



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2021

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000039057

Submitted Date

30-09-2021

PART A

Company Information

Company Name

Rashtriya Chemicals and Fertilizers
Limited, Thal Unit

Application UAN number

MPCB-CONSENT-0000063416

Address

RCF LTD, THAL, TALUKA -ALIBAG, RAIGAD,
MAHARASHTRA

Plot no

Survey No. 2

Taluka

Alibag

Village

800 ACRES

Capital Investment (In lakhs)

263030.71

Scale

L.S.I

City

Raigad

Pincode

402209

Person Name

Sanjeev Narahar Haraliker

Designation

Deputy General Manager
(Environment)

Telephone Number

9423822666

Fax Number

02141238206

Email

edthal@rcfltd.com

Region

SRO-Raigad II

Industry Category

Red

Industry Type

R52 Fertilizer(basic) (excluding
formulation)

Last Environmental statement submitted online

yes

Consent Number

format1.0/BOC/CAC-Cell/UAN
No.0000063614/12thCAC-1904000983

Consent Issue Date

24.04.2019

Consent Valid Upto

31.12.2022

Establishment Year

1984

Date of last environment statement submitted

Aug 29 2020 12:00:00:000AM

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

Product Information

Product Name

Heavy Water Plant (Classified)

Consent Quantity

110

Actual Quantity

0

UOM

MT/A

Di-methyl Formamide & Formic Acid Plant

12500

0

MT/A

Methyl Amine Plant

11400

11167

MT/A

Di-methyl Acetamide Plant

5000

115

MT/A

Power (Turbo-generator)

262800

102415.5

Mwh

Ammonia	1314000	1218660	MT/A
Neem Coated Urea	2233800	1912360	MT/A
Argon	18980	2863	MT/A
Carbon Monoxide Plant	1200	0	
Steam Generation	4818000	2991749	MT/A
Power (Gas Turbine Generator)	560640	223465.38	Mwh
Steam Generation (HRSG)	1752000	671461	MT/A

By-product Information

By Product Name	Consent Quantity	Actual Quantity	UOM
Nil	0	0	MT/A

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day	
Cooling	63000.00	39086.00	
Domestic	10000.00	5746.00	
All others	0.00	0.00	
Total	73000.00	44832.00	

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	14000	7407	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
Heavy Water Plant : Classified	0	0	Ton/Ton
Ammonia Plant	4.2369	4.447	Ton/Ton
Steam Generation Plant	1.236	1.474	Ton/Ton
Di-methyl Formamide & Formic Acid	9.128	0	Ton/Ton
Methyl Amines Plant (MAP)	9.055	8.979	Ton/Ton
Di-methyl Acetamide (DMAC)	0	18.304	Ton/Ton
Urea plant	1.943	2.219	Ton/Ton
Argon	9.678	15.336	Ton/Ton
Carbon Monoxide Plant (CO)	6.059	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
Methanol - MAP	1.5	1.505	Ton/Ton
Sulfuric Acid	0.289	0.244	Ton/Ton
Acetic Acid	0	0.705	Ton/Ton

