

Ref. No.: AMNS/PDB/ENV/25-26/17

Date: 23.09.2025

To, The Member Secretary, State Pollution Control Board, Paribesh Bhawan, A-118, Nilakantha Nagar, Bhubaneswar, Odisha.

Sub.: Submission of Annual Environmental Statement in Form V for the F.Y 2024-25 of M/s ArcelorMittal Nippon Steel India (P) Ltd., Pellet Plant, Paradeep.

Sir,

We are submitting herewith the Annual Environmental Statement in Form-V along with the Annexure in respect of M/s ArcelorMittal Nippon Steel India (P) Ltd., Pellet Plant, Paradeep for the F.Y 2024-25.

This is for your kind perusal.

Thanking you, Yours faithfully

Suresha G

Executive Director, Odisha Operations ArcelorMittal Nippon Steel India (P) Ltd.

Led

Encl.: As above

Copy to: The Regional Officer, State Pollution Control Board, Paradeep, CMCE Building, Sandhakuda, Marine Drive Road, Dist.- Jagatsinghpur, Odisha.



$\frac{FORM-V}{\text{(See Rule 14)}}$

Annual Environmental Statement Report for the financial year ending on 31st March 2025

PART- A

i	Name and Address of the occupier of the Industry, operation or process	Sri Dillip Oommen, CEO ArcelorMittal Nippon Steel India Ltd., Pellet Plant At- Udayabata, Via-Paradeep, Dist Jagatsinghpur, Odisha754142
ii	Industry category Primary(STC code) Secondary(SIC Code)	Primary GST Code: 21AAACE1741P1ZT
iii	Production categoryUnits	Manufacturing of Iron Ore Pellets (2X6 MTPA)
iv	Year of establishment	Pellet Plant-01 (2012), Pellet Plant-02 (2021)
V	Date of last Environment Statement Report submitted	AMNS/20/2024 Dated 25.09.2024

PART- B

i	WATER CONSUMPTION					
	Name of the products	Water consumption per unit of Production m3/day				
	·	Process – 4344.58 KLD				
		Cooling – 1101.9	97 KLD			
		Domestic – 75.46 KLD				
		During the Prev	ious financial year	During	the current financial year	
		(Lit	re/MT)		(Litre/MT)	
(1)	Iron ore pellets	276			275	
Plant	Plant was operated for PP1- 198 days and for PP2- 245 days.					
ii						
	Name of the Raw	Name of the	Consumption of I	Raw mate	rials per unit of output in	
	material	Product	metric tonne		onne	
			During the prev		During the current	
			Financial yea	ar	Financial year	
	Iron Ore Fines	Iron Ore	1.121		1.120	
	Limestone	Pellets	0.021		0.020	
	Bentonite		0.003		0.003	
	Coke/Coal		0.014		0.014	

^{*} Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

PART- C

Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

SI. No.	Pollutants	Quantity of Pollution generated	Concentration of Pollutants discharged (Avg.) (mass/volume)	Percentage of variation from prescribed standards with reason
а	WATER	No Effluent and hence not applicable	NIL	Not
				applicable
b	AIR	Pellet Plant 1:		
	Suspended	i. RCC Chimney (Outlet of ESP)	33.73 mg/Nm3	
	Particulate	ii. Stack attached to HLSB	30.55 mg/Nm3	
	matter	iii. Stack attached to IDB discharge end scrubber	30.94 mg/Nm3	
		iv. Stack attached to induration feed end scrubber	28.75 mg/Nm3	
		Total quantity of SPM from PP1 = 347.94T/YR		
		Pellet Plant 2:	28.00 mg/Nm3	
		i. RCC Chimney (Outlet of ESP)	25.25 mg/Nm3	

ii. Stack attached to HLSB iii. Stack attached to IDB discharge end scrubber iv. Stack attached to IDB feed end scrubber	27.28 mg/Nm3 25.95 mg/Nm3	
Total quantity of SPM from PP2= 409.38 T/YR		

PART- D Hazardous waste

As specified under Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules. 2016 and amendments thereof.

movement reales, 2010 and amondments the con-				
Hazardous waste		TOTAL QUANTITY (MT)		
		During the Previous Financial year (2023-24)	During the current financial year (2024-25)	
а	From Process			
	Used Oil	58.11 T	59.114 T	
	Waste containing oil	0.05 T	0.035 T	
b	From Pollution Control facilities	NIL	NIL	

PART- E Solid wastes

Solid Wastes		Solid Wastes TOTAL QUANTITY		
		During the Previous Financial year	During the current Financial year	
а	From Process	N. A	a. No solid wastes are generated in the plant. The Raw materials handled such as Iron ore fines, Bentonite, Limestone do	
b	From Pollution Control facilities		generate some dust/spillage during handling. The material collected properly and reused on daily basis in the process. b. Dust generated from ESP, Wet	
С	Quantity recycled or reutilised within the unit		scrubber, and bag filter are converted to the slurry in wet process and put into the process thickener for reutilization which results in zero solid waste discharge.	
			c. Total 281057 Tons (4.8%) of production.	

