HMEL®

Date: 29th September, 2025
Ref: HMEL-OE-40-ENV 1278

To,

Environmental Engineer,
Punjab Pollution Control Board
3rd Floor, Room No: 406E,
District Administrative Building,
Bathinda- Regional Office,
Bathinda.

Subject: Environmental Statement for the financial year ending 31st March 2025.

Dear Sir,

Enclosed please find the Environmental Statement for 2024-25 as per "The Environment (Protection) Rules, 1986".

Thanking you,

Very truly yours

Jatinder Kumar
(DM –Env.)

Encl: 1. Environmental Statement **Form-V**.

Cc: Ministry of Environment, Forest & Climate Change, Northern Regional Office, Bays No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh-160 030.

Environmental Statement for FY 2024-25

FORM-V
(See Rule 14)

Environmental Statement for the financial year ending on 31st March 2025.

PART - A

(i) Name and address of the owner/ occupier of the industry operation or process:

Mr. Prabh Das,
MD & CEO,

HQ Address:
HPCL-Mittal Energy Limited
INOX Towers, Plot No., - 17, Sector 16A,
NOIDA-201301, (U.P), INDIA

Plant Address:
HPCL-Mittal Energy Limited
Guru Gobind Singh Refinery
Village Phullokhari
Taluka: Talwandi Saboo
District Bathinda – 151301, PUNJAB,
INDIA.

(ii) Industry category Primary: (STC Code) Secondary- (SIC Code):

SIC Code 2911: Petroleum Refinery.

(iii) Production capacity- Units:

11.25 MMTPA (Crude processing capacity)

(iv) Year of establishment:

April 2012

(v) Date of the last environmental statement submitted:

30th September 2024

PART - B

Water and Raw Material Consumption:

1. Water consumption m^3/ day
   - Process : 27164 m^3/day (Refinery - 21095 m^3/day, Petchem – 6069 m^3/day)
   - Cooling : 60707 m^3/day (Refinery - 24746 m^3/day, Petchem – 35961 m^3/day)
   - Domestic : 1114339 m^3/day
   - Fire Water : 379915 m^3/day

Name of products	Process water consumption per unit of product output	
	During the previous Financial Year (2023-24)	During the current Financial Year (2024-25)
1. LPG 2. Naphtha 3. Hexane 4. MS 5. SKO 6. ATF 7. Motor Turpentine Oil 8. HSD 9. Polypropylene 10. Bitumen 11. Pet Coke 12. Sulphur 13. Benzene 14. LSFO 15. PP 16. HDPE 17. LLDPE/HDPE	0.85 m^3 / MT*	2.41 m^3 / MT#

*Note: *2023-24: Data reported for Refinery only.*
#2024-25: Data Reported for both Refinery and Petchem units.

2. Raw Material Consumption:

Name of raw materials	Name of products	Consumption of raw material per unit of output	
		During the previous Financial Year (2023-24)	During the current Financial Year (2024-25)
(Crude Oil+ Naptha+ Natural Gas)	1. LPG 2. Naphtha 3. Hexane 4. MS VI 5. SKO 6. ATF 7. Motor Turpentine Oil 8. HSD 9. Polypropylene 10. Bitumen 11. Pet Coke 12. Sulphur 13. Benzene 14. LSFO 15. PP 16. HDPE 17. LLDPE/HDPE	1.17 MT	1.19 MT

PART - C

Pollution discharged to environment/ unit of output.

(Parameter as specified in the consent issued)

Pollution _	Quantity of pollutants Discharged (Mass/ day) (kg/day)	Concentration of pollutants in discharges (Mass/ volume) (kg/m^3)	Percentage of variation from prescribed standards with reasons

(a) Water- Treated Water from ETP is recycled / reused inside the refinery.

Pollutant	Pollutant in kg/day	Pollutant in kg/m3
Oil & Grease	11.10	0.0014
BOD	BDL	BDL
COD	509.27	0.0624
Suspended Solids	116.52	0.0143

Phenols	1.52	0.0002
Sulphides	1.96	0.0002
Hg	BDL	BDL
Zn	BDL	BDL
Ni	BDL	BDL
Cu	BDL	BDL
V	BDL	BDL
Cyanide	BDL	BDL
TKN	5.79	0.0007
Ammonia	60.22	0.0074
Phosphate	12.57	0.0015
Hexavalent chromium	BDL	BDL
Total chromium	BDL	BDL
Lead	BDL	BDL
Benzene	BDL	BDL
Benzo(a)pyrene	BDL	BDL

Water- Treated Water from ETP is recycled / reused inside the Petrochemical complex:

Pollutant	**Pollutant in kg/day**	**Pollutant in kg/m3**
Oil & Grease	11.80	0.001447
BOD	BDL	BDL
COD	494.97	0.060658
Suspended Solids	106.76	0.013083
Phenols	2.08	0.000255
Sulphides	1.67	0.000204
Hg	BDL	BDL
Zn	BDL	BDL
Ni	BDL	BDL
Cu	BDL	BDL
V	BDL	BDL
Cyanide	BDL	BDL
TKN	3.66	0.000448
Ammonia	59.69	0.007315
Phosphate	12.30	0.001507
Hexavalent chromium	BDL	BDL
Total chromium	BDL	BDL
Lead	BDL	BDL
Benzene	BDL	BDL
Benzo(a)pyrene	BDL	BDL

