

JSL/JRD/ENV/2025-26/21

Date: 18.09.2025

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 2024-25.

Dear Sir,

Please find enclosed herewith the "Annual Environmental Statement (Form-V)" dully filled in the prescribed format for the financial year 2024-25.

This is for your kind perusal please.

Thanking You,

Yours faithfully, For Jindal Stainless Limited

Maitreyee Deb/ Head-Environment

Encl: As Above

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

Jindal

Jindal Stainless Limited

Jajpur Unit : Kalinga Nagar Industrial Complex, Duburi, Distr. Jajpur - 755 026 (Odisha) total L269 2 FR 1980 FL C0 10901

Corporate Office : Jindal Centre, 12, Bhikaiji Cama Place, New Delhi - 110 066, India, Registered Office : O.P. Jindal Marg. Hisar - 125 005. (Haryana) India T. (06726) 266700, F. (06726) 266006, E. info jajpur@jindalstainless.com, Website : www.jindalstainless.com



## **ENVIRONMENT STATEMENT**

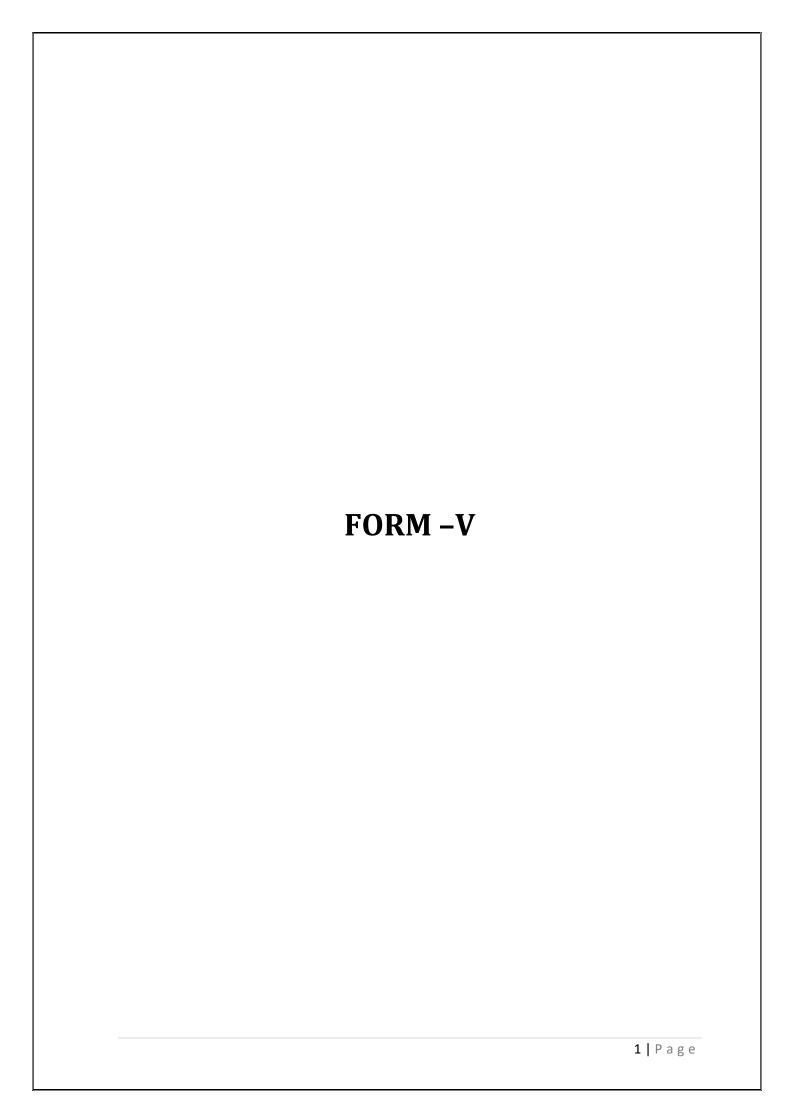
## FINANCIAL YEAR 2024-25



### JINDAL STAINLESS LIMITED

Kalinganagar Industrial Complex, Duburi, Dist. Jajpur - 755026, Orissa, India Tel: +91~06726~266031 - 33 Fax: +91~06726~266006

E-mail: info.jajpur@jindalsteel.com



### Form-V

# ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING ON 31<sup>ST</sup> MARCH, 2025

#### Part-A

Name and address of the owner/ occupier of the industry, operation or process	:	Shri Jagmohan Sood Director & COO
		Deepak Agrawal Unit Head Jindal Stainless Limited Jajpur-755026, Orissa
Industry Category Primary/(STC code)	:	Red
Primary (STC code)		Large Industry
Secondary (STC code)	:	Metal & Mining
Production Capacity	:	During the FY 2024-25
	:	Crude Stainless Steel: 2.2 MTPA
	:	Captive Power: 2 x 125 MW, 13 MW
Year of Establishment	:	2007
Date of Last Environmental /Audit Report submitted	:	26.09.2024

#### Part-B

#### **WATER AND RAW MATERIAL CONSUMPTION**

Water consumption (m <sup>3</sup> /Day)	2023-24	2024-25		
Process*	4784	5434		
Cooling**	14352	16301		
Domestic***	876	530		
Total 20012 22265				
* Includes fresh water for water make up, DM water, Service water etc.				

