



By E-Mail

Ref.No.: MGM/P&E/343/20

Date: 28/09/2020

To  
The Member Secretary,  
Odisha State Pollution Control Board,  
Paribesh Bhawan,  
A/118, Nilakantha Nagar,  
Bhubaneswar, 751012

**Subject:** Submission of Annual Environmental Statement in FORM-V for the year ending 31<sup>st</sup> March 2020 in respect of Malda Manganese Mine of M/s Tata Steel Ltd.

**Reference:** Rule-14 under Environmental (Protection) Amendment Rule, 1993 (G.S.R.386,22.04.1993)

Dear Sir,

We are hereby submitting the Annual Environmental Statement in "FORM-V" prescribed under the above referenced statute, for the year ending 31<sup>st</sup> March 2020 in respect of Malda Manganese Mine of M/s Tata Steel Ltd., At/Po-Malda, Dist-Sundergarh, Odisha.

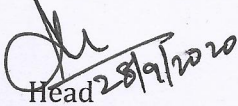
We would also like to inform your good office that the Malda Manganese Mine lease of M/s Tata Steel Limited over 822 Ha. has lapsed vide Govt. Proceeding no. 5371SM, dtd. 13-01-2020 and thus we have not carried out mining operation at Malda Manganese Mine during FY 2019-20. At present physical handover process is being pursued with State Govt agencies.

This is for your kind information and perusal please. Receipt of the same may please be acknowledged.

Thanking you,

Yours faithfully,

F: TATA STEEL LTD.

  
Head 28/9/2020

Mine & Production Planning  
Ferro Alloys Mineral Division

**Enclosure:** Annual Environmental Statement (FORM-V) for the Financial Year ending 31st March 2020

**Copy To:**

- 1) Zonal Office Kolkata, Central Pollution Control Board, South end Conclave, Block 502, 5th and 6th Floors, 1582 Rajdanga Main Road, Kolkata, West Bengal 700107.
- 2) The Regional Officer, State Pollution Control Board, Baniapat, DD College Road, Keonjhar, Odisha-758001.
- 3) MoEF&CC Eastern Regional Office, A/3, Chandrasekharpur, Bhubaneswar-751023

**TATA STEEL LTD.**

Ferro Alloys & Minerals Division, Manganese Group of Mines, At/P.O.: Bichhakundi, Via: Joda,  
Dist: Keonjhar Odisha – 758 034 Tel.: 9238101370, e-mail : mnminesadmin@tatasteel.com  
Regd. Office : Bombay House, 24 Homi Modi Street, Mumbai – 400 001 Tel 912266658282, Fax 912266657724  
Corporate Identity Number L27100MH1907PLC000260 website : www.tatasteel.com



**ENVIRONMENTAL STATEMENT**

**FORM – V [2019-20]**

**[Rule-14 under Environmental (Protection) Amendment Rule, 1993]  
(G.S.R.386,22.04.1993)**

**Submitted By:**

**Malda Manganese Mine**

**M/s. Tata Steel Limited**

**At/Po: Malda,**

**District- Sundergarh, Odisha -770048**

**FORM V**

**[See Rule 14 of Environment (Protection) Amendment Rules, 1993]**

**ENVIRONMENTAL STATEMENT**

**for the financial year ending the 31<sup>st</sup> March 2020**

**PART - A**

- (i) Name and Address of the Owner / occupier of the industry operation or process. : **MALDA MANGANESE MINE**  
Mr. T.V. Narendran  
Managing Director, M/s TATA Steel Ltd.  
Jamshedpur, Dist- East Singhbhum  
Jharkhand – 831 001
- Nominated Owner:**  
Mr. Amit Kumar Dubey,  
Head(Manganese Group of Mines), Joda, FA  
& MD, TATA Steel  
At/Po-Malda  
Dist: Sundergarh, Orissa – 770048
- Agent:**
- (ii) Industry Category : Opencast Mining
- (iii) Production Capacity – Units : **550,000 Tonnes per annum** (Manganese Ore or 5.50 LTPA (as per Environmental Clearance)
- (iv) Year of Establishment : 1935
- (v) Date of the last environmental statement submitted : 26<sup>th</sup> Sept'2019

**PART - B**

**Water and Raw Material Consumption:** The Malda Manganese Mine lease of M/s Tata Steel Limited over 822 Ha. Has lapsed vide Govt. Proceeding no. 5371SM, dtd. 13-01-2020 and permits the lessee under rule 12(1) (gg) of MC Rule, 2016, the benefit to remove all or any ore mineral excavated during the currency of the lease. Mining operation has not been carried out at Malda during FY 2019-20.

