



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000049389

Submitted Date

29-09-2022

PART A

Company Information

Company Name

posco Maharashtra Steel Pvt. Ltd.

Application UAN number

MPCB-CONSENT-0000128520 Dated 28.12.2021

Address

Plot No. C-1 & C-1 Part, Vile Bhagad
MIDC, Tal-Mangaon, Dist-Raigad, 402308

Plot no

Plot No: C-1 & C-1 Part,

Taluka

Mangaon

Village

Vile Bhagad MIDC

Capital Investment (In lakhs)

123124.00

Scale

L.S.I.

City

Raigad

Pincode

402308

Person Name

Kwang Soo Kim

Designation

Director

Telephone Number

8149700913

Fax Number

02140661198

Email

atinraut@posco.net

Region

-

Industry Category

Red

Industry Type

R44 Industry or process involving metal surface treatment or process such as pickling/ electroplating/paint stripping/ heat treatment using cyanide bath/ phosphating or finishing and anodizing / enamellings/ galvanizing

Last Environmental statement submitted online

yes

Consent Number

1.0/CAC/UAN No.0000128520/CR/2204000648
Date of Issue: Date: 12/04/2022

Consent Issue Date

2022-04-12

Consent Valid Upto

2027-02-28

Establishment Year

2011

Date of last environment statement submitted

Sep 29 2021 12:00:00:000AM

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

Product Information

Product Name

Galvanized Coils

Consent Quantity

450000

Actual Quantity

386066

UOM

Ton/Y

H2 (Hydrogen Gas)

204

89.87

Ton/Y

N2 (Nitrogen Gas)

89280

20519

Ton/Y

By-product Information

| By Product Name | Consent Quantity | Actual Quantity | UOM |
|------------------------|-------------------------|------------------------|------------|
| Zinc Dross | 2400 | 1555.43 | Ton/Y |

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 | 880.00 | 609.00 | |
| Domestic | 750.00 | 592.00 | |
| All others | 253.00 | 194.00 | |
| Total | 0.00 | 0.00 | |
| | 1883.00 | 1395.00 | |

2) Effluent Generation in CMD / MLD

| Particulars | Consent Quantity | Actual Quantity | UOM |
|--------------------|-------------------------|------------------------|------------|
| Trade Effluent | 962 | 700 | CMD |
| Domestic Effluent | 160 | 120 | 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 |
|--------------------------------------|---|--|------------|
| Galvanizing Coils | 1.36 | 1.32 | Ton/Ton |
| H2 (Hydrogen Gas) | 0.0166 | 0.0144 | Ton/Ton |
| N2 (Nitrogen Gas) | 0.576 | 0.00110 | 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 | 28.97 | 34.82 | |
| H2 (Hydrogen Gas) | 2.95 | 2.59 | |
| N2 (Nitrogen Gas) | 70.65 | 42.52 | |
| Full Hard Coil | 0.834 | 1.00 | Ton/Ton |
| NaOH | 0.00067 | 0.00071 | Ton/Ton |
| Phosphate Solution | 0.00118 | 0.00145 | Ton/Ton |
| Wet Oil | 0.00077 | 0.00108 | Ton/Ton |
| Chrome Free Solution | 0.00098 | 0.00114 | Ton/Ton |
| Chromate | 0.00022 | 0.00033 | Ton/Ton |
| Anti Rust Oil | 0.00025 | 0.000327 | Ton/Ton |
| Zinc | 0.02476 | 0.02406 | Ton/Ton |

4) Fuel Consumption

| Fuel Name | Consent quantity | Actual Quantity | UOM |
|------------------|-------------------------|------------------------|------------|
| Natural Gas | 73102764 | 13441126 | |
| HSD | 2630 | 550 | 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 | 7.78 | 7.78 | 0 | 5.5 to 9.0 | With in Norms |
| Suspended Solids | 4.89 | 6.69 | 0 | <100 mg/Lit | With in Norms |
| BOD 3 Days | 8.51 | 11.64 | 0 | <30 mg/Lit | With in Norms |
| COD | 36.74 | 50.27 | 0 | <250 mg/Lit | With in Norms |
| Oil & Grease | 0.21 | 0.30 | 0 | <10 mg/Lit | With in Norms |
| Total Dissolved Solids | 556.10 | 760.90 | 0 | <2100 mg/Lit | With in Norms |
| Chlorides | 262.81 | 359.60 | 0 | <600 mg/Lit | With in Norms |
| Sulphates | 28.58 | 39.119 | 0 | <1000 mg/Lit | With in Norms |
| Lead (Pb) | 0.002 | 0.0021 | 0 | <0.1 mg/Lit | With in Norms |
| Cadmium (Cd) | 0.007 | 0.0102 | 0 | <2 mg/Lit | With in Norms |
| Total Chromium (Cr) | 0.002 | 0.0024 | 0 | <2 mg/Lit | With in Norms |
| Nickel (Ni) | 0.001 | 0.0018 | 0 | <3 mg/Lit | With in Norms |
| Zinc (Zn) | 0.086 | 0.1183 | 0 | <5 mg/Lit | With in Norms |
| Iron (Fe) | 0.025 | 0.0341 | 0 | <3 mg/Lit | With in Norms |
| Cyanide (CN) | 0.000 | 0.000 | 0 | <0.2 mg/Lit | With in Norms |
| Hexavalent Chromium as Cr | 0.000 | 0.000 | 0 | <0.1 mg/Lit | With in Norms |

