



**The Member Secretary
State Pollution Control Board, Odisha
Paribesh Bhawan,
A/118, Nilakantha Nagar, Unit - VIII
Bhubaneswar - 751012**

MD/ ENV/238/120/ 2026
Date: 24th September 2026

**Sub: Environmental Statement of Kalamang West (Northern Part) Iron Ore Mines, M/s
Tata Steel Limited for 2025-26.**

Dear Sir,

Kindly find attach herewith the Environmental Statement in the prescribed format (Form V) as per "Environmental (Protection) Amendment Rules 1992" of our Kalamang West (Northern Part) Iron Ore Mines for your kind perusal for FY'25-26.

Thanking you,

Yours faithfully

(Abinash Das)
Area Manager (Environment), OMQ

Encl: As above

Copy to: The Regional Officer, State Pollution Control Board, Near Hockey Chowk, Panposh,
Rourkela, Odisha 769004

TATA STEEL LIMITED

Mines Division Noamundi 833 217 India
Tel 91 9234301340 Fax 91 6596 290737

Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001
Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

ENVIRONMENT STATEMENT 2025-26



Kalamang West (Northern Part) Iron ore Mines

KALAMANG WEST (NORTHERN PART) IRON ORE MINE

TATA STEEL LIMITED

September 2026

FORM - V
(See Rule -14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH, 2026

KALAMANG WEST (NORTHERN PART) IRON ORE MINE, TATA STEEL LIMITED

PART-A

1	Name and address of the owner/ occupier of the industry, operation or process	:	Owner: Mr. T V Narendran, Managing Director & CEO, Tata Steel Limited, PO: Jamshedpur, Dist.: East Singhbhum, Jharkhand-831001 Agent: Mr. Dipak Behera, Chief (Kalamang & Gandhalpada Project) Kalamang West (Northern Part) Iron Ore Mine Tata Steel Ltd, Joda Dist.- Keonjhar, Odisha – 758034 Manager: Mr N.K. Srinivas Rao, Mine Manager, Kalamang West (Northern Part) Iron Ore Mine Tata Steel Limited, Joda Dist.- Keonjhar, Odisha – 758034
	Nominated Owner	:	Mr. Debashis Jena, General Manager, OMQ division, Administrative Building, Noamundi Iron Mine, Tata Steel Limited PO.: Noamundi, Dist.-West Singhbhum Jharkhand – 833217
2	Industry Category	:	Opencast Iron Ore Mining, Crushing & Screening (Major)
3	Production Capacity*	:	Mining: 2.95 MTPA Iron Ore (ROM)
4	Year of Establishment	:	Mine operation has started in Novemeber'25.
5	Date of last Environmental Statement submitted.	:	08 th September'2025

*As per Environmental Clearance

PART-B

Water and Raw Material Consumption

(i) Water Consumption:

<u>Consumption Head:</u>	<u>2024-25</u> <u>(in Cu.m/day) (Annual</u> <u>Average)</u>	<u>2025-26</u> <u>(in Cu.m/day) (Annual</u> <u>Average)</u>
Process	0	0
Spraying in mine pit, services	0	0.08
Domestic	0	0
Name of the product	Process water consumption per product (m3/MT)	Process water consumption per product (m3/MT)
Iron Ore	0	0.06

The iron ore processing is dry crushing and screening only. Dust suppression at C&S plant will be carried out through a scientific way using dry fog system, thus reducing the requirement of water to very minimum level.

ii) Raw Material Consumption

The following items have been consumed/ utilized:

Name of Raw Materials	Consumption of Raw Material	Consumption of Raw Material
	During current financial year (2024-25)	During current financial year (2025-26)
High Speed Diesel	0	9029 litres
Lubricants	0	107 litres
Grease	0	34 Kg
Explosive of all types (Explosive, codex, detonator)	0	0
Gas	0	0
Tyres	0	0
Drill rods	0	0
Electricity Consumed	0	0
Electricity Generated	NA	0