Water Consumption m<sup>3</sup>/day (Av. figures for 2019-20)

Process : Nil (Water sprinkling)

Cooling : Nil

Domestic : 5-6 m<sup>3</sup>/day (domestic consumption for watch and ward/residential staffs only.

Name of the Products	<u>Process water consumption per unit of product output</u>	
	During the previous Financial year	During the current Financial year
	(1)	(2)
(1) Manganese Ore	Nil	Nil

**(2) Raw material consumption:** Unlike manufacturing processes, mining doesn't involve any such raw materials; However, uses various other resources for ancillary services essential to ensure mining such as Diesel, Electricity and Explosives, etc.

The table below reflects the production and dispatch figures for the last two financial year

Name of the raw materials	Name of the product	Consumption of raw materials per unit	
		During the previous Financial year (Year 2018-19)	During the current Financial year (Year 2019-20)
-Nil-	Manganese Ore	<b>Production</b> Nil	<b>Production</b> Nil
		<b>Despatch</b> Nil	<b>Despatch</b> Nil

*Remarks: The mining operation has not been carried out at Malda during FY 2019-20; however basic essential resources consumed during the reporting period (2019-20) is as follows: Diesel (Nil), Explosive (Nil), Electricity (116090 Kw-h from grid & 5464 Kw-h from DG set).*

### **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	-Nil-	-Nil-	Not Applicable
(b) Air	-Nil-	-Nil-	Not Applicable

Remark: The Malda Manganese Mine lease of M/s Tata Steel Limited over 822 Ha. Has lapsed vide Govt. Proceeding no. 5371SM, dtd. 13-01-2020 and permits the lessee under rule 12(1) (gg) of MC Rule, 2016, the benefit to remove all or any ore mineral excavated during the currency of the lease. Mining operation has not been carried out at Malda during FY 2019-20.

### **PART - D** **(Hazardous Wastes)**

[As specified under the Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016]

Hazardous Wastes	Total Quantity	
	During the previous Financial year (Year 2018-19)	During the current Financial year (Year 2019-20)
(i) From Process		
Waste containing Oil	Nil	Nil
Used Oil (in Ltrs.)	Nil	Nil
Cotton Waste (in Kgs)	Nil	Nil
Duster (in Nos.)	Nil	Nil
Filters (in Nos.)	Nil	Nil

**Environmental Statement in respect of Malda Manganese Mine of Tata Steel Limited for year ending 31<sup>st</sup> March 2020**

(ii) From pollution control facilities Nil Nil

Remark: The Malda Manganese Mine lease of M/s Tata Steel Limited over 822 Ha. Has lapsed vide Govt. Proceeding no. 5371SM, dtd. 13-01-2020 and permits the lessee under rule 12(1) (gg) of MC Rule, 2016, the benefit to remove all or any ore mineral excavated during the currency of the lease. Mining operation has not been carried out at Malda during FY 2019-20.

