

JCL/JRD/ENV/2023-24/17

То

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

Date: 28.09.2023

Bhubaneswar – 750012

Sub: Submission of Environment Statement for the year 2022-23.

Dear Sir,

With reference to the above subject, we are herewith submitting the Environment Statement Report dully filled in FORM-V for the year 2022-23 (Copy enclosed).

This is for your kind perusal please.

Thanking You,

Yours faithfully, For **Jindal Coke Limited**

Deepak Agiwal Head - COBP

Encl: As Above

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









ENVIRONMENT STATEMENT REPORT

FOR THE FINANCIAL YEAR 2022-23

Submitted to SPCB under Rule 14 of The Environment (Protection) Rules 1986



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>

INTRODUCTION

Jindal Coke Limited is a company incorporated on 2nd December, 2014 under the Companies Act, 2013, and has its registered office at O.P. Jindal Marg, Hisar 125005, Haryana. It proposes to engage in the business of manufacturing, processing, finishing and dealing in all kinds and forms of coke and coke products at a facility with a capacity of 0.425 MTPA at Kalinganagar Industrial Complex, Duburi, Jajpur, Odisha. It has also acquired inter alia the coke oven undertaking from Jindal Stainless Limited pursuant to the Composite Scheme of Arrangement among Jindal Stainless Limited, Jindal Stainless (Hisar) Limited, Jindal United Steel Limited and Jindal Coke Limited and their respective shareholders and creditors sanctioned by the Hon'ble High Court of Punjab and Haryana at Chandigarh vide its Order dated 21st September, 2015 (as modified on 12th October, 2015 by the High Court).

Jindal Coke Limited's Coke oven is a state of the art plant with stamp charged and full recovery and is one of the best coke making facility in the entire country. The coke battery comprises of 64 ovens. There is a Railway Siding inside the plant premises which facilitates movement of coke in rake load quantities to meet customer's requirement of coke.

The site of the stainless steel plant is located in Jajpur district of Orissa. The site is covered under Survey of India Toposheet No. 73 L/1 bounded between latitudes 20° 56′58″ N to 20° 58′ N and longitudes 86° 02′17″ E to 86° 03′53″ E. The plant area is bounded by East Coast Railway's line connecting Jakhapura and Daitari station on the east and the Jajpur-Talcher State Highway on the north. The nearest railway station is Jakhapura, on the Howrah – Kharagpur – Bhubaneswar -Vishakhapatnam line, which is about 10 km towards SE. The expressway (NH-215) connecting Daitari mines to Paradip port is about 8 km W from the site. Duburi is at a distance 7 km from the site and district head quarter Jajpur is at a distance 35 km from the site. The nearest National Highway is NH-6, which is about 20 km E of the plant at its nearest point.

JCL has laid-down its Environmental Policy along with Quality Policy and OHSAS Policy and communicated to all employees. Jindal Coke Limited (JCL) is an ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Integrated Management system (IMS) certified company. The Company goes beyond mere compliance legislation to create a healthy environment both within and outside plants. It has adopted state of art technologies in Coke production at site with best available facilities on control of Pollution measures.

FACILITIES INSTALLED:

Jindal Coke Limited has installed recovery type coke oven of capacity 0.425 MTPA.

The Plant has obtained Consent to Operate (CTO) from SPCB, Odisha, valid up to 31st March, 2025. Further, JCL has obtained authorization under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016, valid up to 31st March 2025.

FORM -V

Form-V

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING ON 31ST MARCH, 2022

<u>Part-A</u>

Name and address of the owner/ occupier of the industry, operation or process	:	Deepak Agiwal Director Jindal Coke Limited Jajpur-755026, Orissa
Industry Category Primary/(STC code)	:	Metal and Mining
Secondary (STC code)	:	Large Industry
Production Capacity	:	Coke Oven: 1 x 0.425 MTPA
Year of Establishment	:	2011
Date of Last Environmental /Audit Report submitted	:	28.09.2022

<u>Part-B</u>

WATER AND RAW MATERIAL CONSUMPTION

Water consumption (m ³ /Day)	2021-22	2022-23	
Process*	129	126	
Cooling**	387	376	
Domestic***	Requirement met from M/s. JSL		
Total	516	502	
* Includes fresh water for water make up, Service water etc.			
** Includes fresh water for cooling tower make up			
*** Requirement met from M/s. JSL			

Water consumption per Ton of Product:

Name of product	Water consumption per unit of products (m ³ /MT)
Coke Oven	0.47 m ³ /MT

Raw Material Consumption:

Name of raw materials	Name of Products	Consumption of raw material per unit of Output (KG/ MT or (MWH)	
		During the previous Financial Year (2021-22)	During the current Financial Year (2022-23)
Coking Coal	Coke	1389 KG/MT	1386 KG/MT

PART-C

POLLUTION DISCHARGED TO ENVIRONMENT/ UNIT OF OUTPUT

(PARAMETERS AS SPECIFIED IN CONSENT ISSUED)

Water Pollutants Α.

