



Ref. No. TSLMD/ENV/26-08/27

Date: 05/08/2026

To
The Environmental Engineer & Regional In-charge
West Bengal Pollution Control Board, Regional Office,
P.S: Bhabanipur, Raghunathchak,
PO: Barghasipur, Haldia,
Dist-Purba Medinipur, Pin-721657

Sub: Submission of Environmental Statement in FORM-V for the year 2025-2026

Dear Sir,

We hereby submit the Environmental Statement of Tata Steel Limited, Metaliks Division (Formerly known as Tata Metaliks Limited) in FORM-V for the year 2025-2026.

Please acknowledge & receive the same.

Thanks & regards,

For Tata Steel Limited, Metaliks Division

Ujjal Ghosh
Factory Manager & Chief Operations Metaliks

Encl. as above

Copy to: Chief Engineer (O&E), West Bengal Pollution Control Board, Paribesh Bhawan,
Kolkata 700106

TATA STEEL LIMITED

FORM V

(See rule 14)

Environment Statement for the financial year ending with 31st March 2026

PART - A

i.	Name and address of the owner / occupier of the industry	Mr. T.V. Narendran, CEO & MD M/s Tata Steel Limited, Metaliks Division Vill- Mahreshpur, P.O. - Samraipur, P.S.- Kharagpur (Local), Dist - Paschim Medinipur. State-West Bengal, Pin - 721301.
ii.	Industry category Primary- (STC Code) Secondary- (STC Code)	Red 21-500003
iii.	Year of establishment	1994 (Pig Iron Division) 2010 (Ductile Iron Pipe Division)
iv	Production Capacity - Units	Hot Metal : 750000 TPA Ductile Iron Pipe : 500000 TPA
v.	Date of last environment statement submitted:	11 th September 2025.

PART - B

Water and Raw Material Consumption:

i. Water consumption in m ³ / d		
	PI Division	DIP Division
	m ³ / d (appx.)	m ³ / d (appx.)
Process (including wash)	997	855
Cooling	1106	
Domestic	183	70
Total	2286	825

Name of Products	ii. Process water consumption per unit of product output	
	During the current financial year - 2024 - 25	During the current financial year - 2025 - 26
Hot Metal	1.34 m ³ /T of Hot Metal	1.53 m ³ /T of Hot Metal
Finished Pipe	1.43 m ³ /T of Finished Pipe	1.19 m ³ /T of Finished Pipe

iii. **Raw material consumption:**

Raw material consumption			
Name of raw materials*	Name of Products	Consumption of raw material per unit of output (kg/ton of output)	
		During current financial year- 2024-25	During current financial year- 2025-26
For Pig Iron Division			
1. Iron Ore	Hot Metal	405	437.78
2. Mn Ore		0.24	1.39
3. Limestone		7.53	8.34
4. Dolomite		4.58	1.58
5. Quartzite		44.92	44.91
6. Coke		497.29	495.00
7. Sinter		1010.51	1024.97
8. PCI (CDI) Non-Coking Coal		115.30	121.42
9. Ferro-Silico Manganese		3.35	4.50
10. FESI, Size: 4 TO 25 MM		3.54	6.45
For Ductile Iron Pipe Division			
1. Hot metal (T/T)	Ductile Iron Pipe	0.928	0.960
2. Steel scrap (T/T)		Not used	Not used
3. Ferro silicon (T/T)		0.0060	0.0042
4. Calcium Carbide		Not used	Not used
5. Mg wire & ingot (T/T)		0.0010	0.0012
6. Silica Sand (T/T)		0.034	0.031
7. Resin (ml/T)		0.00049	0.00047
8. Hardener (ml/T)		0.00047	0.00046
9. Catalyst (ml/T)		0.00008	0.00008
10. Core Paint (ml/T)		0.00073	0.00079
11. Zinc wire (T/T)		0.00354	0.00409
12. Cement (T/T)		0.0743	0.0728
13. River Sand (T/T)		0.130	0.130
14. Black Bitumen (ml/T)		0.0033	0.0032

