Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2024

Unique Application Number	Submitted Date
MPCB-ENVIRONMENT_STATEMENT-0000069438	11-09-2024

PART A

Company Information

Company Name	Application UAN number
DEEPAK FERTILISERS & PETROCHEMICALS CORPORATION LIMITED	MPCB CONSENT_AMMENDMENT-0000012331

Address

Plot No. K-1 Part-1, K-2, K-3, K-4, K-5 & K-6, MIDC Taloja, Tal. Panvel, Dist. Raigad. 410208

Plot no	Taluka	Village
Plot No. K-1 (Part-1), K-2, K-3,K-4,K-5 & K-6	Panvel	Tondre
Capital Investment (In lakhs)	**Scale**	**City**
6493612	L.S.I	Raigad
Pincode	**Person Name**	**Designation**
410208	Jeyaprakash M	EHS HEAD
Telephone Number	**Fax Number**	**Email**
9047022731		jeyaprakash.m@dfpcl.com
Region	**Industry Category**	**Industry Type**
SRO-Taloja	Red	R25 Basic chemicals and electro chemicals and its derivatives including manufacturing of acid
Last Environmental statement submitted online	**Consent Number**	**Consent Issue Date**
yes	Format1.0/CAC/UAN No. MPCB-CONSENT_AMMENDMENT-0000012331/CO/2403000008	2024-03-01
Consent Valid Upto	**Establishment Year**	**Date of last environment statement submitted**
2026-03-31	1979	Sep 30 2023 12:00:00:000AM

Industry Category Primary (STC Code) & Secondary (STC Code)

Product Information

Product Name	Consent Quantity	Actual Quantity	UOM
Hand Sanitizer (By mixing & blending only)	7200	0	MT/A

METHANOL	99996	0	MT/A
LIQUID CO2	72000	46639.89	MT/A
WEAK NITRIC ACID plant no. 3	99000	84289	MT/A
CONCENTRIC NITRIC ACID plant 1,2 and 3	129600	96175	MT/A
Iso Propyl Alcohol	70200	62744.83	MT/A
Di Iso Propyl Ether (DIPE)	15000	0	MT/A
Iso- Propyl Alcohol (For drum filling operations)	15000	15000	MT/A
Crude DIPE	1440	1440	MT/A
Crude IPA/NPA mixture	1080	394.8	MT/A
Propane	33000	9656.69	MT/A
Electricity power GT-1,2 & 5 (Gas based excluding DG set)Propane	16.9	3.6	Mwh

By-product Information

By Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
Not Applicable	0	0	MT/A

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for	***Consent Quantity in m3/day***	***Actual Quantity in m3/day***
Process	1024.20	980.00
Cooling	6724.00	5187.00
Domestic	56.00	55.00
All others	0.00	0.00
Total	7804.20	6222.00

2) Effluent Generation in CMD / MLD

Particulars	***Consent Quantity***	***Actual Quantity***	***UOM***
Trade effluent	1515.86	1285.3	CMD
Domestic effluent	51.5	51.5	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***
Hand Sanitizer	0	0	Ton/Ton
Methanol	0	0	Ton/Ton
Liquid CO2	0	0	Ton/Ton
Weak Nitric Acid	0.32	0.43	Ton/Ton
Concentrated Nitric Acid	0.70	0	Ton/Ton
Iso Propyl Alcohol	1.67	0	Ton/Ton
Di Iso Propyl Ether (DIPE) for drum filling operation)	0	0	Ton/Ton
IPA for drum filling operation)	0	0	Ton/Ton
Crude DIPE	0	0	Ton/Ton
Crude IPA/NPA mixture	0	0	Ton/Ton

Propane	0	0	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
Natural Gas (Methanol) Sm3/MT	0	0	Ton/Ton
RGP (IPA)	0.973	0.933	Ton/Ton
Ammonia (WNA-3)	0.289	0.299	Ton/Ton
WNA (CNA-1,2&3)	0.995	0.995	Ton/Ton

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Natural Gas	91566.87	28610.52	MT/A
HSD	1459	1.87	KL/A

Part-C

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	7.12	0	6.5 to 8.5	NA
COD	62.98	49.2	0	250	NA
BOD	23.04	18	0	100	0
Oil & Grease	1.70	1.33	0	10	0
TSS	33.79	26.4	0	100	0
TDS	1725.44	1348	0	2100	0
Ammoniacal Nitrogen as N	42.59	33.28	0	50	0
Total Kjeldhal Nitrogen (TKN) as N	13.10	10.24	0	75	0
Free Ammoniacal Nitrogen as N	0.35	0.28	0	4	0
Fluoride as F	0	0	0	10	0
Dissolved Phosphate as P	1.51	1.18	0	5	0
Nitrate Nitrogen as N	2.73	2.14	0	20	0

