



IEL/PH#6/ENV/ 45 /2022
Date: 29-08-2022

Member Secretary
Jharkhand State Pollution Control Board,
T A Building (Ground Floor)
HEC Campus, Dhurwa,
Ranchi- 834004

Sub: Environmental Statement for the financial year ending 31st March -2022

Dear Sir,

With reference to the above, enclosed please find Environment Statement (Form-V) for the financial year ending 31st March -2022 pertaining to Industrial Energy Limited, Power House-6, Jamshedpur duly filled in prescribed format.

Thanking You.

Yours Faithfully
For Industrial Energy Limited.

Mangal
Basudev
Basudev Hansdah
Station Head
IEL, Powerhouse-6

Encl: As above.

Cc: The Regional Officer, Jharkhand State Pollution Control Board, MB/15, New Housing Colony, Adityapur, Jamshedpur -13

INDUSTRIAL ENERGY LIMITED
(A Joint Venture Company of Tata Power & Tata Steel)
Site office : Power House # 6 (Inside Tata Steel)
Registered Office : C/o The Tata Power Company Limited
Corporate Center, A Block 34, Sant Tukaram Road Carnac Bunder, Mumbai 400 009
CIN : U74999MH2007PLC167623
Tel : (022) 66657519

FORM V

Environmental Statement for the Financial Year ending 31st March 2022

PART - A

1: (i) Name and address of the Owner /
Occupier of the Industry Operation or
Process :

Mr. Vijayant Ranjan
No.95, Vijya Heritage Phase-6,
Kadma, Jamshedpur -06
ranjanv@tatapower.com

Mr. Basudev Hansdah
Station Head,
Industrial Energy Limited,
Power House-6, Inside Tata Steel works
Jamshedpur -831001
bhansdah@tatapower.com

(ii) Industry Category : N.A.
Primary (STC Code)
Secondary (STC Code)

(iii) Production Capacity : 120 MW

(iv) Year of Establishment : 2009

(v) Date of last Environment : 22/09/2021
Statement submitted

PART – B

Water and Raw Material Consumption

| | | |
|---------------------------|---|--------------|
| (1) Raw Water consumption | : | 7226 M3/ Day |
| • Process | : | 50 M3/ Day |
| • Cooling | : | 7152 M3/ Day |
| • Domestic | : | 24 M3/ Day |

| Name of products | Process water (specific water) consumption per unit of product output | |
|------------------|---|---|
| | During current financial year (2020-21) | During current financial year (2021-22) |
| Electricity | 2.658 Litre / KWH | 2.673 Litre / KWH |

(2) Raw Material consumption:

| Name of the raw material | Name of products | Consumption of raw material per unit of output | |
|------------------------------------|------------------|--|---|
| | | During financial year (2020-21) | During current financial year (2021-22) |
| Gas (B.F Gas, C.O Gas and L.D Gas) | Electricity | 2.61 Nm3/KWH | 2.51 Nm3/KWH |

PART - C
POLLUTION DISCHARGED TO ENVIRONMENT / UNIT OF OUTPUT
(PARAMETER AS SPECIFIED IN THE CONSENT ISSUED)

| Pollutants | Quantity of pollutants discharged (mass / day) Tones/Day | Concentration of pollutants in Discharged (mass / volume) Mg/Nm3 | Percentage of Variation from prescribed Standards with reasons |
|---|--|--|--|
| A) Water | NIL | NIL | N/A |
| B) Air (Stack) SPM (mg/Nm3) SO2(mg/Nm3) NOx (mg/Nm3) | Annex-1 attached. | 25.71 140.61 129.12 | N/A |

PART - D

HAZARDOUS WASTES
(AS SPECIFIED UNDER HAZARDOUS WASTES / MANAGEMENT AND HANDLING RULES, 1989)

| Hazardous Waste | Total Quantity (kg / years) | |
|----------------------------|---|---|
| | During current financial year (2020-21) | During current financial year (2021-22) |
| a) From process (Used Oil) | 6KL | 1.46 KL |
| b) From Pollution Control | Not applicable | Not applicable |

PART – E

Solid Waste

| | Total Quantity Generated (MT/Year) | |
|--|------------------------------------|----------|
| | 2020-21 | 2021-22 |
| a) From process (metal Scrap) | NIL | NIL |
| b) From Pollution Control Facility | NIL | NIL |
| c) Quantity recycled or reutilized within the unit | NIL | NIL |
| d) Sold | 33.38 MT | 17.81 MT |
| e) Disposed | 00 MT | 00 MT |