**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

Pollutant discharged to Environment / unit of output (Parameter as specified in the consent issued)

(a) Water:

S.N	Parameter	UoM	Waste water treatment plant Outlet at CPP-3 (reused in the process)	ETP Outlet at Ductile Iron Pipe Plant (reused in the process)	ETP 450KLD Outlet at Hot Metal Division (reused in the process)
1.	pH	--	7.94	7.34	7.51
2.	Total Suspended Solids (TSS)	mg/l	13.5	78.13	2.35
3.	Chemical Oxygen Demand (COD)	mg/l	53.1	36.4	29.8
4.	Bio-chemical Oxygen Demand (BOD)	mg/l	14.4	19.7	7.6
5.	Oil & Grease	mg/l	4.03	2.85	2.75

Remarks:

1. No process wastewater is discharged outside the plant.
2. No deviation from Prescribed standard.
3. Treated wastewater is being reused for process make up for MBF, Captive Power Plant & for dust suppression (high pressure fog & dry fog system) at work zone areas, road dust suppression by mobile tankers/ Fog canon system.
4. Treated wastewater from ETP of Ductile Iron pipe making plant is recycled back in process as well as used for service water purpose.
5. Another effluent treatment plant of 450 m³/d has been installed & under operation to reuse treated water as CPP-4 MW for cooling tower makeup.

(b) Air: Stack emission-

S.N.	Pollutants	Quantlty of Pollutants discharged (mass/day)	Concentration of pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons
	Particulate Matter	Kg/day	mg/ Nm ³	Below than the prescribed standard.
1.	MBF Stove – I	34.52	15.47	(-) 84.5 %
2.	MBF Stove - II	19.97	9.78	(-) 90.2 %
3.	MBF#1- Casthouse Fume extraction System	53.68	18.99	(-) 81.0 %
4.	MBF#2- Casthouse Fume extraction System	35.39	13.37	(-) 73.3 %
5.	CPP-4MW (BFG fired)	13.49	8.22	(-) 91.8 %
6.	CPP-15 (Coke oven WHRB & BFG)	31.59	12.02	(-) 92.0 %
7.	Sinter Head ESP	125.13	26.51	(-) 73.5 %
8.	Sinter Tail ESP	164.19	44.27	(-) 55.7 %
9.	RMHS-1 Sinter storage bin	48.05	13.56	(-) 86.4 %
10.	RMHS-2 Sinter storage bin	12.49	15.05	(-) 85.0 %
11.	Flux crusher stack	8.18	9.35	(-) 90.7 %
12.	RFP bag filter	50.03	34.37	(-) 65.6 %
13.	MGT & IF (Common) Stack.	0.97	4.91	(-) 95.1 %
14.	Zn Coating m/c FL-1	3.18	10.38	(-) 89.6 %
15.	Barrel & Socket Grinders Stack	7.13	17.69	(-) 82.3 %
16.	Zn Coating m/c FL-2	11.56	22.21	(-) 77.8 %
17.	Tri-Grinding Stack FL-2	4.97	10.00	(-) 80.0 %
18.	Zn Coating m/c FL-3	6.12	12.57	(-) 74.9 %
19.	Tri-Grinding Stack FL-3	0.86	5.60	(-) 88.0 %
20.	Annealing Furnace regeneration unit	5.22	9.29	(-) 90.7 %
21.	Annealing WHR Boiler 8 TPH	6.51	16.32	(-) 83.7 %
22.	Sand Cleaning System stack	0.50	3.59	(-) 96.4 %
23.	Induction furnace Stack (LDP)	3.09	6.27	(-) 87.5 %
24.	Magnesium Converter (LDP)	3.76	5.19	(-) 89.6 %
25.	Zn Coating Stack FL-4	17.36	17.7	(-) 64.6 %
26.	Tri-grinding Bag filter FL4	6.62	13.2	(-) 73.6 %
27.	Zn Coating Stack FL-5	3.76	5.90	(-) 88.2 %
28.	Tri-grinding Bag filter FL5	2.05	5.22	(-) 89.6 %
29.	Core Shop (LDP)	1.30	4.60	(-) 90.8 %
30.	Mould Shop (LDP)	1.84	6.40	(-) 87.2 %
31.	Annealing Furnace Air Chimney flue gas exit (LDP)	9.85	13.25	(-) 73.5 %