[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
NO2 (WNA-3)	104.96	171.97	0	400 Mg/NM3	NA
PM (Boiler AB)	0	0	0	10 Mg/NM3	NA
NOX (Boiler AB)	6.72	15.9	0	350 Mg/NM3	NA

PM (Boiler D)	9.26	6.73	0	10 Mg/NM3	NA
NOX (Boiler D)	7.71	5.6	0	350 Mg/NM3	NA
PM (HRSG-1)	5.75	5.6	0	10 Mg/NM3	NA
NOX (HRSG-1)	98.41	95.8	0	350 Mg/NM3	NA
PM (HRSG-2)	3.02	2.83	0	10 Mg/NM3	NA
NOX (HRSG-2)	73.37	68.83	0	350 Mg/NM3	NA
PM (HRSG-5)	3.42	2.7	0	10 Mg/NM3	NA
NOX (HRSG-5)	118.14	93.23	0	350 Mg/NM3	NA
SO2 (DG Set 200KVA)	1.49	78.08	0	16 Kg/Day	NA
SO2 (DG Set 1000KVA)	3.49	102.71	0	80 Kg/Day	NA
PM (DG Set 20 KVA)	0.07	14.51	0	150 Mg/NM3	NA
NO2 (Methanol Primary Reformer)	0	0	0	400 Mg/NM3	NA
NOX (Boiler C)	0	0	0	350 Mg/NM3	NA
PM (Boiler C)	0	0	0	10 Mg/NM3	NA
IPA flare Stack	0	0	0	-	NA

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	***Total During Previous Financial year***	***Total During Current Financial year***	***UOM***
5.1 Used or spent oil	14.60	15	KL/A
5.2 Wastes or residues containing oil	1.31	0	MT/A
18.1 Spent catalyst	17.57	43.46	MT/A
35.1 Exhaust Air or Gas cleaning residue	7.79	6.81	MT/A
35.2 Spent ion exchange resin containing toxic metals	1.36	3.73	MT/A
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	0	0	Nos./Y
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	0	0	Nos./Y
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	0	0	Nos./Y
17.2 Spent catalyst	0	0	Kg/Annum
17.2 Spent catalyst	0	0	MT/A
5.2 Wastes or residues containing oil	0	0	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

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Canteen waste	730.5	1666	Kg/Annum
Insulation waste (Glass wool)	18.93	19.96	MT/A
Paper Waste, Cartoon	0	0	Kg/Annum
Packaging Waste	0	0	Kg/Annum
Spun Filters	0	0.72	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Not Applicable	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

Part-F

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
5.1 Used or spent oil	15	KL/A	Used oil
18.1 Spent catalyst	43.46	MT/A	Spent catalyst
35.1 Exhaust Air or Gas cleaning residue	6.81	MT/A	KMNO4 Residue
35.2 Spent ion exchange resin containing toxic metals	3.73	MT/A	Spent resin of DM plant

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Not Applicable	0	MT/A	--

Part-G

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)
To reduce Silica and Conductivity of RO permeate water (End to End operational evaluation of RO and DM plant for optimization) : 1.Replaced older inefficient membranes with high silica rejection (90%)	150	0	0	0	0	20
ETP treated water PH maintained by using ETP Outfall instead of RW	10	0	0	0	0	1

To reduce WNA3,4,& utility CT blowdown by using RO reject water in IPA & Ammonia cooling tower makeup : RO reject transferred to IPA CT makeup	100	0	0	0	0	13
Reduction of RGP losses in HE-95A of IPA Plant	0	0	192000	0	0	0

Part-H

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)***
Green belt development : Maintenance at site & nearby villages	Environmental protection	15
OCEMS ,AAQMS upgradation & Maintenance	Pollution monitoring	25
Environmental Monitoring	Pollution monitoring	24

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	***Environmental Protection Measures***	***Capital Investment (Lacks)***
Green belt development : Maintenance at site & nearby villages	Environmental protection	10
OCEMS ,AAQMS upgradation & Maintenance	Pollution monitoring	25
Environmental Monitoring	Pollution monitoring	24
Implementation of Retrofitted Emission Control Device (RECD) for Diesel operated engine of DG sets	Pollution monitoring	22

Part-I

Any other particulars for improving the quality of the environment.

Particulars

1. Identification of opportunities for up-gradation of the infrastructure for air pollution control aimed at achieving the performance beyond regulatory compliance at DFPCL through Environmental Science and Engineering Department, Indian Institute of Technology (IIT) Bombay, Powai, Mumbai. 2. Deepak fertilisers collaborative efforts yield remarkable results in forest conservation. Plantation done at Davadi Village, Dombivali (Total – 22,220 Nos. of trees are planted.) 3. World Environment Day

Name & Designation

Jeyaprakash M (Head-EHS)

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000069438

Submitted On:

11-09-2024