

JCL/JRD/ENV/2024-25/13

Date: 26.09.2024

To
The Member Secretary,
State Pollution Control Board, Odisha
A/118, Nilakantha Nagar, Unit VIII
Bhubaneswar – 750012

Sub: Submission of annual Environmental Statement for the financial year 2023-24.

Dear Sir,

Please find enclosed herewith the "Annual Environmental Statement (Form-V)" dully filled in the prescribed format for the financial year 2023-24.

This is for your kind perusal please.

Thanking You,

Yours faithfully, For Jindal Coke Limited

Surya Pratap Sahoo Associate Vice President – Coke Oven

Encl: As Above

CC: The Regional Officer, State Pollution Control Board, KNIC, Jajpur Road





ENVIRONMENT STATEMENT

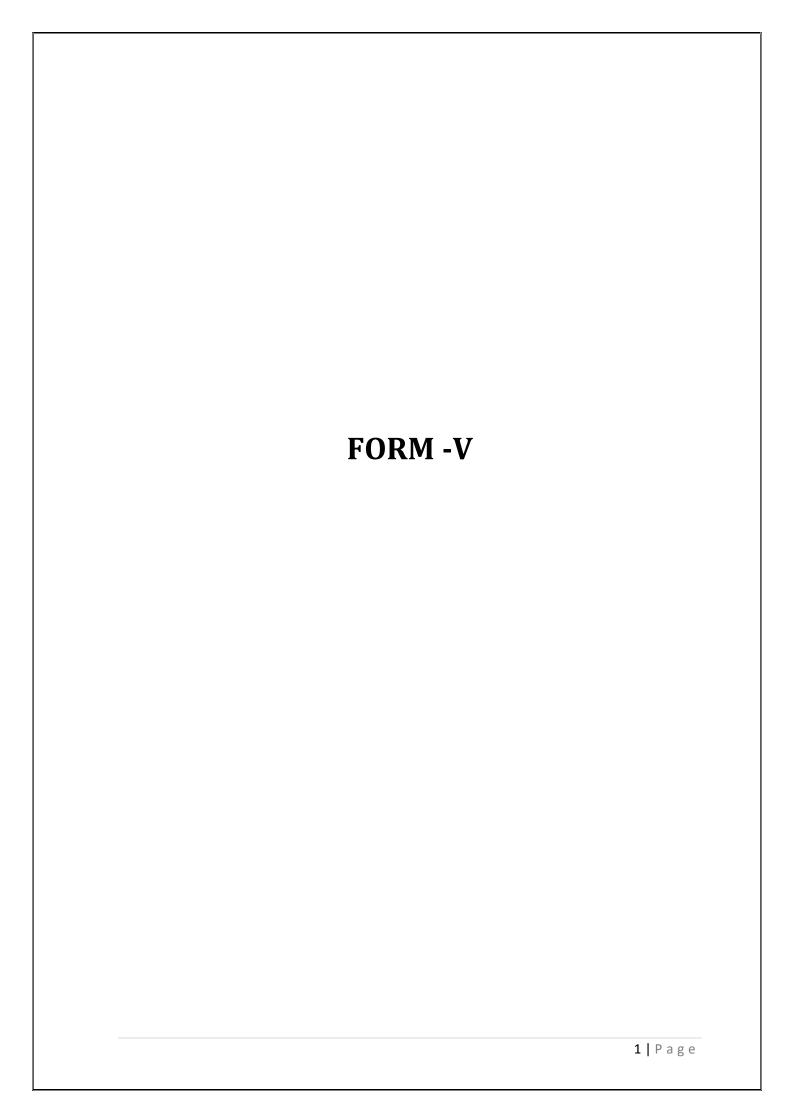
FINANCIAL YEAR 2023-24



JINDAL COKE LIMITED

Kalinganagar Industrial Complex, Duburi, Dist. Jajpur - 755026, Orissa, India Tel: +91 06726 266031 - 33

Fax: +91 06726 266006 E-mail: <u>info@jindalcoke.com</u>



Form-V

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING ON 31ST MARCH, 2024

Part-A

Name and address of the owner/ occupier of the : Deepak Agiwal

industry, operation or process

Director

Jindal Coke Limited Jajpur-755026, Orissa

: Red **Industry Category**

Primary/(STC code) : Large Industry

Secondary (STC code) : Metal & Minning

Production Capacity : Coke Oven: 1 x 0.425 MTPA

Year of Establishment : 2011

Date of Last Environmental / Audit Report submitted : 28.09.2023

Part-B

WATER AND RAW MATERIAL CONSUMPTION

| Water consumption (m³/Day) | 2022-23 | 2023-24 | | |
|--|-------------------------------|---------|--|--|
| Process* | 126 | 138 | | |
| Cooling** | 376 | 415 | | |
| Domestic | Requirement met from M/s. JSL | 96 | | |
| Total | 502 | 649 | | |
| * Includes fresh water for water make up, Service water etc. | | | | |
| ** Includes fresh water for cooling tower make up | | | | |

Water consumption per Ton of Product:

| Name of product | Water consumption per unit of products (m³/MT) |
|-----------------|--|
| Coke Oven | 0.56 m ³ /MT |

| Name of raw materials | Name of Products | Consumption of raw material per unit of Output (KG/ MT or (MWH) | |
|-----------------------|---------------------|---|---|
| | | During the previous Financial Year (2022-23) | During the current Financial Year (2023-24) |
| Coking Coal | Coke | 1386 KG/MT | 1399 KG/MT |

Raw Material Consumption:

PART-C

POLLUTION DISCHARGED TO ENVIRONMENT/ UNIT OF OUTPUT

(PARAMETERS AS SPECIFIED IN CONSENT ISSUED)

A. Water Pollutants

The entire effluent from each unit is being treated and recycled within plant premises in different activities being performed and waste water is not allowed to discharge outside the plant.