PART - D

HAZARDOUS WASTES:

[As Specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016]

S.N.	Hazardous Wastes	Total Quantity (Kg)	
		During the current financial year (2024-25)	During the current financial year (2025-26)
1.	From Process	Used Oil – 4.82 MT (from PI Division) Waste Oil – 22.73 MT (from DI Pipe) Resin, Hardener – 3.47MT Empty container/Paint drum- 13.688 MT. Spent Ion Exchange Resin- 0 MT Copper Waste Scrap- 0 MT	Used Oil (PI +DI Pipe)- 46.53 MT. Resin, Hardener – 2.06MT Empty container/Paint drum- 261.46 MT. Spent Ion Exchange Resin - 0.09 MT Copper Waste Scrap- 14.58 MT
2.	From Pollution Control Facilities	Flue gas dust & GCP sludge - 27458 T (appx.) Zinc Dust – 728.0 MT	Flue gas dust & GCP sludge - 26461 T (appx.) Zinc Dust – 626.5 MT

PART - E

SOLID WASTES:

S.N.	Solid Wastes	Total Quantity (Ton)	
		During the current financial year (2024-25)	During the current financial year (2025-26)
a.	From process	315195.39 Ton appx. (Iron sweepings, slag & iron scraps, DI pipe scrap) Waste core sand-14688.25 MT	295512.68 Ton appx. (Iron sweepings, slag & iron scraps, DI pipe scrap) Waste core sand-8114.79 MT
b.	From Pollution Control Facility	Flue gas dust & GCP sludge - 27458 T (appx.) Magnesium Oxide – 90 MT. Zinc Dust – 728.0 MT.	Flue gas dust & GCP sludge - 26461 T (appx.) Magnesium Oxide – 85 MT. Zinc Dust – 626.5 MT.
c. 1)	Quantity recycled or reutilized within the unit	12439.64 MT (pipe scrap) Magnesium Oxide – 90 MT.	9813.76 MT (pipe scrap) Magnesium Oxide – 85 MT.
2)	Sold	302755.75 Ton appx.	285689.92 Ton appx.
3)	Disposed	Nil	Nil
4)	Stored	Nil	Nil

PART – F

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

The waste oil/ used oil is being stored in the MS drum on the concrete floor with secondary containment facility & finally disposed of through authorized external agencies.

Other Solid Wastes	Composition/ Nature of waste	Disposal Practices
Iron Ore Dust	Fe (61.1%) Al ₂ O ₃ (3%)	Reuse for Sinter making process
Scrap Iron (flashing and skulls)	Fe (90%)	Sale
Coke Dust	C (85%)	Reuse for Sinter making process
Dust from cyclone separator	Iron Ore (69%), coke, limestone dust and dust from other fluxes that are fed into blast furnace	Reuse for Sinter making process
Iron Scrap	Non Hazardous	Recycling or sell off as scrap
Magnesium Oxide Dust	Non Hazardous	Use in Sinter plant
Waste Core Sand	Non Hazardous	Land development within Plant premises & reuse in process.
Cement Sand dust	Non Hazardous	Low laying area filling within Plant premises.
Zinc Dust	Hazardous	Sell off to authorized agency
Used Oil	Hazardous	Sell off to authorized agency
Resin, Hardener	Hazardous	Disposed off through CHW-TSDF
Empty Barrel/container paint drum	Hazardous	Sell off to authorized agency or Disposed off through CHW-TSDF
Spent Ion Exchange Resin	Hazardous	Disposed off through CHW-TSDF
Waste Copper wire cable	Hazardous	Sell off to authorized agency