PART-C POLLUTION DISCHARGED TO ENVIROMENT/ UNIT OF OUTPUT (Parameters as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass / day)	Concentration of Pollutants discharges (mass / day)	Percentage of variation from prescribed standards with reasons
a) Water	The mine commenced development activities in November 2025 and is currently in the development stage. At present, no wastewater is being discharged from the mine premises. Surface runoff generated within the mining area is being effectively channelized and managed through settling ponds located within the lease area. The installation of an Effluent Treatment Plant (ETP) and Sewage Treatment Plant (STP) has been proposed for the mine premises, and the necessary provisions and implementation activities are currently under progress. Upon commissioning, the treated water from the ETP and STP will be reused for dust suppression (water sprinkling) and horticultural activities within the mine area. The project is designed to maintain a Zero Liquid Discharge (ZLD) system, ensuring that no treated or untreated effluent is discharged outside the mine premises. Water quality report for surface water in buffer zone is attached as Annexure-1		
b) Air	The Kalamang West (Northern Part) Iron Mine is a proposed opencast iron mine with crushing & screening plant. The air quality in the form of fugitive, dust fall, ambient, respirable has been measured and monitored regularly and is well within limits. Air monitoring is being conducted in buffer zone. 3 continuous ambient air quality monitoring stations with PM₁₀, PM_{2.5}, SO_x, NO_x, (NO₂ & NO) & CO parameters have been planned to be installed. The results of air quality monitoring are attached as Annexure-2.		

PART-D
HAZARDOUS WASTES

As specified under the Hazardous & Other Waste (Management & Trans boundary Movement) Rules, 2016 and amendment thereof

Hazardous Wastes	Total Quantity	Total Quantity
	During previous financial year (2024-25)	During previous financial year (2025-26)
(a) From Process - Used Oil - Waste containing Oil - Lead Bering residues (Batteries etc) - Rejected & used hose pipes	NA	NA
ii) From Pollution Control Facility - Waste oil from oil & grease separation pit - Sludge from oil and grease separation pit	All the Hazardous waste generated will be disposed as per law. Nil (Included in process)	All the Hazardous waste generated will be disposed as per law. Nil (Included in process)

PART-E
SOLID WASTES

Solid wastes from Kalamang West (Northern Part) Iron ore mines are Overburden/rejects removed during mining operations. All the materials overburden will be stacked at designated place inside the mine as per the approved Mine Plan. However, other solid waste (scrap material, used conveyor belts, tyres etc.) from mining activity will be stored at designated place.

Sources	Total Quantity	Total Quantity
	During previous financial year (2024-25)	During previous financial year (2025-26)
a) From Process - From mining as Overburden - Rejects	NIL	7523.20 m ³
b) From Pollution Control Facility	NIL	
c) i. Quantity recycled or reutilized within the unit	NIL	
ii. Quantity sold General Office waste		
iii. Quantity disposed Mining overburden		7523.20 m ³ (Disposed in Designated Dumps)

PART-F

PLEASE SPECIFY THE CHARACTERISTICS (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES

The mine commenced development activities in November 2025 and is currently in the development stage. The used oil will be generated from HEMM maintenance, which are used in mining operations. The used oil will be disposed to authorized agency for recycling and reuse. The hazardous waste such as used batteries is sold to authorized agency.

The other solid waste in the form of overburden and sub-grade mineral are stocked in designated place.

PART-G

IMPACT OF POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

- For conservation of natural resources, high efficiency HEMM will be used with adequate maintenance so as to reduce the fuel consumption. Zero effluent discharge will be maintained.
- For ground water augmentation, various rainwater harvesting structures will be developed in future in the buffer zone which will harvest the groundwater.
- Scientific mining along with mixing of ore of different grades for conservation & common boundary mining will be practiced for conservation of mineral.

PART-H

ADDITIONAL MEASURES/ INVESTMENT PROPOSAL FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION, PREVENTION OF POLLUTION

Mine operation has not started till date. Below mentioned are some measures proposed for abatement of pollution.

- Settling ponds will be conducted for storage of surface runoff.
- Construction of toe walls, garland drains along with check dams will be done for arresting silts from overburden dumps.
- Awareness programme such as World Environment Day, Biodiversity Day, Swachhata pakhwada, Earth Day was organised for creating awareness of people.
- In addition, Tata Steel Foundation (TSF) is engaged in peripheral developmental activities in villages around the mine. The projects of the Society include irrigation and agricultural extension projects, plantation programmes, creation of SAVE FOREST groups, civic amenities development, medical care and health education, rural sports and skill development, rural cultural promotion etc.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- The Company is having a full-fledged Environmental Management Department with personnel from different backgrounds to take care of all environmental aspects relating to mines of Tata Steel. This department has in house capabilities for monitoring various environmental parameters and suggesting to the management necessary abatement measures.
- Various awareness programs throughout the year conducted in the area which included celebration of World Environment Day, World Water Day, Mine Environment & Mineral Conservation Week, World Bio-diversity Week, Annual Flower & Vegetable Show etc. In which environment conservation models, current & future proposals are made, environment messages through Nukkad natak, poems, slogans, swachhata drive has been conducted every year.