**PART - E**  
**(Solid Wastes)**

	Total Quantity	
	During the previous Financial year	During the current Financial year
	<u>Year (2018-19)</u>	<u>Year (2019-20)</u>
(a) From Process (Overburden material)	Nil	Nil
(b) From pollution control facilities	Nil	Nil
(c)		
(1) Quantity recycled or re-utilized within the unit	Nil	Nil
(2) Sold	Nil	Nil
(3) Disposal	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:** - The significant source of hazardous waste is Used oil (HW-5.1) is mainly Hydrocarbons and consist of lubricants, coolants, transformer oil and hydraulic oil. Lead Acetate batteries are also used in HEMM fleet which are mainly of automotive fuel cells.
- Overburden being the only form of significant solid **waste** contains lateritic morrum, shale and quartzite, etc.
- **Disposal Practice:** -
  - SOLID WASTES -OB dumps are maintained as per the approved scheme of mine plan where proper terraces and peripheral drains are constructed supported with gabion wall/retention wall to arrest the silt/sediments during monsoon season.
  - USED OIL -The used oil generated at various sources is collected in leak proof barrels and then is kept on an impervious floor with oil catch pit. It is also ensured that the caps of the barrels remain intact and horizontal.
  - The Malda Manganese Mine lease of M/s Tata Steel Limited over 822 Ha. Has lapsed vide Govt. Proceeding no. 5371SM, dtd. 13-01-2020 and permits the lessee under rule 12(1) (gg) of MC Rule, 2016, the benefit to remove all or any ore mineral excavated during the currency of the lease. Mining operation has not been carried out at Malda during FY 2019-20.

**PART - G**

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

1. The Malda Manganese Mine lease of M/s Tata Steel Limited over 822 Ha. Has lapsed vide Govt. Proceeding no. 5371SM, dtd. 13-01-2020 and permits the lessee under rule 12(1) (gg) of MC Rule, 2016, the benefit to remove all or any ore mineral excavated during the currency of the lease. Mining operation has not been carried out at Malda during FY 2019-20.
2. During FY 2019-20, in respect of Malda Manganese Mine cost incurred on environmental front is because of environmental monitoring and is approximately at Rs. 5Lacs for FY 2019-10.
3. In addition, Tata Steel Rural Development Society also undertakes the peripheral development activities with a large magnitude.

**PART - H**

**(Additional measures / investment proposal for environmental protection, abatement of pollution, prevention of pollution)**


- a) Garland drains and toe wall around the OB dumping shall be provided to check and channelize surface run-off.
- b) Plantation of forestry species shall be planted over the inactive waste dump slopes to arrest the airborne dust.
- c) Vetiver Plantation has been done in inactive dump slope.
- d) Green belt has been developed along colony and mining.

**PART - I**

**(Any other for improving the quality of environment)**

1. With compliance to conditions of Environment Clearance obtained from MoEF, the following monitoring is being done at regular interval.
  - Ground Water Level at nearby bore wells
  - Trace metal in dust fall
  - Ground water quality at lower level
  - Meteorological monitoring
  - Trace metals such as Fe, Cr+6, Cu, Se, As, Cd, Hg, Pb, Zn and Mn at specific locations for both surface water (downstream & upstream) and ground water at lower elevation is being periodically monitored by referring to the standards as per BIS : 10500.
2. Top soils generated during excavation are utilized immediately for nursery development and dump slope plantation.
3. Measures taken to control Air Pollution: -
  - Water sprinkling on the haul road,
  - Provision of dust masks to the workmen,
  - Adoption of wet drilling arrangement in the drill machines and
  - Black topped road in the residential colony.
  - Green belt along mining and colony
  - Native sapling and vetiver plantation in inactive dumps.

4. Measures taken to control Water Pollution: -
  - Construction of toe wall and garland drain along the dump slope to prevent surface run-off during monsoon.
  - Construction of soak pits for discharge of sanitary sewage.
  - Provision of oil separation pit for effluents coming out of work shop at Joribar.
  - Native sapling and vetiver plantation in inactive dumps.
  
5. Measures taken to control Land Degradation: -
  - Afforestation around the non-active dump for stabilization and
  - Reclamation and rehabilitation of mined out area as per approved Scheme of Mining.
  
6. Surveillance of Occupational Health: - Periodical Medical Examination of employees (departmental & contractual) are conducted as per prescribed norms of Mines Rule, 1955. The initial and periodical examination includes blood haematology, blood pressure, detailed cardiovascular assessment, neurological examination etc.

  
28/09/2020  
Head (MPP)  
FA & M, JODA  
Tata Steel Ltd.

Mine & Production Planning  
Ferro Alloys Mineral Division  
M/s Tata Steel Limited

Date: 28/09/2020