Tata Steel Ltd. Metaliks Division(TSLMD) has been accorded authorization for Hazardous Waste storage and disposal. Hazardous wastes are mainly sold to authorized agency or reused inside plant premise or disposed off through CHWTSDF. All the required statutory documents and records are being maintained in prescribed format and submitted as per the statute (Form 10 & Form 4) within stipulated timeframe.

PART - G

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

1. Energy conservation initiatives including solid fuel, liquid fuel, electrical & thermal energy conservation were executed thereby minimizing greenhouse gas emission.
 - a. Introduction of high efficiency BFG burner for efficient combustion and HSD cost reduction.
 - b. Installation of another 1.8 MWp roof top solar power plant at new ductile iron pipe unit shed
 - c. Installation of Coke Drying unit (25 TPH) to reduce coke moisture using hot exhaust air from sinter cooler zone 3&4, thereby reducing MBF-2 Coke Rate.
 - d. Install Hot Exhaust Air Based Boiler at Cooler Zone 1&2 and Generate Steam to Use in New DI Plant (9TPH, 10 kg/cm² pressure and 185 Deg C temperature).
 - e. Increasing Feed water temperature through a HP heater to reduce THR and BFG consumption at CPP-2 boiler.
 - f. Installation of fan less zero drift loss cooling tower for MBF1 and DIP-1 (Power saving 120 KW)
 - g. Nut Coke consumption with lime & ESP dust coating to improve RI (Reducibility index) for fuel rate reduction.
 - h. HSD consumption reduction in annealing furnace & power plant by burner modification.
 - i. Tower Crane installation is in progress in weigh bridge to reduce excavator engagement time & HSD consumption.
 - j. Installed variable-frequency drives (VFDs) in various HT (high tension) & LT (low tension) loads at Sinter Plant, MBF & CPP.
 - k. Furnace top camera in MBF-1 for continuous gas flow monitoring inside furnace for improving Fuel rate by stable F/C operation.
 - l. Skid upgradation & Pipeline modification in O2 Plant to maintain 6% O2 enrichment in both furnace after MBF-2 start-up.
 - m. Increase Sinter Burden in MBF-1 by changing Sinter Plant screen size from 5 mm to 4 mm.
 - n. Pressure Optimization of air compressor (3 No.s) at MBF-2 (7.5 kg/cm² to 5 kg/cm²).
2. Installed higher efficiency Electrostatic Precipitator (ESP) at Sinter Plant (Head ESP) to significantly reduce emissions.
3. Cyclone separator assembly was retrofitted to the existing de-dusting system of Ductile Iron Pipe unit & Sinter plant thereby reducing point source emission.
4. Online Connectivity of Continuous Emission Monitoring System has been done for 36 analyser in the new ODAMS portal of CPCB. Comprehensive Annual Maintenance Contract has been provided to 3rd party as well as OEM of analyser for regular monitoring maintenance, data transmission and calibration of the equipment.
5. 2418 nos. of tree saplings are done for green belt development inside plant premises in FY'26.
6. Wind Shelter fencing has been installed for raw material yards to prevent fugitive dust emission.
7. Fixed type water sprinklers & truck mounted Fog canon system are being used for dust suppression using recycled water.
8. Construction of covered shed has been made in coal yard area to reduce fugitive dust emission in surrounding area.

9. Installed of 4 nos. Continuous Ambient Air Quality Monitoring System inside & outside of plant & data displaying through digital display board at Main gate of plant for stakeholders.
10. Installation of Sonic Soot Blowing technology for increasing the collecting efficiency in Head ESP & RFP bag house of Sinter Plant.
11. Installation of real time water consumption monitoring through IOT based ultra-sonic flowmeters at all borewell for capturing the data through dashboard.
12. Installation of Sewage Treatment Plant for utilization of treated water for gardening purpose.
13. Installation of DG set 2250 KVA as emergency power back up.