Rishi Raj Kashyap

**Sr. Manager (Environment),
Kalamang West (Northern Part) Iron Ore Mine
Tata Steel Limited**

Surface Water Quality Data 2025-26
Kalamang West (Northern Part) Iron Ore Mine
(Annual Average)

Test Parameter	Sona River Upstream (SW-1)	Sona River Downstream (SW-2)	Measurement Unit	Standards
Total Colifom	198.50	263.50	MPN/100 ml	Max 5000
pH value	6.90	7.22	-	6.5 to 8.5
Colour	7.27	9.55	Hazen	Max 300
Dissolved Oxygen	3.90	3.53	mg/l	Min 4.0
Total Suspended Solid (asTSS)	43.87	40.15	mg/l	-
BOD (3 days at 27°C)	3.15	2.14	mg/l	Max 3.0
Chemical oxygen demand	10.95	11.23	mg/l	-
Total Dissolved Solids (TDS)	1336.73	1219.36	mg/l	Max 1500
Copper (as Cu)	0.13	0.09	mg/l	Max 1.5
Chloride (as Cl)	369.65	327.20	mg/l	Max 600
Sulphate (as SO ₄)	337.02	298.46	mg/l	Max 400
Nitrate (as NO ₃)	27.82	116.07	mg/l	Max 50
Fluoride (as F)	1.05	1.39	mg/l	Max 1.5
Iron (as Fe)	0.40	0.36	mg/l	Max 1.0

Note: BDL – Below detection limit.

AIR QUALITY DATA 2025-26
Average Air quality of Kalamang Iron ore Mine of FY'26

Summarized Ambient Air Quality Monitoring Report of Core & Buffer Zone								
Kalamang Iron Ore Mine of M/s TATA Steel Limited								
Period: Apr 2025 to September 2025								
Mine location	Sampling Location	Month	Range	Parameters				
				PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)	CO (mg/m3)
Kalamang Iron Ore Mine of M/s TATA Steel Limited	Near Guali Village (Buffer Zone)	Apr-25	Avg	57.94	22.4	12.51	22.68	BLQ(LOQ-0.5)
		May-25	Avg	57.2	21.61	11.62	21.73	BLQ(LOQ-0.5)
		Jun-25	Avg	62.41	24.97	9.66	19.73	BLQ(LOQ-0.5)
		July-25	Avg	56.15	21.77	11.18	20.35	BLQ(LOQ-0.5)
		Aug-25	Avg	51.87	20.37	10.8	20.21	BLQ(LOQ-0.5)
		Sep-25	Avg	53.36	21.33	11.08	20.12	BLQ(LOQ-0.5)
	Near Kalamang Village (Buffer Zone)	Apr-25	Avg	59.94	21.44	12.02	22.1	BLQ(LOQ-0.5)
		May-25	Avg	59.53	21.47	11.55	21.63	BLQ(LOQ-0.5)
		Jun-25	Avg	57.35	22.9	9.28	18.2	BLQ(LOQ-0.5)
		July-25	Avg	55.7	20.98	11.57	19.56	BLQ(LOQ-0.5)
		Aug-25	Avg	57.76	21.55	10.45	17.77	BLQ(LOQ-0.5)
		Sep-25	Avg	56.78	22.87	11.05	18.32	BLQ(LOQ-0.5)
	Near Katesahi Village (Buffer Zone)	Apr-25	Avg	56.97	21.9	12.38	22.25	BLQ(LOQ-0.5)
		May-25	Avg	56.23	21.2	11.67	21.06	BLQ(LOQ-0.5)
		Jun-25	Avg	48.11	22.5	6.27	15.6	BLQ(LOQ-0.5)
		July-25	Avg	55.26	21.71	11.05	19.22	BLQ(LOQ-0.5)
		Aug-25	Avg	52.54	19.86	10.32	19.82	BLQ(LOQ-0.5)
		Sep-25	Avg	51.32	21.81	11.12	18.12	BLQ(LOQ-0.5)
	Near Gandalpada Village (Buffer Zone)	Apr-25	Avg	58.97	21.64	12.3	21.27	BLQ(LOQ-0.5)
		May-25	Avg	59.37	22	12.47	21.81	BLQ(LOQ-0.5)
		Jun-25	Avg	56.3	22.37	9.18	19.08	BLQ(LOQ-0.5)
		July-25	Avg	54.27	22.43	13.71	20.87	BLQ(LOQ-0.5)
		Aug-25	Avg	58.78	21.41	11.23	20.05	BLQ(LOQ-0.5)
		Sep-25	Avg	56.45	21.54	10.54	19.34	BLQ(LOQ-0.5)
	Near Malda Village (Buffer Zone)	Apr-25	Avg	59.55	24.04	12.3	21.14	BLQ(LOQ-0.5)
		May-25	Avg	60.67	23.8	12.5	21.1	BLQ(LOQ-0.5)
		Jun-25	Avg	60.77	24.4	9.55	19.87	BLQ(LOQ-0.5)
		July-25	Avg	56	22.33	11.92	20.23	BLQ(LOQ-0.5)
		Aug-25	Avg	52.07	19.8	10.25	18.87	BLQ(LOQ-0.5)
		Sep-25	Avg	57.76	21.23	11.35	19.34	BLQ(LOQ-0.5)