B. Air Pollutants

B.1 Pollutants from Stack:

| SI No. | Stack details | Pollutants | Quantity of Pollutants discharged (mass/day) (Ton/day) 2023-24 | Concentration of Pollutants discharged (mass/volume) (mg /Nm3) 2023-24 | Percentage of variation from prescribed standard with reasons |
|-----------|---------------|-------------|---|---|---|
| 3 | Coke Oven | Particulate | 0.20 | 32.2 | (-) 35.6 % |
| | Battery | Matter | 0.20 | 32.2 | (-) 33.0 /6 |

B.2 Discharge of water pollutant: Zero Discharge

Part-D

HAZARDOUS WASTES

(As specified under Hazardous & Other Wastes (Management and Transboundary Movement)
Rules, 2016)

| Hazardous wastes | | Generation Quantity | | |
|------------------|------------------------------|--|---|--|
| | | During the previous financial year 2022-23 | During the current financial year 2023-24 | |
| From Process | Used Oil | - | 9.90 KL | |
| FIOCESS | Waste Containing Oil | 11.76 KL | Nil | |
| | BOD Plant Sludge (Coke Oven) | 276 MT | 250 MT | |
| | Tar Storage Tank Residue | 42 MT | 37.1 MT | |

Part-E

SOLID WASTES

| Solid Wastes | | Generation Quantity (in MT) | | |
|--------------|-------------|--|-------|--|
| | | During the previous During the current final year 2022-23 year 2023-24 | | |
| From Process | Coke breeze | 29665 | 30351 | |

<u>Part-F</u> <u>Characteristics of Hazardous as well as solid wastes and their disposal practice.</u>

A) Hazardous Wastes

Hazardous Wastes Characteristics and Disposal practice:

| SI. No. | Hazardous Wastes | Characteristics | Quantity (2023-24) | Mode of Disposal |
|------------|---|-----------------|-----------------------|---------------------------------|
| 1. | Used Oil | Liquid | 9.90 KL | Sold to Authorised recycler |
| 5. | Tar Storage Tank Residue (Coke Oven) | Solid | 37.1 MT | Recycled in coke making process |
| 6. | BOD Plant Sludge (Coke Oven) | Solid | 250 MT | Recycled in coke making process |

B) Solid Wastes

Solid Wastes Characteristics and Disposal practice:

| Solid Wastes | Characterstics (Chemical Analysis) | Mode of Disposal | |
|--------------|--|-----------------------------------|--|
| Coke breeze | Fe: 0.47 ,SiO ₂ : 4.98 , Al ₂ O ₃ : 3.39 , CaO: 0.39 , MgO: 0.09 , P ₂ O ₅ : 0.02 Na ₂ O: 0.05 | Sold to Sinter making steel plant | |

Part-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

- 1. The plant is equipped with various state-of-the-art Air Pollution Control devices such as Bag Houses etc. designed to control the emission (PM) level below 50 mg/Nm³ from the stacks installed at our plant.
- 2. A HDPE line impervious pit of 5000 m³ has been constructed adjacent to BOD plant for storage of effluent from COBP during exigency.
- 3. Fugitive emissions are being arrested by way of putting up covered belt conveyors, water sprinklers and mostly concreted /asphalted roads for vehicular movement inside the plant premises.
- 4. One number of Opacity Monitor and gas analyzer is installed at coke oven battery stack and 1 no. of Continuous Effluent Quality Monitoring Station (CEMS) is installed at the outlet of BOD plant. Data are being transmitted to SPCB & CPCB server. Photographs of installed EQMS & CEMS are attached.

Part-H

Additional measures/Investment proposal for environmental protection <u>including</u> abatement of pollution

a) Additional Measures

- 1. The unit has installed a dedicated Continuous Ambient Air Quality Monitoring System (CAAQMS) for monitoring of parameters like PM10, PM2.5, SO2, NOx & CO. The online data is being transmitted to SPCB/CPCB server on uninterrupted basis.
- 2. Online CEMS has been installed at stack connected to Coke Oven Battery stack for monitoring of PM, SO2 & NOx and connected to SPCB/CPCB server.
- 3. In order to maintain neat and clean environment inside the plant premises, housekeeping is being on regular basis. 5-S system has been implemented across the full plant.

| Cost estimation of pollution control in (Rs. Crores) | | | |
|--|--------------------------------------|-------------|--|
| Description | Expenditure in Crores during 2023-24 | | |
| | Capital | Operational | |
| Air Pollution Control | 0.05 | 2.40 | |
| Water Pollution Control | - | 4.48 | |
| Hazardous Waste Management | 0.12 | 0.001 | |
| Greenbelt development | - | 0.60 | |
| Total 0.17 7.481 | | | |

4. Plantation:

- We have planted totally 15,000 nos. of trees inside the plant premises over an area of 15 Acre till 31st March 2024.
- > During the FY 2023-24, 672 nos. of tress have been planted inside plant premises

PART -I

Miscellaneous

Any other particular for improving quality of environment

1. IMS Certification (New Standards):

The unit has obtained its recertification for Integrated Management System that includes ISO 14001:2015 (Environment Management System), ISO 9001:2015 (Quality Management System) and ISO 45001:2018 (Occupational health & safety Management System).