PART- F

Please classify the characteristics (in terms of concentration and quantities) of hazardous as well as solid wastes and indicate disposal practices adopted for both these categories of wastes)

- The used transformer oil and waste oil including residual sludge generated during the process are collected, stored in barrels with caps intact. These barrels are then stored on impervious lined floor under a shed and are disposed of to the authorised re-processors in accordance with the procedures laid down in Hazardous waste management rules. The plant is having authorization for generation of used oil (60 T/A), wastes/ residues containing oil (25 T/A), emply barrels (20T/A) and copper wire scrap (10T/A) which is valid upto 31.03.2027.
- Dusts generated during handling of Iron ore Fines are collected in ESP/ Scrubbers. The dust generated during handling of Limestone, Bentonite and Coke is collected in the Bag filters installed in the Additive Grinding and Mixing Building of the plant. The Iron ore fines are scrubbed with water and the resultant slurry is recycled into the process through thickener. The dust collected in Bag filters is also recycled completely. Hence the recycling/ re-utilisation of the dust generated are 100%.
- High efficiency electrostatic precipitators (ESP) have been installed in the induration Furnace of Pellet Plant 1 and 2.
- Wet scrubbers have been provided at the below-mentioned points of PP1 and PP2 for cleaning exhaust gases.
 - Location 1: At the feed end of the Induration machine

- Location 2: At the discharge end of the Induration machine
- Location 3: At the Hearth Layer Separation Building (HLSB)
- Highly efficient bag filters have been installed at the bellow mentioned points
 - Location 1: Lime/anthracite coal bag filter
 - Location 2: Bentonite Bag Filter
 - Location 3: Mixture Bag Filter collecting dust from Mixture.
- Two numbers of Bag filters have been installed in Roller Mill (No. of Bags- 360) and Ball mill (No. of Bags- 676) of common Additive Grinding Building.
- Dust collected at ESP, Bag filter, and scrubber is being recirculated into the process by wet disposal process into the process thickener.

PART- G

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

The conservation of natural resources is taken up through following various measures like:

- 2 nos. wet scrubbers were installed and commissioned in the product conveyor galleries as a dust suppression measure for fugitive emissions in the transfer points.
- 7 nos. Settling pits were newly constructed and facilitated with vertical sump pump for surface
 water management around the plant after settlement the clear water shall be pumped into the
 process for reutilization.
- The surface water sump was renovated to increase the settling time for surface water runoff and reduce the load on the Surface Water Treatment Plant.
- Retention wall with garland drain was provided around the raw material storage yard.
- Covered storage area has been provided for storage of additives like Bentonite, limestone, and coal and raw material as well.
- Dry fog systems are installed at all discharge points in transfer houses and working effectively.
- Fixed line water sprinkling system (242 nos. ¾ inch) were installed for internal as well as transportation road.
- Storm water and process water drain height was increased and widening done for storm water drains to increase the carrying capacity of storm water in case of heavy rain.
- Wet scrubbers installed as Dust Extraction Systems for the Feed End of the Induration Building (Thermax make) as well as in Hearth Layer Separation Building for arresting fugitive dust emission. Only clean gases are vented through the stack of adequate height.
- Fog cannon was installed at HSLB area to minimise dust emission while Pellet dumping.
- New RCC drains, RCC roads and black topped roads have been made to reduce fugitive dust emission and smooth water flow.
- All trucks carrying raw materials to Plant are covered with tarpaulin to prevent spillage and thus conserve natural resources.
- 02 numbers of dedicated Road sweeping vehicle have been engaged to clean all the internal roads.
- 05 numbers of EV vehicles are provided for movement of employees and workers inside the plant areas which reduces the fossil fuel consumption CO2 emission to great extend.
- Wheel washing system is installed for washing of truck wheels at the time of exit from raw material yard.
- STP (Sewerage Treatment Plant) of capacity 15KLD of MBBR (Moving Bed Bio-film Reactor) based technology is installed and treated water is used for green belt development.
- The excess water remains on the surface, building roof, and flows down the slope as runoff towards a pit which are further treated by Surface runoff treatment plant of capacity 160m3/hr.
 This treated water is being taken for reuse in the plant activities.
- Transportation of iron ore pellets through non-polluting closed conveyor system from Plant to Paradeep Port.
- Heavy noise generating equipment like blowers/fans, compressors are provided with acoustic barriers and Proper grouting provided for equipments to avoid rattling and vibrations.
- Due to Wet process of Iron ore grinding, the water is recycled and kept in closed circuit through thickeners, so that there is no discharge of waste water.