Summarized Ambient Air Quality Monitoring Report of Core & Buffer Zone								
Kalamang Iron Ore Mine of M/s TATA Steel Limited								
Period: Oct 2025 to March 2026								
Mine location	Sampling Location	Month	Range	Parameters				
				PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)	CO (mg/m3)
Kalamang Iron Ore Mine of M/s TATA Steel Limited	Near Guali Village (Buffer Zone)	Oct-25	Avg	63.68	23.54	13.08	20.33	BLQ(LOQ-0.5)
		Nov-25	Avg	68.26	24.48	9.45	13.88	BLQ(LOQ-0.5)
		Dec-25	Avg	76.26	24.72	9.92	13.45	BLQ(LOQ-0.5)
		Jan-26	Avg	70.65	23.91	6.78	11.45	BLQ(LOQ-0.5)
		Feb-26	Avg	68.53	25.24	8.60	20.68	BLQ(LOQ-0.5)
		Mar-26	Avg	68.83	26.08	7.90	10.66	BLQ(LOQ-0.5)
	Near Kalamang Village (Buffer Zone)	Oct-25	Avg	58.96	22.17	14.79	22.56	BLQ(LOQ-0.5)
		Nov-25	Avg	66.01	28.01	11.49	15.70	BLQ(LOQ-0.5)
		Dec-25	Avg	69.49	26.13	9.40	13.92	BLQ(LOQ-0.5)
		Jan-26	Avg	69.18	25.22	10.00	12.92	BLQ(LOQ-0.5)
		Feb-26	Avg	65.15	23.20	8.64	22.24	BLQ(LOQ-0.5)

	Near Katesahi Village (Buffer Zone)	Mar-26	Avg	69.19	23.09	8.44	9.71	BLQ(LOQ-0.5)
		Oct-25	Avg	62.05	22.01	15.35	23.19	BLQ(LOQ-0.5)
		Nov-25	Avg	62.19	24.55	11.20	16.89	BLQ(LOQ-0.5)
		Dec-25	Avg	69.29	23.30	9.51	14.99	BLQ(LOQ-0.5)
		Jan-26	Avg	57.03	22.94	9.56	12.16	BLQ(LOQ-0.5)
		Feb-26	Avg	63.95	22.00	9.36	22.30	BLQ(LOQ-0.5)
		Mar-26	Avg	70.18	22.06	9.52	10.69	BLQ(LOQ-0.5)
	Near Gandalpada Village (Buffer Zone)	Oct-25	Avg	61.38	22.12	14.24	21.42	BLQ(LOQ-0.5)
		Nov-25	Avg	68.84	26.65	10.97	15.74	BLQ(LOQ-0.5)
		Dec-25	Avg	77.21	27.41	8.54	15.60	BLQ(LOQ-0.5)
		Jan-26	Avg	73.61	26.51	9.84	13.77	BLQ(LOQ-0.5)
		Feb-26	Avg	69.93	24.91	8.51	21.51	BLQ(LOQ-0.5)
		Mar-26	Avg	69.28	24.33	8.45	10.59	BLQ(LOQ-0.5)
	Near Malda Village (Buffer Zone)	Oct-25	Avg	59.38	23.32	13.74	21.41	BLQ(LOQ-0.5)
		Nov-25	Avg	64.01	24.69	10.28	13.15	BLQ(LOQ-0.5)
		Dec-25	Avg	72.59	25.70	9.34	16.39	BLQ(LOQ-0.5)
		Jan-26	AVg	70.08	26.51	12.86	14.20	BLQ(LOQ-0.5)
		Feb-26	Avg	65.70	24.04	10.29	22.24	BLQ(LOQ-0.5)
		Mar-26	Avg	68.89	22.28	6.87	8.61	BLQ(LOQ-0.5)

*