



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

MD/ ENV/ 247 /120/2026  
Date: 29<sup>th</sup> September 2026

**Sub: Environmental Statement of Manmora Manganese Mine, 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 Manmora Manganese Mine for your kind perusal.

Thanking you,

Yours faithfully  
f: Tata Steel Limited

**Area Manager (Environment), OMQ**

Encl: As above

**Copy to: The Regional Officer, State Pollution Control Board, At:  
Baniapata, College Road, Keonjhar - 758001, Odisha**

**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 India  
Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH1907PLC000260 Website [www.tatasteel.com](http://www.tatasteel.com)



# ENVIRONMENTAL STATEMENT

2025-26



**MANMORA MANGANESE MINE**

*TATA STEEL LIMITED*

SEPTEMBER 2026

**FORM V**  
**[See Rule 14 of Environment (Protection) Rules, 1986]**  
**ENVIRONMENTAL STATEMENT**  
**FOR THE FINANCIAL YEAR ENDING THE 31<sup>ST</sup> MARCH 2026**

**PART - A**

|       |                                                                                |                                                                                                                                                                                                                                                                                                                                                                              |
|-------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (i)   | Name and Address of the Owner / occupier of the industry operation or process. | : <b>MANMORA MANGANESE MINE</b><br><br><u>Nominated Owner :-</u><br>Mr. T.V. Narendran.<br>Managing Director, M/s TATA Steel Ltd.<br>Jamshedpur, Dist.- East Singhbhum<br>Jharkhand - 831 001<br><br><u>Agent:-</u><br>Sri. Rajesh Kumar<br>Chief (Joda East Iron Mine), Joda<br>O M & Q, Tata Steel Limited<br>P.O.: Joda, Via : Joda<br>Dist. : Keonjhar, Odisha - 758 034 |
| (ii)  | Industry Category                                                              | : Opencast Mining                                                                                                                                                                                                                                                                                                                                                            |
| (iii) | Production Capacity - Units                                                    | : 12,000TPA (Manganese Ore)                                                                                                                                                                                                                                                                                                                                                  |
| (iv)  | Year of Establishment                                                          | : 1956                                                                                                                                                                                                                                                                                                                                                                       |
| (v)   | Date of the last environmental statement submitted                             | : 26 <sup>th</sup> September 2025, through letter no. MD/ENV/340/120/2025 for the year 2024-25.                                                                                                                                                                                                                                                                              |

**PART - B**

**Water and Raw Material Consumption**

1. Water Consumption m<sup>3</sup>/day  
 Process: Nil  
 Cooling: Nil  
 Domestic: Nil \*

\*Domestic water is not required within the lease area as the employees are residing at Joda East Township which is situated under Joda East land lease.

| Name of the Products | <u>Process water consumption per unit of product output</u> |                                   |
|----------------------|-------------------------------------------------------------|-----------------------------------|
|                      | During the previous Financial year                          | During the current Financial year |
|                      | 2024-25                                                     | 2025-26                           |
|                      | (1)                                                         | (2)                               |
| 1. Manganese Ore     | Nil                                                         | Nil                               |

Remarks: Manganese Ore is produced by semi mechanized Mining method, which does not involve beneficiation and thus precludes the consumption of water.

## 2. Raw material consumption

| Name of the raw materials | Name of the product | Consumption of raw materials per unit                     |                                                            |
|---------------------------|---------------------|-----------------------------------------------------------|------------------------------------------------------------|
|                           |                     | During the previous Financial year 2024-25                | During the current Financial year 2025-26                  |
| Manganese Ore             | Manganese Ore       | Year 2024-25<br>Production:-<br>NIL<br>Despatch :-<br>NIL | Year: 2025-26<br>Production:-<br>NIL<br>Despatch :-<br>NIL |

Remarks: As the entire mineable resource has been depleted, no further mining activities shall be undertaken within the lease hold area is envisaged. However, the production of finished ore will be continued by manual screening and processing of sub-grade mineral and mineral rejects already available at pit head during dry season only.