PART – F

| Characteristics of wastes and their characteristics: | |
|--|---|
| Solid Waste | Mixed Heavy metal scrap from plant maintenance. |
| Hazardous Waste | Cat-5.1, Used Oil- 1.46 KL given to authorized recyclers. |

PART – G

| Sl. No. | Pollution abatement Measures taken in 2021-22 | Impact on conservation of natural resources & others |
|---------|--|--|
| 1 | Automation of ETP | System reliability increased. Chances of mal operation of ETP eradicated. Better compliance of effluent treatment norms. |
| 2 | Green Belt Development | Tree plantation done for Improvement in Ambient air quality, |
| 3 | Cooling Tower Blow down Water Recovery Plant Modification. | Reduction of specific water Consumption. Recovery / recycle of wastewater. |

PART – H

Additional measures / investment proposal environmental protection including Abatement of pollution prevention of pollution:

PART - I

Any other particulars for improving the quality environment.

1. Roof top solar light installed at service building to cater the lighting load of office floor. This is a green initiative for reduction in carbon footprint. This is monitoring continuously, and it is in healthy condition.
2. CT Blow down Water Recovery Plant is under operation for reuse of waste blow down water continuously.
3. Lamella Clarifier Plant installed for reuse and recycling of wastewater.
4. Roof top rainwater harvesting, and ground water recharge system installed on Office building. D M Plant, Oil Pump House roofs as per Design approved by Central Ground water Board.
5. Provision to measure rain fall is incorporated.
6. Good housekeeping and 5S is maintained in and around the Power Station as PowerHouse-6 sites is adjudged Best Garden Award four consecutive years by Jusco- Horticulture society for its commitment towards maintenance and propagation of green work site.
7. Environment awareness propagated in workmen through special tree Plantation and Env. Awareness drive.
8. Continuous Auto effluent neutralization system is operational at DM Plant for better compliance and ETP operation automation implemented for better compliance.

Other notable contributions towards better environment are -

- (1) CAAQM station installed inside Tata Steel which is connected to JSPCB server.
- (2) IEL, PowerHouse#6 has been certified for ISO9001:2015, 14001:2015 and, 45001: 2018 standards.
- (3) Ambient air quality monitoring (12 parameters) done at one location as per CPCB guideline and Noise levels are monitored once per month within power station premises.
- (4) In plant awareness program on environment are conducted periodically. Celebrated World environment Day in plant premises included tree plantation activities.
- (5) Roof top rainwater harvesting system installed in office buildings.
- (6) Side Stream filtration system installed for water conservation and running continuously.
- (7) Motion detectors installed in office building for saving of electricity.
- (8) LED lights are used in lawns and gardens. Solar Street Lights are installed in plant premises for saving electricity and working continuously. Ordinary Tube lights are replaced with LED tube lights in office building.

| Stack Monitoring Data FY22 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---------------------|-----------------------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|----------|
| Sl | Parameter | Units | U#6 Apr-21 | | U#6 May-21 | | U#6 Jun-21 | | U#6 Jul-21 | | U#6 Aug-21 | | U#6 Sep-21 | | U#6 Oct-21 | | U#6 Nov-21 | | U#6 Dec-21 | | U#6 Jan-22 | | U#6 Feb-22 | | U#6 Mar-22 | | Yrly Avg |
| | | | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | BOILER-1 | BOILER-2 | |
| 1 | Sulphur dioxide | (mg/Nm ³) | 142.5 | 142.8 | 147.3 | 146.3 | 145.8 | 149.6 | 142.8 | 142.1 | 149.1 | 144.6 | 141.5 | 147.3 | 146.2 | 141.5 | 139.4 | 132.6 | 132.5 | 136.2 | 136.1 | 131.6 | 136.1 | 134.7 | 131.4 | 134.7 | 140.61 |
| 2 | Nitrogen oxide | (mg/Nm ³) | 120.8 | 131.4 | 122.4 | 136.1 | 124.5 | 138.9 | 133.6 | 133.4 | 136.3 | 132.8 | 130.3 | 131.4 | 136.4 | 132.8 | 130.1 | 134.6 | 126.8 | 129.1 | 122.4 | 127.3 | 122.4 | 128.9 | 118.9 | 117.3 | 129.12 |
| 3 | Particulate Matters | (mg/Nm ³) | 24 | 26 | 26 | 27 | 25 | 28 | 27 | 26 | 28 | 27 | 29 | 28 | 27 | 26 | 26 | 28 | 21 | 25 | 22 | 26 | 23 | 24 | 22 | 26 | 25.71 |

Annex-1.