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 complying Zero-Discharge Concept.

Β. **Air Pollutants**

B.1 Pollutants from Stack:

SI No.	Stack details	Pollutants	Quantity of Pollutants discharged (mass/day) (Ton/day) 202-23	Concentration of Pollutants discharged (mass/volume) (mg /Nm3) 2022-23	Percentage of variation from prescribed standard with reasons
3	Coke Oven	Particulate	0.24	43.78	Well within the
	Battery	Matter			prescribed limit

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		Quantity (in KL)	
	-	During the current financial year 2022-23	
From Process	Used Oil	Nil	
	Waste Containing Oil	11.75 KL	
	BOD Plant Sludge (Coke Oven)	276 MT	
	Tar Storage Tank Residue	42 MT	
	Oily Sludge	Nil	
	Discarded Containers	Nil	
	Insulation Material	Nil	

Part-E

SOLID WASTES

Solid Wastes	Quantity (in MT)
	During the current
	financial year 2022-23
Coke breeze	29665

Part-F

Characteristics of Hazardous as well as solid wastes and their disposal practice.

A) Hazardous Wastes

Hazardous Wastes Characteristics and Disposal practice:

SI.	Hazardous Wastes	Characteristics	Quantity	Mode of Disposal
No.			(2022-23)	
1.	Used Oil	Liquid	Nil	-
2.	Waste Oil	Liquid	11.75 KL	-
3.	Oily Sludge	Solid	Nil	-
4.	Discarded Container	Solid	Nil	-
5.	Tar Storage Tank Residue (Coke Oven)	Solid	42 MT	Recycled in Coke Oven Battery
6.	BOD Plant Sludge (Coke Oven)	Solid	276 MT	Recycled in Coke Oven Battery
7.	Insulation Material	Solid	Nil	-

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 ₇ : 0.02 Na ₂ O : 0.05	Sold to Sinter making steel plan

Part-G

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

- 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. At battery top, new technology adopted with M-Type coke oven gas transfer car/machine has been provided for servicing the gas withdrawing equipment along with HPALA. The gases being generated during charging are sucked into the gas collecting main in coke side through the standpipes of the oven being charged by means of HPALA system as well as through the U tubes of CGT car.
- 3. The plant is maintaining zero discharge from the entire plant. Effluent from Coke Oven Plant is being treated in PETP (BOD plant) and recycled & reused in coke oven for wet quenching. Treated STP water is being used for green belt development. No process water is being discharged outside.



4. A HDPE line impervious pit of 5000 m³ has been constructed adjacent to BOD plant for storage of effluent from COBP during exigency.

5. 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.

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- 6. One number of Opacity Monitor and gas analyzer is installed at coke oven battery stack and 1no. 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.
- 7. Road sweeping machine is in operation for dust extraction during vehicular movement. This also helped in remarkable reduction in water used for sprinkling all along the plant area.

Part-H

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

Additional Measures a)

1. The unit has installed a dedicated Continuous Ambient Air Quality Monitoring System (CAAQMS) for monitoring of parameters like PM₁₀, PM_{2.5}, SO₂, NOx & CO. The online data is being transmitted to SPCB/CPCB server on uninterrupted basis.

- 2. The unit has installed digital display (LED Video Screen) board with provision of display of real time data of online analysers (CEMS, CAAQMS & CEQMS) and CTO & authorization conditions and awareness clippings on environment.
- 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.





Mechanical sweeping Van





4. <u>Plantation : (Undivided JSL)</u>

- We have planted totally 3,46,154 nos. of trees inside the plant premises over an area of 156.61 Ha (35.8 % of the total area) till 31st March 2023.
- Our plant has 100% complied with the 33% green belt development criteria given by CPCB.
- During the FY 2022-23, 11383 nos. of tress have been planted inside plant premises for gap filling.

<u>PART -I</u>

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).

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CERTIFICATE	CERTIFICATE	CERTIFICATE
Management system as per ISO 14001 : 2015	Management system as per ISO 14001 : 2015	Management system as per ISO 45001 : 2018
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operates a management system in accordance with the requirements of IBD 140212015 and will be assessed for contomity within the 3 year term of validity of the certificate.	operates a management system in accordance with the requirements of IBO 14001:2015 and will be assessed for contomity within the 3 year term of validity of the certificate.	operates a management system in accordance with the requirements of IDO 45001:2018 and will be assessed for conformity within the 3 year term of validity of the certificate.
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Manufacture and Supply of Coke and By-Products.	Manufacture and Supply of Coke and By-Products.	Manufacture and Supply of Coke and By-Products.
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