<sup>\*\*</sup> Includes fresh water for cooling tower make up

### Water consumption per Ton of Product:

	Water consumption per unit of products 2024-25	
Name of products		
CPP – Electricity	2.70 m <sup>3</sup> /MW	
SMS -	0.92 m <sup>3</sup> /tss	

#### **Raw Material Consumption:**

<sup>\*\*\*</sup> Includes water for drinking, toilets, washing & canteen supply in plant.

Name of raw materials	Name of Products	Consumption of raw material per unit of Output (KG/ MT or (MWH)	
		During the Previous Financial Year (2023-24)	During the current Financial Year (2024-25)
Steam Coal	Power	778 Kg/MW	786 Kg/MW
MS Scrap		417 Kg/MT	366 Kg/MT
SS Scrap		367 Kg/MT	274 Kg/MT
Ferro Alloy	Crude Stainless	240 Kg/MT	230 Kg/MT
Ferro Nickel	Steel	30 Kg/MT	23 Kg/MT
Si Manganese		38 Kg/MT	43 Kg/MT
Fe Manganese		21 Kg/MT	24 Kg/MT
Chrome Ore		474 Kg/MT	376 Kg/MT

#### 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 wastewater 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) 2024-25	Concentration of Pollutants discharged (mass/volume) (mg /Nm³) 2024-25	Percentage of variation from prescribed standard
1	CPP-1		0.53	38.66	(-) 22.67 %
2	CPP-2		0.49	37.90	(-) 24.20 %
3	13 MW		0.04	31.60	(-) 36.80 %
4	SMS –EAF		0.49	22.02	(-) 77.98 %
5	SMS- AOD	PM	0.97	41.19	(-) 58.81 %
6	SAF # 3		0.20	34.05	(-) 65.95 %
7	SAF # 4&5		0.23	44.55	(-) 55.45 %
8	CRM-Shot Blaster		0.07	54.78	(-) 45.22 %
9	2 x60 MVA – Tapping Fume		0.02	10.57	(-) 89.43 %

31 %
93 %
14 %
98 %
73 %
17 %
32 %
14 %
02 %
03 %
37 %
67 %
90 %
19 %

### <u>Part-D</u> <u>HAZARDOUS WASTES</u>

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

Hazardous wastes		Generation Quantity		
		During the previous financial year 2023-24	During the current financial year 2024-25	
From	Used Oil	75.69 MT	183.74 MT	
Process	Waste / Residue containing Oil	44.80 MT	58.55 MT	
	Used Grease	-	3.11 MT	
	Oil soaked jute / cotton	1.87 MT	4.34 MT	
	CRM ETP Sludge (CRM)	47652.21MT	54369.28 MT	
	*Inclusive of Moisture content.			
From				
Pollution	Elua gas cleaning residue	27011.28 MT	20293.31 MT	
Control	Flue gas cleaning residue	2/011.28 WH	20295.31 IVII	
facilities				

#### NOTE:

\*42851.98 MT (Inclusive of Moisture content.) of CRM Sludge have been disposed at CHWTSDF of M/s. Re Sustainability Limited, Sukinda.

#### Part-E

#### **SOLID WASTES**

Solid wastes		Generation Quantity (in MT)		
		During the previous	During the current	
		financial year	financial year	
		2023-24	2024-25	
From process	Fe-Cr slag	235907 MT	255781 MT	
	SMS Slag	437719 MT	518665 MT	
	Mill Scale (CRM)	4302.66 MT	3173 MT	
	Bottom Ash	67639.42 MT	76124 MT	
From Pollution	Bag Filter & Grinding Dust from SMS	60677.81 MT	75637 MT	
Control facilities	Fly Ash	669739.54 MT	613471 MT	

Part-F

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

#### A) Hazardous Wastes

**Hazardous Wastes Characteristics and Disposal practice:** 

Sl. No.	Hazardous Wastes	Characteristics	Quantity	Mode of Disposal
1.	Used Oil	Liquid	183.74 MT	Sold to Authorised recycler
2.	Used Grease	Semi Solid	3.11 MT	Sold to Authorised recycler
3.	Waste Oil	Liquid	58.55 MT	Sold to Authorised recycler
4.	CRM Sludge	Semi solid	54369.28 MT	Recycled in Briquette Plant rest has been disposed at CHWTSDF of M/s. Re Sustainability Limited, Sukinda.
5.	Flue gas cleaning residue	Solid	20279.20 MT	Recycled in the Briquette Plant for further reutilization in FAP.
6	Oil soaked cotton jute	Solid	4.34 MT	Disposed at CHWTSDF of M/s. Re Sustainability Limited, Sukinda.