### PART - C

#### **Pollution discharged to environment / unit of output**

(Parameter as specified in the Consents issued)

| Pollution | Quantity of pollutants discharged (mass/day)                                                                                                                                                                                                                                                                                          | Concentrations of Pollutants in discharges (mass/volume) | Percentage of variation from prescribed standards with reasons |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------|
| a. Water  | Since the Mine is not operational no discharge/pollution of water has been envisaged.<br>However, the six-month average surface water quality data is enclosed as <b>Annexure - I</b> .<br>It shows that the concentrations of the pollutants are well within the permissible standards.                                              |                                                          |                                                                |
| b. Air    | Since the Mine is not operational, the dust due to the movement of vehicles in the haul roads, drilling activities etc., is not generated.<br><br>The monthly average ambient air quality data is enclosed as <b>Annexure - II</b> .<br>It shows that the concentrations of the pollutants are well within the permissible standards. |                                                          |                                                                |

### PART - D

#### **Hazardous Wastes**

[As specified under the Hazardous wastes (Management & Handling) Rules, 1989]

| Hazardous Wastes                       | Total Quantity                             |                                           |
|----------------------------------------|--------------------------------------------|-------------------------------------------|
|                                        | During the previous Financial year 2024-25 | During the current Financial year 2025-26 |
|                                        | <u>Year 2024-25</u>                        | <u>Year 2025-26</u>                       |
| (i) From Process                       |                                            |                                           |
| Waste Oil (in Ltrs.)                   |                                            |                                           |
| Used Oil (in Ltrs.)                    |                                            |                                           |
| Cotton Waste (in Kgs)                  | Nil*                                       | Nil*                                      |
| Duster (in Nos.)                       |                                            |                                           |
| Filters (in Nos.)                      |                                            |                                           |
| (ii) From pollution control facilities | Nil                                        | Nil                                       |

\* The mine has no facility for maintenance of equipment deployed at the mine itself. Viewing the close proximity and same management control, the equipment of Manmora Mn. Mine are being maintained at Joda East Iron Mine

#### **PART – E**

##### **Solid Wastes**

|                                                         | Total Quantity                                |                                              |
|---------------------------------------------------------|-----------------------------------------------|----------------------------------------------|
|                                                         | During the previous<br>Financial year 2024-25 | During the current<br>Financial year 2025-26 |
|                                                         | Year 2024-25                                  | Year 2025-26                                 |
| a. From Process<br>{Overburden rejects}                 | Nil                                           | Nil                                          |
| b. From pollution control<br>facilities                 | Nil                                           | Nil                                          |
| c.                                                      |                                               |                                              |
| 1. Quantity recycled or re-<br>utilized within the unit | Nil                                           | Nil                                          |
| 2. Sold                                                 |                                               |                                              |
| 3. Disposal                                             | Nil                                           | Nil                                          |
|                                                         | Nil                                           | Nil                                          |

#### **PART – F**

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

- **Characterization of Hazardous Waste:** - No hazardous waste is generated from the mine as the mine is not operational.
- **Disposal Practice:-**
  - **SOLID WASTES** -The overburden is systematically and scientifically dumped on a geologically barren area and the same will be reclaimed by plantation after being declared inactive.

#### **PART – G**

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

1. All the haul roads in the mining area are made up of morum & compacted. Regular repair is being done by dozer & grader after spreading the layer of sweat morum over it.
2. Saplings of various forestry species were planted within and nearby the leasehold area of Manmora Manganese mines with a survival rate of 85% during the year 2025-26.
3. In addition, Tata Steel Rural Development Society also undertakes the peripheral development activities with a large magnitude.
4. An amount of more than ₹ 18 lakhs was spent as a part of Manpower Engagement in the Environment Department in the year 2025-26.