During FY'26 the environmental parameters stipulated by MoEF&CC, WBPCB have been monitored and was found to be within the permissible limit. The report has been submitted to RO, MoEF&CC and WBPCB, Haldia as well as Kolkata office along with the six-monthly Environment Clearance compliance report.

PART - H

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

Environment protection measures in FY'26

S.N.	Description of environment protection measure executed/ in advanced stage of completion in FY'26	Investment Amount (₹ in lakh)
1.	Install sinter cooler WHRB (9TPH) 10.5 Kg/cm ² to generate & supply steam for DIP -2 curing therefore save BFG & generate 1.6 MW power	700.0
2.	Installing Coke drying System 25 TPH at RMHS#1 bunker by using hot exhaust gas of Sinter Cooler zone for moisture reduction.	900.0
3.	Installation of Sewage Treatment Plant 30 KLD for domestic sewage water treatment	99.9
4.	Installation done for Reverse Osmosis (RO) Plant 30 m ³ per hr. at Ductile Iron Pipe Unit.	41.3
5.	Installation of Fanless & finless cooling tower to save water and energy consumption in DIP unit & Iron-making unit.	150.0
6.	Hiring of truck mounted fog canon system for water sprinkling to control fugitive dust for Raw material Stock, inside and out side plant road.	16.06
7.	CMC for O&M of 4 number CAAQMS	42.3
8.	CMC for O&M of 36 number CEMS	80.0
9.	Installation of grid connected battery less 1.8 MW solar power system at DIP-2 unit	700.0
10.	Installation of Sonic Soot Blowing technology for increasing the collecting efficiency in Head ESP at Sinter Plant	4.4
11.	Enhancing Bag Filter Performance of RFP by Installation of Sonic Soot Blowing Technology	1.9
12.	Electrical Energy Conservation initiatives through power generation through microturbine with PRDS unit in CPP-2	180.0

13.	Green belt augmentation (2418 nos. of saplings) inside plant & for plantation at nearby community (9711 nos. of saplings) from Apr25 to Mar26	6.5
14.	Wind shelter fencing is constructed near Iron ore yard & horizontal deployment	5.0
15.	IOT Based Smart Ultrasonic Water Flow Meters Installation	30.0
16.	Installation of micro turbine with pressure reducing system	210.0
17.	Upgradation of Induced Draft (ID) fan at tail side of Electrostatic Precipitator (ESP) in Sinter Plant	74.0
18.	Renewable Consumption Obligation (RCO) Compliance audit by BEE accredited agency	1.75
19.	Hiring of Road Sweeping Machine (DULEVO- 5000) for reduction of fugitive dust on inside plant road.	78.0

PART - I

MISCELLANEOUS:

Any other particulars for improving the quality of the environment.

TSLMD (erstwhile TML) carried out detailed GHG emission inventorisatation & BRSR third-party verification of the same. TML received 4.5 star and 2d runner up award for CII – ENCON Energy Excellence Award.

TSLMD (erstwhile TML) has been awarded for Gold rating in GreenCo assessment by CII- Sohrabji Godrej Green Business Centre. This is a performance-based assessment framework launched in 2013 by CII Godrej GBC (Green Business Centre) to define & assess how green a unit is.

A separate Environment Management Cell is set up under the control of plant Head to oversee effective implementation of environment protection measures and to monitor the routine environmental performance within the premises.

We organize a weeklong event to celebrate World Environment Day through which we create a lot of awareness among employees and nearby villagers on the importance of protecting our environment, considering the current global and local environmental issues & tree plantation drive within plant and surrounding community.


5/8/2026

Authorised Signatory