

TSJ/EMD/C-23/200/24 September 27, 2024

The Member Secretary
Jharkhand State Pollution Control Board
T.A. Division Building,
HEC Campus, Dhurwa
Ranchi- 834004

Sub.: Submission of Environmental Statement (Form 5) for 1290 TPD Air Separation Unit (ASU) of Tata Steel Limited, Jamshedpur for the year 2023-24

Dear Sir,

With the reference to the captioned subject, we are herewith submitting the Environmental Statement (Form 5) for 1290 TPD Air Separation Unit (ASU) of Tata Steel Limited, Jamshedpur for the year 2023-24.

Requesting you to kindly acknowledge the same and put in your records for future reference.

Your faithfully
For Tata Steel Limited

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**Head Environment Clearance& Compliance** 

**Tata Steel Limited** 

Encl.: As above

Copy to: Regional Officer, Jharkhand State Pollution Control Board, Jamshedpur

# **ENVIRONMENTAL STATEMENT**FOR THE YEAR 2023-24

# 1290 TPD Air Separation Unit (ASU) TATA STEEL LIMITED

Submitted by:
Environment Management Department
TATA STEEL LIMITED
JAMSHEDPUR-831001
JHARKHAND

### FORM – V (See Rule 14)

## Environmental Statement for the financial Year ending the 31st of March - 2024.

### PART-A

man.	Name and address of the owner/occupier of the industry operation or process	1	1290 TPD ASU Tata Steel Limited Occupier Name: T.V. Narendran Mauza-Sunsungaria P.S. Jamshedpur
11)	Industry Category Primary (STC Code) Secondary (STC Code)	:	Dist: East-Singhbhum  Green
)	Production capacity		Oxygen- 1290 TPD, Nitrogen - 615 TPD, Argon - 102.5 TPD
IV)	Year of establishment	:	1998
V)	Date of the last environmental statement submitted.		Sept 28, 2023

### PART-B

### WATER AND RAW MATERIAL CONSUMPTION

i) Water Consumption (m³/day)
 Process & Cooling: 1523
 Domestic Consumption: 114

	Name of the products	Process water consumption per unit of product Output (m3/ton of product)		
		During the previous financial Year (2022-23)	During the current financial year (2023-24)	
•	MP Gaseous Nitrogen Liquid Oxygen HP Gaseous Nitrogen Liquid Nitrogen Liquid Argon HP gaseous Oxygen	0.699 m3/Ton	0.896 m3/Ton	

### ii) Raw Material Consumption:

Name of Raw Material	Name of Products	Consumption of raw material per unit of output (Atmospheric air consumption in m3/ton of product) During Previous Financial  During Current Financial		
-		Year (2022-23)	During Current Financial Year (2023-24)	
Atmospheric Air	<ul> <li>MP         Gaseous         Nitrogen</li> <li>Liquid         Oxygen</li> <li>HP         Gaseous         Nitrogen</li> <li>Liquid         Nitrogen</li> <li>Liquid         Nitrogen</li> <li>Liquid         Argon</li> <li>HP gaseous         Oxygen</li> </ul>	2523.61 m3/ton	2527.00 m3/Ton	

### PART-C

# Pollution discharged to environment/ unit of output. (Parameter as specified in the consent issued)

Pollution	Quantity of pollutants discharged. (mass/day)	Concentrations of pollutants discharged. (mass / volume)	Percentage of variation from prescribed (standards with reasons.)
a) WATER	kg/day	mg/NM3	1 (430113.)
	Not Applicable as unit is	zero effluent discharge unit	1
b) AIR	kg/day	mg/NM3	
	Not Applicable as the	re is no stack in the unit.	

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### PART-D

### **HAZARDOUS WASTES**

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

	Total Quantity (Tonne/year)		
Hazardous Wastes	During Previous Financial Year (2022-23)	During Current Financial Year (2023-24)	
From Process-Waste Oil	1190 Liter/year	1470 Liter/ year	
From Pollution control facilities#	Nil	Nil	

<sup>\*</sup>Waste oil is considered, accounted, and reported here with 1800 TPD Air separation Unit. # The unit is non-polluting green category, not generating any pollution. Hence, there is no such pollution control equipment like Bag filter or ESP.

#### PART-E

### **SOLID WASTES**

-	Total Qty Kg	
	During Previous Financial	During Current Financial
	Year (2022-23)	Year (2023-24)
(a) From process	No solid waste is generated	No solid waste is generated
(a) 110m pro-	from process	from process
(b) From pollution control facility	There is no pollution control facility as the unit is non	There is no pollution control facility as the unit is non polluting
C (1) Qty recycled or re- utilised within the unit	polluting N/A	N/A
(2) sold	N/A	N/A
(3) Disposed	3500 KG	3400 KG

All Municipal solid waste like paper, cartoon, domestic and canteen waste is being routed through TSUISL for further management and handling.

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### PART - F

Please specify the characterisation (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Name of Wastes	Characteristics	Quantum (FY -23-24)	Disposal Method
	Haz	Iardous waste	
From Process: Waste Oil	Oily	1470 Litre	Sell to Authorised recycler
* *		olid waste	
Municipal solid waste	Garbage/ paper / leaf/ food waste / cloth waste / cartoon	3.4 Ton (Fy. 23-24)	All Municipal solid waste like paper, cartoon, wooden scrap, domestic and canteen waste is bein routed through TSUIS for further management and handling.

### PART - G

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

- 1. Rainwater Harvesting facility is in place for recharge of ground level. There are two rainwater harvesting pits in the premises.
- 2. R-32 is being used as the refrigerant in all the air-conditioners which is a balanced refrigerant and has a global warming potential that is one-third lower and is remarkable for its low environmental impact and is energy efficient.
- 3. GHG emission abatement measures LED lamps are being used in entire unit.
- 4. Auto process control system is controlling the plant which operates the plant in most efficient manner, conserving electricity.
- 5. Greenery developed across the unit.
- 6. All the lighting system are energy efficient.

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1290 TPD Air Separation Unit (ASU), Tata Steel Limited, Jamshedpur

### PART - H

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

- 1. We have grown greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.
- 2. VFD drives and energy efficient chillers pump are in use for better energy efficiency and thus reducing GHG potential.
- 3. Regular upgrade in plant operating software for operating plant in energy efficient manner, thus saving electricity.
- 4. All disposable batteries are being replaced by re-chargeable batteries.

#### PART - I

Any other particulars for improving the quality of the environment.

- 1. The unit is ISO: 14001:2015 certified.
- 2. Rain water harvesting are in place and being maintained.

de Amanatt Vyas 25/4/24 July 24