

PPGCL/ENV/FY24/081

Date: 21.07.2023

To,
The Member Secretary,
U.P. Pollution Control Board,
Building No. TC-12V
Vibhuti Khand, Gomti Nagar
Lucknow-226010

Subject: Environment Statement in Form V for the financial year 2022-2023.

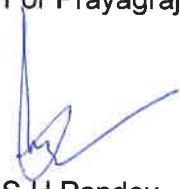
Dear Sir,

Please find enclosed the Environment Statement report for the period April-22 to March-23 (FY 22-23) for M/s Prayagraj Power Generation Company Limited, Bara.

This is for your kind information and record please.

Yours Sincerely,

For Prayagraj Power Generation Company Limited,



S H Pandey

Chief- Operation & Maintenance (Services)

Encl: Environment Statement (Form V) for FY 22-23

Cc: The Regional Officer

U.P. Pollution Control Board, Prayagraj

FORM – V**Environment Statement for the Financial Year ending 31st March 2023****PART-A**

- (i) Name and Address of the Owner/Occupier of the industry or process : Mr. S H Pandey
Prayagraj Power Generation Company Limited
Vill. - Lohgara, Tehsil- Bara
Distt – Prayagraj, Uttar Pradesh
Pin- 212107
- (ii) Industry Category : Large
- (iii) Production Capacity : 3x660 MW (Electric Thermal Power Plant)
- (iv) Year of establishment : Unit-1: 2016
Unit-2: 2016
Unit-3: 2017
- (v) Date of last Environment Statement submitted : 14.09.2022

PART-B**Water and Raw Material Consumption**

- (1) Water Consumption (m³/day)
Current Year (2022-2023)
Process : 71143.7
Domestic : 398.6

| Name of Product | Water consumption per unit of product output (m ³ /MWh) | |
|-----------------|--|---|
| | During the previous financial year 2021-2022 | During the current financial year 2022-2023 |
| Electricity | 2.03 | 2.08 |

- (2) Raw Material consumption

| Name of raw materials | Name of Products | Consumption of raw material per unit of output (MT/MU) | |
|-----------------------|------------------|--|---|
| | | During the previous financial year 2021-2022 | During the current financial year 2022-2023 |
| Coal | Electricity | 619.07 | 610.4 |
| HSD | Electricity | 0.25 | 0.20 |

- (3) Electricity Generation (MUs)

| Name of Product | During the previous financial year 2021-2022 | During the current financial year 2022-2023 |
|-----------------|--|---|
| Electricity | 11654.94 | 12509.99 |

PART-C
Pollution discharge to Environment/Unit of output
 (Parameters as specified in consent issued)

| Pollutants | Quantity of pollutants discharged (T/day) | Concentration of pollutants in discharged (mass/volume) Mg/Nm ³ | Percentage of variation from prescribed standards with reasons |
|--|---|--|---|
| Water | - | - | Treated process wastewater is recycled within system. Treatment domestic effluent is used in horticulture. |
| Air (1)PM (2)SO ₂ (3)NO _x | 3.8 104.0 32.9 | 30.3 823.5 261.7 | - |

PART-D
Hazardous Waste

(As specified under Hazardous and Other waste (Management and Transboundary movement) Rules 2016)

| Hazardous Waste | Total Quantity (kg) | |
|-----------------------------------|--|---|
| | During the previous financial year 2021-2022 | During the current financial year 2022-2023 |
| From Process | Cat-5.1: 40.4 kL | Cat-5.1: 27.6 kL |
| From Pollution Control facilities | Nil | Nil |

PART-E
Solid Waste

| Solid Waste | Total Quantity (MT/Annum) | |
|--|--|---|
| | During the previous financial year 2021-2022 | During the current financial year 2022-2023 |
| A. From Process | Nil | Nil |
| B. From Pollution Control facilities (Ash) | 2419356 | 2613596 |

| | | |
|---|--|---|
| <p>C. 1. Quantity recycled or reutilized within the unit</p> <p>2. Sold</p> <p>3. Recycled/Utilized</p> | <ul style="list-style-type: none"> • The Fly ash is utilized in – Cement industry, for ash-based products like fly ash brick, Low lying and abandoned mine backfilling and Ash dyke raising • Total quantity utilized in FY 22-2107528.77 MT | <ul style="list-style-type: none"> • The Fly ash is utilized in – Cement industry, for ash-based products like fly ash brick, filling of low lying area and road construction. • Total quantity utilized in FY 23-2295579.08 MT |
|---|--|---|

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.

- The Hazardous waste Used Oil (Cat- 5.1 - 27.6 kL) generated at site was sent to authorized recycler for recycling.
- Solid Waste: Fly Ash was utilized in Cement, Brick, filling of low-lying area and road construction.

PART-G

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

- (1) Installation of ETP for the treatment of industrial effluent.
- (2) Installation of STP for the treatment of Domestic effluent.
- (3) Installation of Ash water recovery system has been implemented.

The treated effluent is recycled within the system resulting in conservation of natural resource (fresh water).

PART-H

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

- For the control of Air pollution ESP, one twin Flue stack of 275-meter height, dust extraction and dust suppression system has been installed.
- Online monitoring system has already been installed in stack to monitor SO₂, NO_x, and particulate matter.
- CAAQMS (Continuous Ambient Air Quality Monitoring System) for online ambient air monitoring has been installed.
- For the control of Water pollution ETP & STP has been installed for the treatment of Industrial and domestic effluent. Also, ash water recovery system has been established.
- Coal pile run off pit constructed.
- Green belt has been developed in and around plant premises. The species which have been planted are- Neem, Sisam, Arjun, Pipal, Banyan, Karanj, Kaner, Gulmohar, Siris, Jamun, and Bamboo. During FY 23, we planted 20520 saplings. Till March 23 we have planted approx 3.34 lakh saplings.
- We also have developed "Miyawaki Forest" in 5650 m² area with plantation of local species.

- Environment monitoring carried out by NABL accredited laboratory.
- Dust suppression system has been installed in coal yard area. Fogging system installed at wagon tippler.
- We have installed solar streetlights, solar based garden lights and roof top solar of 204 kW at our school building and 61 kW at hospital.
- Solar water heaters have been installed on the roof of guest houses.
- LED lamps have been installed.
- Fly ash brick making unit has been installed under CSR activity.
- One check dam has been constructed in Jorvat village.
- Turbo ventilators have been installed in the store and mechanical workshop.
- We have constructed roof top rainwater harvesting systems and rainwater harvesting ponds in the plant premises.

PART-I

Any other particulars for improving the quality of the environment.

- (i) Green Belt developed in and around the factory premises. Additional plantation is also being done.
- (ii) Good housekeeping is being maintained in and around the power plant.
- (iii) Treated effluent being recycled within the system.
- (iv) Installed solar panels on the roof of school and hospital building.
- (v) Biodegradable waste generated at site is being managed by third party to convert it into compost.
- (vi) E waste and battery has been disposed through authorised recycler.