- Collection of iron ore dust through ESP, Wet Scrubber and Bag Filters that is recycled through the thickener. Thus, the valuable raw material is re-utilised/ re-used. The Limestone/ Bentonite/ Coke dust collected in the Additive Grinding and Mixing Bag Filters is completely recycled/ re-utilised.
- The excess water from the slurry pipeline is being reused within the pellet plant or provided to nearby power plant after treatment through Water Treatment Plant of capacity 550 m3/Hr.
- To reutilize the spillage water, process overflow in the operational areas, pits with sump pumps are installed at strategic locations.
- Thickener is used to treat the process of water before reuse/recycle.
- Total 55250 nos of saplings planted over an area of 16.14Ha as green belt i.e 30% of total plant area 54.65 Ha Has been covered under green belt now.
- Biomedical wastes generated from the medical centre are handed over to authorized vendor for safe disposal.
- Housekeeping drives are being conducted for various areas and overall housekeeping of the
 plant is being maintained by dedicated team and equipment to maintain a good environment
 inside the plant.
- All the internal and approach roads have been black topped and concreted to avoid fugitive emissions.
- External training on Environmental topics are being imparted to the workmen on regular basis for awareness.
- Total expenses occurred in pollution control measures in F.Y 2024-25 is Rs. 6.94 Cr i.e the impact of environmental pollution control measures on cost of production is Rs. 11.85/T.

PART -H

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

- 3rd Party Hazardous Waste Audit was carried out by M/s Ecokart Technology Pvt Ltd, Bhubaneswar for the period Apr'2024 to Mar'2025 was conducted on 20.06.2025.
- World Environment Day and Sustainability Week, Van Mahotsav Earth Day and coastline clean-up day were celebrated as per yearly calendar with active participation from the employees and Associates.
- Total 1050 numbers of saplings planted in F.Y 2024-25 inside plant premises.
- Furnace oil was completely replaced with natural gas in all processes of pellet plant as per the fuel policy notified by govt. of Odisha.
- New organic waste composter machine has been installed and commissioned for preparation of manure from organic waste.
- Wind screen has been installed to control fugitive emissions towards Musadiha village and IFFCO township.
- 02 nos of new CAAQMS have been installed and data transmission to OSPCB server has been completed.

PART - I

MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution

- Additional 400 mtrs of Wind screen to be installed to control fugitive emissions towards Musadiha village and IFFCO township as per additional condition imposed in CTO.
- 2 nos. Piezometers shall be installed at 2 locations of the plant to monitor the level of ground water in plant.
- 5000 saplings were planned to be planted in vacate space of Pellet Plant in FY 25.

Photographs in support of Environmental Statement, Pellet Plant, AM/NS India (P) Ltd, Paradeep









Photographs of Electrostatic precipitator and Wet scrubber installed to capture for Dust generated from process





Photograph of Wind screen installed to control fugitive emission towards Musadiha village & IFFCO township



Photographs of fixed water sprinklers on plant road





Photographs of water sprinklers installed at yard and pellet transfer point





Photographs of dry fog system and fog cannon installed at transfer point





Photograph of installed Surface Run off Treatment Plant of capacity 160 m3/Hr



Photograph of installed Water Treatment Plant of capacity 550 m3/Hr









Photographs of Environmental Monitoring station (Weather monitoring, CAAQMS, CEMS and IP Camera)





Photohgraphs of Thick plantation inside plant and around boundaries





Photographs of plant internal roads





Photographs of settling Pits





Photographs of storage of Raw material under Shed





Photographs of toe wall around the raw material yard



Photograph of Sewage Treatment Plant







Photograph of CAAQMS and Manual Ambient Air Monitoring station





Photographs of Road sweeping vehicles engaged on the Plant internal road



Photograph of Wheel Washing System





Photographs of electric golf cart vehicles provided for workmen



Photograph showing digital display of environmental information at plant main gate



Photograph of Hazardous waste storage shed





Photographs of Biomedical waste management facility





Mass Plantation drive









Fruit bearing Sapling distribution



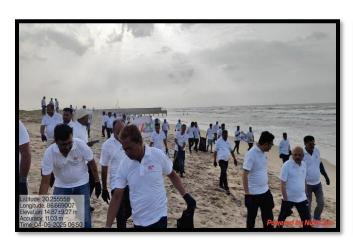


Housekeeping drive was organized in plant





Training on Environmental Awareness for both Employees & Contractor Workmen





Mass Sea beach cleaning drive was organized at Paradeep Sea beach area





Housekeeping audit was conducted in Pellet Plant, Power Plant and AMNS Ports.





Distribution of Jute bags with Stainless steel water bottles to Employees





Photographs of Environmental Signages displayed around the plant.











Reward & Recognition on the Celebration of World Environment Day and Sustainability week







Photograph of Awareness campaign in the presence of SPCB