[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 |
| Stack 1 Boiler Stack Particulate Matter | 1.42 | 9.00 | 0 | <150 mg/Nm3 | With in Norms |
| SOX | 0.00 | 0.00 | 0 | <4.8Kg/Hr | With in Norms |
| NOX | 1.98 | 6.66 | 0 | <100 ppm | With in Norms |
| Stack 2 Furnace Stack Particulate Matter | 5.39 | 10.80 | 0 | <150 mg/Nm3 | With in Norms |
| SOX | 1.95 | 0.10 | 0 | <4.8Kg/Hr | With in Norms |
| NOX | 8.16 | 8.70 | 0 | <100 ppm | With in Norms |
| Stack 3 No.1 Cleaning Section Alkali Mist | 0.24 | 0.88 | 0 | <35 mg/Nm3 | With in Norms |
| Stack 4 Nano Coating Stack Acid Mist | 0.92 | 3.4 | 0 | <35 mg/Nm3 | With in Norms |
| Stack 5 Post Treatment Stack Acid Mist | 1.58 | 5.81 | 0 | <35 mg/Nm3 | With in Norms |

| | | | | | |
|--|------|-------|---|-------------|---------------|
| Stack 6 Pot Roll Cleaning Room - Acid Mist | 1.08 | 3.99 | 0 | <35 mg/Nm3 | With in Norms |
| Stack 7 DG Set 2000 KVA Particulate Matter | 0.5 | 5.50 | 0 | <150 mg/Nm3 | With in Norms |
| SOX | 0.00 | 0.00 | 0 | <4.8Kg/Hr | With in Norms |
| NOX | 0.68 | 4.00 | 0 | <100 ppm | With in Norms |
| NMHC | 4.16 | 45.70 | 0 | <100 mg/Nm3 | With in Norms |
| CO | 3.48 | 37.75 | 0 | <150 ppm | With in Norms |

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 | 9.12 | 18.63 | MT/A |
| 6.3 Other residues from processing of zinc ash or skimmings | 744.28 | 1555.43 | MT/A |
| Other Hazardous Waste | 5.59 | 9.37 | MT/A |
| 12.2 Spent acid and alkali | 29.99 | 19.96 | MT/A |
| 33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes | 1771 | 3009 | Nos./Y |
| 1.6 Spent catalyst and molecular sieves | 0.00 | 0.00 | MT/A |

2) From Pollution Control Facilities

| Hazardous Waste Type | Total During Previous Financial year | Total During Current Financial year | UOM |
|---|---|--|------------|
| 35.3 Chemical sludge from waste water treatment | 358.46 | 450.32 | MT/A |

Part-E

SOLID WASTES

1) From Process

| Non Hazardous Waste Type | Total During Previous Financial year | Total During Current Financial year | UOM |
|---------------------------------|---|--|------------|
| Metal Scrap | 7700 | 11538.47 | MT/A |

2) From Pollution Control Facilities

| Non Hazardous Waste Type | Total During Previous Financial year | Total During Current Financial year | UOM |
|---------------------------------|---|--|------------|
| NA | 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 | 18.63 | MT/A | Oily, Organic Liquid Form |
| 6.3 Other residues from processing of zinc ash or skimmings | 1555.53 | MT/A | Zinc Oxide, Solid Form |
| 12.2 Spent acid and alkali | 19.96 | MT/A | NaOH ppt, Other Chemical ppt |
| 5.1 Used or spent oil | 18.63 | MT/A | Oily, Organic Liquid Form |
| Other Hazardous Waste | 9.37 | MT/A | CrO3 |
| 33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes | 3009 | Nos./Y | HDPE,MS Drum, Plastic Carboys etc. |
| 35.3 Chemical sludge from waste water treatment | 450.32 | MT/A | Chemical ppt, Hydroxide, Sulphite, Phosphate etc. |
| 1.6 Spent catalyst and molecular sieves | 0.00 | Kg/Annum | Oily, Organic Liquid Form |

2) Solid Waste

| Type of Solid Waste Generated | Qty of Solid Waste | UOM | Concentration of Solid Waste |
|--------------------------------------|---------------------------|------------|-------------------------------------|
| Metal Scrap | 11538.47 | MT/A | Solid Metal Scrap |

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) |
|---|--|---|---------------------------------------|---|------------------------------------|--|
| New Tree Plantations Outside Plant (Nearby Villages) Plantations: 520 Nos. & Within Plant Premises: 824Nos. Total Tree Plantations:1344 | 0.00 | 0.00 | 0.00 | 0.00 | 7.7 | 0.00 |

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) |
|--|---|-----------------------------------|
| Development & Maintenance of Green Belt Area (Cost towards Manpower & Equipment Maintenance) | Increase in number of trees, Conservation of existing and new planted trees will improve biodiversity of plant area | 45 |

[B] Investment Proposed for next Year

| Detail of measures for Environmental Protection | Environmental Protection Measures | Capital Investment (Lacks) |
|---|---|-----------------------------------|
| Landscape & Green Belt Area Maintenance including New Tree Plantation (Cost towards Manpower & Equipment Maintenance) | Soil Conservation and water reuse for garden (Reduction of Natural Resources) | 45 |

Part-I

Any other particulars for improving the quality of the environment.

Particulars

Green Belt Development & Maintenance. Tree Plantation activity done (Inside green area-2400 Nos.), Provided sprinkler & drip irrigation system to green coverage area, Certification of EMS- ISO 14001:2015 with Validity 23rd Feb, 2024 & OHSAS - ISO 45001:2018 with Validity 23rd Feb, 2024, Celebrated WED on 5th Jun.

Name & Designation

Kwang Soo Kim (Director)

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000049389

Submitted On:

29-09-2022