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Natural Gas	4.9	4.29	CMD

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	Standard	Reason
	Quantity	Concentration	%variation		
pH	7407	7.87	NIL	6.5-8.5	NA
Ammonical Nitrogen	228.35	30.83	Nil	50 mg/lit	NA
Total Kjeldhal Nitrogen	318.945	43.06	Nil	75 mg/lit	NA
Nitrate Nitrogen	21.48	2.9	Nil	20 mg/lit	NA
Suspended Solids	423.97	57.4	Nil	100 mg/lit	NA
Oil & Grease	21.99	2.97	Nil	10 mg/lit	NA
COD	562.635	75.96	Nil	250 mg/lit	NA
BOD	179.24	24.2	Nil	100 mg/lit	NA
Phosphate (as P)	20.81	2.81	Nil	5 mg/lit	NA
Free Ammonical Nitrogen	18.66	2.52	Nil	4 mg/lit	NA
Cyanide	0	0	Nil	0.2 mg/lit	NA
Vanadium (as V)	0	0	Nil	0.2 mg/lit	NA
Arsenic	0.074	0.01	Nil	0.2 mg/lit	NA
Fluoride	0.74	0.1	Nil	10 mg/lit	NA
Hexavalent Chromium as Cr	0	0	Nil	0.1 mg/lit	NA
Total Chromium as Cr	0	0	Nil	2 mg/lit	NA
Mercury	0.074	0.01	Nil	0.01 mg/lit	NA
Lead	7.4	1	Nil	2 mg/lit	NA
Copper	0.74	.1	Nil	3 mg/lit	NA
Nickel	24.48	3.35	Nil	5 mg/lit	NA
Bio- Assay test on fish shall show 90% survival in 96 hours in 100% effluent	0	93.78	-----	-----	NA

[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	Standard	Reason
	Quantity	Concentration	%variation		
Particulate Matter from Boiler stack	208.13	20.64	Nil	150 mg/nm3	NA
Nox from Boiler stack	120.00	11.90	Nil	50 ppm	NA

SO2 from Boiler stack	103.765	10.29	Nil	5 ppm	NA
TPM from Urea Prilling Tower	44.918	39.51	Nil	50 ppm	NA
NH3 from Urea Prilling Tower	32.321	22.71	Nil	50 ppm	NA
NOx from Reformer	100.256	9.38	Nil	50 ppm	NA
SO2 from Reformer	75.139	7.03	Nil	50 ppm	NA

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
18.1 Spent catalyst	0	0	MT/A
5.1 Used or spent oil	28	51.7	MT/A
Other Hazardous Waste	0	3.41	MT/A
Other Hazardous Waste	0	0	Nos./Y
0	0	0	Ltr/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
0	0	0	MT/A
0	0	0	MT/A
0	0	0	Nos./Y
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
Civil waste	16	20	MT/A
Metal scrap	22	464	MT/A
HDPE container / drums	1350	0	Nos./Y
Metal drums	660	0	Nos./Y
E-waste	0	0	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NIL	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	0000	0000	Mtrs/Y
0	0000	0000	MT/A
0	0000	0000	MT/A

0	0000	0000	Nos./Y
0	0000	0000	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	51.7	MT/A	NA
0	0	MT/A	NA
0	0	MT/A	NA
0	0	Nos./Y	NA
0	0	MT/A	NA
2) Solid Waste			
Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Civil waste	20	MT/A	NA
Metal scrap	464	MT/A	NA
HDPE drums	0	Nos./Y	NA
Metal drums	0	Nos./Y	NA
E-waste	0	MT/A	NA

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)
Raw water, Natural Gas, Power	2593	6072	1206000	1369000	102.62	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)
Installation of VFD	Reduction in Power consumption	92.58
Solar panel and solar pipe light installation	Reduction in fossil fuel	5.72
Motion sensor installation	Power reduction	0.11
Replacement of old AC with star rated AC	Reduction in Power consumption	4.2
Environmental Monitorings	Monitoring & Control	9.98
Maintenance & Repairs of Roads in & around Factory	Reduction in Fugitive Emission	49.19
Plantation, Greenery & Horticulture	Improvement in Environment and Aesthetics	165.15

[B] Investment Proposed for next Year

<i>Detail of measures for Environmental Protection</i>	<i>Environmental Protection Measures</i>	<i>Capital Investment (Lacks)</i>
ETP Up-gradation	Conservation of Raw water	1200

Part-I**Any other particulars for improving the quality of the environment.****Particulars**

Saving due to in-built pollution control system is Rs. 0.29 lakhs per day.

Name & Designation

SANJEEV NARAHAR HARALIKAR Deputy General Manager (Environment) , RCF THAL

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000039057

Submitted On:

30-09-2021