5. Environment Management Department is in function to manage regular environmental monitoring jobs and to ensure operation of environmental safeguards. To generate awareness among the employees and their families about environment, World Environment Day, World Water Day, Mine Environment & Mineral Conservation Week, World Bio-diversity Week, Joda Festival etc. In which environment conservation models, current & future proposals are made, environment messages through Nukkad natak, poems, slogans, swachhata drive has been done every year.

#### **PART - H**

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

- a. Garland drains and toe wall maintenance around the OB dump and tailing dam slopes to check and channelize surface run-off.
- b. Gap filling plantation of forestry species shall be done over the inactive waste dump and tailing dam slopes.

#### **PART - I**

Any other particulars for improving the quality of environment:

1. Top soils generated during excavation were utilized for dump slope plantation.
2. Measures taken to control Air Pollution: -
  - Water sprinkling on the haul road,
3. Measures taken to control Water Pollution: -
  - Construction of toe wall and garland drain along the dump slope to prevent surface run-off during monsoon.
4. Measures taken to control Noise & Ground Vibration: -
  - Thick plantation has been developed around the mines to provide a canopy cover
  - No drilling and blasting being carried out due to no operational mine.
5. Measures taken to control Land Degradation: -
  - Afforestation around the non-active dump and tailing dam slope for stabilization.
6. The mine is certified with ISO-14001 (Environment Management System)

#### **Annexure- I**

**Water Pollution:** Not applicable as there is no outside discharge of any industrial effluent.

**Annexure- 2****AIR QUALITY DATA 2025-26**  
**Annual Average Air quality of Joda East Iron Mine of FY26**

| Pollutants                        | Concentration of pollutants<br>( $\mu\text{g}/\text{m}^3$ ) | Standards<br>( $\mu\text{g}/\text{m}^3$ ) |
|-----------------------------------|-------------------------------------------------------------|-------------------------------------------|
| <b>Manmora Slime Dam</b>          |                                                             |                                           |
| 1. $\text{PM}_{10}$               | 62.83                                                       | 100                                       |
| 2. $\text{PM}_{2.5}$              | 23.74                                                       | 60                                        |
| 3. $\text{SO}_2$                  | 11.84                                                       | 80                                        |
| 4. $\text{NO}_x$                  | 22.43                                                       | 80                                        |
| 5. CO                             | BLQ (LOQ-0.5)                                               | 4*                                        |
| <b>Near Rainwater Harvesting</b>  |                                                             |                                           |
| 1. $\text{PM}_{10}$               | 55.10                                                       | 100                                       |
| 2. $\text{PM}_{2.5}$              | 21.59                                                       | 60                                        |
| 3. $\text{SO}_2$                  | 11.01                                                       | 80                                        |
| 4. $\text{NO}_x$                  | 19.85                                                       | 80                                        |
| 5. CO                             | BLQ (LOQ-0.5)                                               | 4*                                        |
| <b>Near Magazine</b>              |                                                             |                                           |
| 1. $\text{PM}_{10}$               | 60.57                                                       | 100                                       |
| 2. $\text{PM}_{2.5}$              | 23.44                                                       | 60                                        |
| 3. $\text{SO}_2$                  | 11.55                                                       | 80                                        |
| 4. $\text{NO}_x$                  | 22.26                                                       | 80                                        |
| 5. CO                             | BLQ (LOQ-0.5)                                               | 4*                                        |
| <b>Near Equipment Maintenance</b> |                                                             |                                           |
| 1. $\text{PM}_{10}$               | 60.52                                                       | 100                                       |
| 2. $\text{PM}_{2.5}$              | 24.59                                                       | 60                                        |
| 3. $\text{SO}_2$                  | 11.38                                                       | 80                                        |
| 4. $\text{NO}_x$                  | 21.91                                                       | 80                                        |
| 5. CO                             | BLQ (LOQ-0.5)                                               | 4*                                        |

\*Unit of CO is  $\text{mg}/\text{m}^3$ 