spent Caustic Treatment unit	1200 KTPA of Ethylene
2	Butene-1 Unit	55 KTPA
3	Linear Low Density Polyethylene/High Density Polyethylene Swing Unit	2x400 KTPA
4	High Density Polyethylene Unit	450 KTPA
5	Polypropylene Unit	500 KTPA
6	Storage Facilities	Total 34 - DWST(4)/ Spheres(6)/ Bullets(4)/ Tanks (20)

7. The total fresh water requirement of 3500 m³/hr will be met from existing raw water system from Kotla canal.

Total effluent of 185 m³/hr will be treated through a new ETP and the plant will be based on zero liquid discharge system.

Power requirement for the project will be 220 MW (150 MW to be taken from power grid, and 70 MW from 2 new STGs).

8. All Petrochemical Complex are listed at S.N. 5(c) of the Schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

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9. The terms of references (ToR) for the project was granted on 3rd August, 2017 exempting public consultation, in terms of para 7 (ii) of EIA Notification, 2006.

10. The proposal for environmental clearance (EC) was placed before the EAC (Industry-2) in its meeting held during 18-20 September, 2017 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.

11. 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 '**Polymer Addition Project**' at Guru Gobind Singh Refinery Complex in District Bathinda (Punjab) by M/s HPCL - Mittal Energy Ltd (HMEL), under the provisions of EIA Notification, 2006 and the amendments made therein, subject to the compliance of terms and conditions, as under:-

- (i) In view of the base line air quality data for PM₁₀ & PM_{2.5} already exceeding the prescribed standards, one more season data to be collected to confirm the consistency of readings/values, and submitted to Ministry/EAC within six months period positively, along with mitigating measures.
- (ii) During process/detailed engineering, all emission sources shall be equipped with the latest devices to ensure emissions/values in the present readings/values.
- (iii) 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.
- (iv) As already committed by the project proponent, Zero Liquid Discharge shall be adopted.
- (v) 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.
- (vi) Environmental Standards for Petroleum Oil Refinery dated 18th March 2008 and Environmental Standards for Petrochemical (Basic and Intermediates) dated on 9th November, 2012, and its amendments from time to time shall be followed.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Multi-cyclone followed by bag filter shall be provided to the DCU coke based CFBC boiler to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.



- (viii) The total fresh water requirement shall not exceed 3500 m³/hr from Kotla canal. Necessary permission in this regard shall be obtained from the concerned regulatory authority. No ground water shall be used without prior permission from the CGWA.
- (ix) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (x) 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.
- (xi) Process organic residue and spent carbon 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.
- (xii) 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.
- (xiii) 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.
- (xiv) 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.
- (xv) The green belt of at least 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. As many as 25000 trees to be planted per year during first five years. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi) At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvii) 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.

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- (xviii) 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.
- (xix) 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.
- (xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

11.1. 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 16th 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.

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


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

14. 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.


12/12/2017
(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 Secretary, Environment Protection Department, Government of Punjab, Gate No. 8, National Hockey Stadium, Qaddafi Stadium, Ferozepur Road, Lahore (Punjab)
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


12/12/2017
(S. K. Srivastava)
Scientist E