* BDL- Below Detectable Limit

(b) Air SO_2 18000-19000 kg/day

PART - D

Hazardous Wastes

[As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016]

Hazardous Waste	Total Quantity	
Type of waste generated	**During the previous Financial Year (2023-24)**	**During the current Financial Year (2024-25)**
(a) From process		
Spent catalyst and molecular sieves	9.14 MT	8.79 MT
Used or spent oil	132.87 MT	92.1 MT
Spent catalyst	827.52MT	1409.05 MT
Contaminated cotton rags or other cleaning materials	0.5 MT	2.04 MT
Empty barrels/containers used for hazardous waste/chemicals.	16995 nos.	24567 nos.
Spent ion exchange resin containing toxic metals	19.45 MT	12.37 MT
Spent clay containing oil	645.89 MT	535.02 MT
Chemical sludge from wastewater treatment	Nil	Nil
Spent carbon or filter medium	Nil	Nil
(b) From Pollution Control Equipment		
Oily and grease skimming	7169MT	7252 MT

(c) Recycled/Re-utilised/Disposed		
Hazardous Waste	**Total Quantity**	
Type of waste	**Quantity Disposed in Financial Year 2023-24**	**Quantity Disposed in Financial Year 2024-25**
Spent catalyst and molecular sieves	9.14	92.1 MT
Used or spent oil	132.87 MT	92.1 MT
Spent catalyst	1017.81 MT	1409.05 MT
Contaminated cotton rags or other cleaning materials	0.5 MT	2.04 MT
Empty barrels/containers used for hazardous waste/chemicals.	16995nos.	24567 nos.
Spent ion exchange resin containing toxic metals	19.45 MT	12.37 MT

Spent clay containing oil	645.89 MT	535.02 MT
Chemical sludge from waste water treatment	Nil	Nil
Spent carbon or filter medium	Nil	Nil
Oily and grease skimming	7169 MT	7252 MT

PART - E

Solid Waste

Solid Waste	**Total Quantity**	
Type of Waste	**During the previous Financial Year (in MT) (2023-24)**	**During the current Financial Year (in MT) (2024-25)**
(a) From process		
Bottom Ash	68868.9	123922.55
Fly Ash	169791.0	275643.5
(b) From Pollution Control Equipment	Nil	Nil
(c) (1) Quantity recycled within the unit		
(2) Sold		
Scrap Metal	1464.33	2693.92
Scrap Wood	273.96	938.29
Scrap Plastic	809.31	1461.79
Scrap Glass	Nil	Nil
(3) Disposed		
Bottom Ash	68676.6	122989.37
Fly Ash	169338.34	274377.72

PART - F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Disposed Quantity

S. No.	Type of waste	Disposal Management
A.	**Hazardous Waste**	
1	Cargo residue, washing water and sludge containing oil	Disposed to SPCB registered recycler or Co-processing at Cement Industry.
2	Oily and grease skimming	Re-processed in DCU / Disposed in captive SLF
3	Used or spent oil	Disposed to SPCB registered recycler.
4	Spent catalyst	Disposed to SPCB registered recycler.
5	Contaminated cotton rags or other cleaning material	Used in firefighting training or Co-processing at Cement Industry
6	Empty barrels/containers used for hazardous waste/chemicals.	Drums returned to supplier or Disposed to SPCB registered recycler
7	Spent ion exchange resin containing toxic metals	Disposal in captive SLF or Co-processing at Cement Industry
8	Spent clay containing oil	Co-processed in cement industry
9	Chemical sludge from wastewater treatment	Disposal in captive SLF or Co-processing at Cement Industry
10	Spent catalyst and Molecular sieve	Disposed to SPCB registered recycler
11	Spent carbon and Filter medium	Disposal in captive SLF or Co-processing at Cement Industry
B.	**Solid Waste**	
1	Scrap Metal	Disposed to recyclers
2	Scrap Wood	Disposed to recyclers
3	Scrap Plastic	Disposed to recyclers
4	Scrap Glass	Disposed to recyclers
5	Bottom Ash	Co-processed at Cement Industry or brick manufacturing industry
6	Fly Ash	

PART - G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

The following pollution abatement measures taken on conservation of natural resources have been implemented:

The Flare Gas Recovery System (FGRS) has been installed to recover flare gas. Approximately 4,538.9 MT of flare gas was recovered during FY 2024–25. The recovered gas is used as fuel in heaters and boilers. This has resulted in a reduction in fuel gas usage by 1,642.5 MT.

PART - H

Additional measures/investment proposal for environmental protection, abatement of pollution, prevention of pollution.

Green belt has been developed as per the latest amended EC obtained from MoEF&CC dated 07th December 2021.

PART - I

Any other particulars for improving the quality of the environment.

-NIL-