## B) Solid Wastes Solid Wastes Characteristics and Disposal practice:

Solid Wastes	Characteristics (Chemical Analysis)	Mode of Disposal	
Fe-Cr slag	Cr <sub>2</sub> O <sub>3</sub> %:12.1, SiO <sub>2</sub> %:28.07, Al <sub>2</sub> O <sub>3</sub> %:22.44,	Recovered metal reused in process,	
	MgO% :26.39, CaO%: 5.85, FeO% : 3.49	rest has been utilized for low lying	
		area filling.	
SMS EAF Slag	SiO <sub>2</sub> %:26.69, Fe <sub>2</sub> O <sub>3</sub> %:1.35, CaO%:39.69,	Recovered metal reused in process,	
	MgO%: 8.37, Al <sub>2</sub> O <sub>3</sub> %: 12.00, Cr <sub>2</sub> O <sub>3</sub> % :7.88	rest has been utilized for road making,	
SMS AOD Slag	SiO <sub>2</sub> %:29.88, Fe <sub>2</sub> O <sub>3</sub> %:0.79, CaO%:48.41,	low lying area filling.	
	MgO%: 11.63, Al <sub>2</sub> O <sub>3</sub> %:2.72, Cr <sub>2</sub> O <sub>3</sub> %:1.16		
Bottom Ash	SiO <sub>2</sub> %:62.90, Fe <sub>2</sub> O <sub>3</sub> %:7.58, CaO%:2.02,	Entire quantity is being disposed at	
	MgO%: 2.74, Al <sub>2</sub> O <sub>3</sub> %: 22.52	road making of NHAI and mine void	
		filling.	
Fly Ash	SiO <sub>2</sub> %:61.80, Fe <sub>2</sub> O <sub>3</sub> %:5.21, CaO%:1.79,	100 % utilization towards Bricks,	
	MgO%:2.26, Al <sub>2</sub> O <sub>3</sub> %:26.70	Asbestos manufacturing units along	
		with Cement Plant.	

#### Part-G

## Impact of the pollution abatement 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, Electrostatic precipitators etc. designed to control the emission (PM) level below the prescribed standard.
- Continuous effort are being made to control air pollution by way of installing effective air
  pollution control devices at all process units to bring down the air pollution concentration well
  within the permissible limit. 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.
- Continuous Emission monitoring system for monitoring of PM has been installed at Shot Blaster
  of CRM, Tapping Fume of SAF 4&5 and Pellet Plant and the online data is being transmitted to
  SPCB/CPCB server.
- 4. Dedicated surveillance PTZ camera has been installed to monitor the stack and fugitive emission Pellet Plant and connected to SPCB server.
- 5. Dedicated mechanized road sweeping machine has been procured for cleaning of roads of Steel Melting Shop.
- 6. Additional SRTS of capacity 250m3/hr has been installed for treatment of surface runoff generated during monsoon.
- Complete Dry Fog System has been installed at AOD de-bricking area to control fugitive emission. Two nos. of Fog Cannons have been installed at Briquette raw material yard for control
- 8. Additional three nos. of double beam fog cannon have been installed at slag pit to control fugitive emission.

#### Part-H

## Additional measures/Investment proposal for environmental protection\_including abatement of pollution

#### a) <u>Additional Measures</u>

- JSL aims to achieve Net Zero Target by 2050 and reduce 50% of our emissions by 2035 through Energy Substitution, Energy Conservation & Emission Reduction, Technical Sequestration, Ecological Sequestration, Market Trading Mechanism and Green Financial Products.
- 2. Project has been taken up for Zero Liquid Discharge with provision of RO system for reuse of treated water in process.

3. 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 2024-25 Capital Operational		
Air Pollution Control	4.06	71.00	
Water Pollution Control	56.38	3.91	
Hazardous Waste Management	0.19	11.22	
Greenbelt development	1.18	2.71	
Total 61.80 88.84			

#### 4. <u>Plantation:</u>

- We have planted total 2,81,804 nos. of trees inside the plant premises over an area of 127.07 Ha till 31<sup>st</sup> March 2025.
- ➤ During the FY 2024-25, 23302 nos. of tress have been planted inside plant premises for gap filling.

#### <u>PART -I</u> <u>Miscellaneous</u>

#### 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), ISO 45001:2018 (Occupational health & safety Management System) and ISO 50001:2011 (Energy Management System).

- 2. Received CII-ITC Sustainability Award for Environment Management.
- 3. Prepared medicinal garden to enhance biodiversity in the area.