Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

Environmental Audit Report for the financial Year ending the 31st March 2019

Unique Application Number
MPCB-ENVIRONMENT_STATEMENT-0000021611

Submitted Date
30-09-2019

Company Information

Company Name
Hindustan Petroleum Corporation Limited

Application UAN number
CR15120000434

Address
Mumbai Refinery, B. D. Patil Marg, Mahul

Plot no
-

Taluka
Kurla

Village
Mahul

Capital Investment (In lakhs)
830149

Scale
Large Scale Industry

City
Mumbai

Pincode
400074

Person Name
LEKSHMAN VENUGOPAL

Designation
Executive Director - HPCL, Mumbai Refinery

Telephone Number
02225077001, 02225545061

Fax Number
02225542008

Email
Lakshmanv@hpcl.in

Region
SRO-Mumbai III

Industry Category
Red

Industry Type
R56 Oil Refinery (mineral Oil or Petro Refineries)

Last Environmental statement submitted online
yes

Consent Number
BO/CAC-Cell/EIC No MU-5684-14/14th CAC /6298

Consent Issue Date
12/05/2016

Consent Valid Upto
31/08/2020

Product Information

Product Name	Consent Quantity	Actual Quantity	UOM
Light Distillates (LPG/LAN/HAN/Reg. gasoline/premium Gasoline)	1968000	2486298	MT/A
Middle Distillates (ATF/SKO/HSD/LTO)	3313000	3780155	MT/A
Lube Oil Base Stock	331000	472812	MT/A

By-product Information

By Product Name	Consent Quantity	Actual Quantity	UOM
Other heavy products	2288000	1896042	MT/A
Elemental Sulphur	26000	35619	MT/A

1) Water Consumption in m3/day

Water Consumption for	Consent Quantity in m3/day	Actual Quantity in m3/day
Process	9660	5702
Cooling	90242	32852

Domestic	870	570
All others	1500	1498
Total	102272	40621

1) Effluent Generation in CMD / MLD

Particulars	***Consent Quantity***	***Actual Quantity***	***UOM***
Effluent from Process	7200	3111	CMD
Sea cooling water effluent (blow down)	80354	22560	CMD
Sewage effluent from the factory	600	176	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	***During the Previous financial Year***	***During the current Financial year***	***UOM***
Light Distillates	0.28	0.26	Ton/Ton
Middle Distillates	0.28	0.26	Ton/Ton
Lube Oil Base Stock	0.28	0.26	Ton/Ton
Other heavy products including refinery fuel loss	0.28	0.26	Ton/Ton
Elemental Sulphur	0.28	0.26	Ton/Ton

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	***During the Previous financial Year***	***During the current Financial year***	***UOM***
Crude Oil	1.08	1.08	Ton/Ton

4) Fuel Consumption

Fuel Name	***Consent quantity***	***Actual Quantity***	***UOM***
Fuel Oil	325008	120111	MT/A
Refinery Gas/Natural Gas	411750	324811	MT/A
Liquid Naptha	230580	5015	MT/A

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	***Quantity of Pollutants discharged (kL/day)***	***Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour***	***Percentage of variation from prescribed standards with reasons***		
	Quantity	***Concentration***	***%variation***	***Standard***	***Reason***
pH	0	7.4	0	6 -8.5	Complied
Oil & Grease	1.5	2	0	5	Complied
Suspended Solids	12.3	16	0	20	Complied
BOD (3 days 27 Deg C)	7.7	10	0	15	Complied
COD	79.4	103	0	125	Complied
Phenol	0.2	0.27	0	0.35	Complied
Sulphides	0	Below Detectable Limit	0	0.5	Complied
CN	0	Below Detectable Limit	0	0.2	Complied
Ammonia as Nitrogen (N)	8.5	11	0	15	Complied

TKN	20	26	0	40	Complied
P	1.7	2.2	0	3	Complied
Cr (Hexavalent)	0	Below Detectable Limit	0	0.1	Complied
Cr (Total)	0	Below Detectable Limit	0	2	Complied
Pb	0	Below Detectable Limit	0	0.1	Complied
Hg	0	Below Detectable Limit	0	0.01	Complied
Zn	0	Below Detectable Limit	0	5	Complied
Ni	0	Below Detectable Limit	0	1	Complied
Cu	0	Below Detectable Limit	0	1	Complied
V	0	Below Detectable Limit	0	0.2	Complied
benzene	0	Below Detectable Limit	0	0.1	Complied
Benzo(a)-pyrene	0	Below Detectable Limit	0	0.2	Complied

[B] Air (Stack)

Pollutants Detail	***Quantity of Pollutants discharged (kL/day)***	***Concentration of Pollutants discharged(Mg/NM3)***	***Percentage of variation from prescribed standards with reasons***		
	Quantity	***Concentration***	***%variation***	***Standard***	***Reason***
SPM	253	9.8	0	150 mg/Nm3	Complied
SOx	6764	219.8	0	12.6 TPD	Complied
NOx	2166	70	0	6.5 TPD	Complied
CO	2329	75	0	150 mg/Nm3	Complied

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	***Total During Previous Financial year***	***Total During Current Financial year***	***UOM***
4.2 Spent catalyst	1910.6	2054.5	MT/A

2) From Pollution Control Facilities

Hazardous Waste Type	***Total During Previous Financial year***	***Total During Current Financial year***	***UOM***
0	0	0	MT/A

SOLID WASTES

1) From Process

Non Hazardous Waste Type	***Total During Previous Financial year***	***Total During Current Financial year***	***UOM***
Metal Scrap	2810	4938	MT/A
Plastic Waste	27900	64710	Kg/Annum
Metal containers	4600	4524	Nos./Y
Plastic containers	508	216	Nos./Y

2) From Pollution Control Facilities

Non Hazardous Waste Type	***Total During Previous Financial year***	***Total During Current Financial year***	***UOM***
N.A.	0	0	MT/A

3) Quantity Recycled or Re-utilized within the unit

Waste Type	***Total During Previous Financial year***	***Total During Current Financial year***	***UOM***

0	0	0	MT/A

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

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
4.2 Spent catalyst	30.57	MT/A	To authorised recycler - National Traders
4.2 Spent catalyst	15.95	MT/A	To authorised recycler - JBS Mines
4.2 Spent catalyst	13.76	MT/A	To authorised recycler - Arth Metals and metallurgical
4.2 Spent catalyst	27.99	MT/A	To authorised recycler - Team Elevan Pvt.Ltd
4.2 Spent catalyst	1966.3	MT/A	Disposed to CHWTSDF (MWML, Taloja)

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Metal Scrap	4938	MT/A	Sold to recycler
Plastic Waste	64710	Kg/Annum	Sold to recycler
Metal Container	4524	Nos./Y	Sold to recycler
Plastic Container	216	Nos./Y	Sold to recycler
Scrap equipments	0	Nos./Y	-

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

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
-	-	-	-	-	-	-

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

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Improvement in efficiency of SEU I	Efficiency Improvement	866
Ceramic coating in SEU-I & PDA	Efficiency Improvement	16
Steam trap management	Improving performance	120

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Capacity upgradation of IETP VOC system	Reduction in VOC emission	450

Any other particulars in respect of environmental protection and abatement of pollution.

Particulars

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Name & Designation

Ashok Kumar, Deputy General Manager, Technical Department