

Ref. No: MSPL-I/ENV_Statement/2023-24

Date: 04-Sep-2023

To,
The Member Secretary,
West Bengal Pollution Control Board
Parivesh Bhawan,
10A, Block LA, Sector- III,
Salt Lake City, Kolkata- 700106

Subject: Environmental Statement for the Financial Year ending the 31st March, 2023 Submitted by M/s. Maithan Steel & Power Limited (Unit-I)

Dear Sir,

With reference to the above subject matters, we are hereby enclosing the Environmental Statement for the financial year ending the 31st March 2023 as per Rule- 14, Form- V for your ready reference.

So, kindly acknowledge the same.

Thanking you.

For and on behalf of,
M/S Maithan Steel & Power Limited (Unit-I)


Authorized Signatory

Encl. Stated as above

Registered Office:

9, A.J.C. Bose Road, Ideal Centre,
6th Floor, Kolkata - 700 017,
☎ +91 33 4085 7200

CIN: U27102WB2001PLC093321

Works: Unit-I

P.O. Bonra, P.S.: Neturia - 723121,
Dist.: Purulla, (WB)

 www.maithansteel.com

Works: Unit-II

Chittaranjan Road, Dendua More,
P.O. & P.S.: Salanpur - 713357,
Dist.: Paschim Bardhaman (WB)

☎ 8651540007



**Environmental Statement for the
Financial Year 2022-2023**

FORM- V



Factory address:

**M/s. Maithan Steel & Power Limited (Unit- I)
Vill & PO- Bonra, PS- Neturia, Dist- Purulia,
West Bengal- 723121**



**[FORM - V]
(Rule - 14)**

Environmental Statement for the financial year ending the 31st March 2023

PART- A

- i. Name and address of the owner/ occupier of the industry operation or process

Registered & Corporate office address:

**Mr. Kaushal Agarwalla
Director**

**M/s. Maithan Steel & Power Limited
9, AJC Bose Road, 6th Floor,
Kolkata- 700017,
West Bengal**

Factory address/ location:

**M/s. Maithan Steel & Power Limited (Unit-I)
Vill & PO- Bonra, PS- Neturia,
Dist- Purulia, WB- 723121**

- ii. **Industry category**

Red Category

- iii. **Production Capacity**

Sl. No.	Name of the Product	Production Capacity
1	Sponge Iron	5,000 TPM

- iv. **Year of Establishment:** Year of 2003

- v. **Date of the last Environmental Statement submitted:** 29th August, 2022

PART- B

(i) Water and River Material Consumption

(1) Water consumption (m³/Day): 303 KLD

(2) Process: NIL

(3) Cooling: 300 KLD

(4) Domestic: 3 KLD

Name of the Products	Process Water consumption per unit of product output (m ³ /day)	
	During Financial year 2021-22	During Financial year 2022-23
Sponge Iron	--	--

(ii) Raw Materials Consumption:

Name of Raw Materials	Name of Products	Consumption of Raw Materials per unit of Output	Consumption of Raw Materials per unit of Output
		During Previous Financial year (2021-22)	During current Financial year (2022-23)



Iron Ore/Pellets	Sponge Iron	1.98	2.42
Coal		1.177	1.212
Dolomite & Limestone		0.08	0.065

PART- C

(Pollution discharged to environment/ unit of output (Parameter as specified in the consent issued))

A. Water Pollution:

Pollutants	Quantity of pollutants discharged (mass/ day)	Concentrations of pollutants in discharges (mass/ volume)	Percentage of variation from prescribed standards with reasons
NIL	<p>As the industry is being operated on dry process technology, no liquid effluent is generated from the manufacturing process.</p> <p>However, the waste water is generated during the cooling, spraying etc. Clean water is used to prevent the fugitive emission and Green Belt development after conformity with the CPCB guideline.</p> <p>Domestic waste water generated from residential colony and office toilets is treated by Septic tanks and Soak pits.</p>		

B. Air Pollution:

Pollutant Type: - Particular Matter

Source of Pollutants	Quantity of pollutants discharged (mass/ day)	Concentrations of pollutants in discharges (mass/ volume)	Percentage of variation from prescribed standards with reasons
Steel Melting Shop			<p>Within the limit as per CFO awarded from WBPCB & MoEFCC/CPCB Notification</p> <p>The analysis report is enclosed as Annexure- I.</p>
i. Rotary Kiln 1&2 (2x100 TPD DRI)	30.33 Kg/day	26.14 mg/Nm ³	
ii. Intermediate Bin	3.86 Kg/day	24.75 mg/Nm ³	
iii. Product House	2.73 Kg/day	16.94 mg/Nm ³	
iv. Cooler Discharge	2.41 Kg/day	20.64 mg/Nm ³	

PART- D

Hazardous Waste

(As specified under Hazardous Waste Management and Handling Rules, 1989)

Hazardous Waste	Total Quantity (Kg)	Total Quantity (Kg)
	During the Current Financial Year (2021-22)	During the Current Financial Year (2022-23)
From Process	For Liquid (Hazardous): 0.136 Tonne For Solid (Hazardous): 0.001 Tonne	For Liquid (Hazardous): 0.109 Tonne For Solid (Hazardous) : 0.001 Tonne
From Pollution control facilities	None	None

PART- E

Solid Waste



		Total Quantity	Total Quantity
		During the Current Financial Year (2021-22)	During the Current Financial Year (2022-23)
A	From Process	14,998 TPA	16,900 TPA
B	From Pollution control facilities	2,083 TPA	2,300 TPA
C	1 Quantity recycled or re-utilized within unit	---	---
	2 Disposed	17,081 TPA	19,200 TPA

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 the categories of wastes.

Sr. No.	Name of the Hazardous waste	Quantity per Annum
1	Used Oil/ Spent Oil (Rule- 5.1)	0.109 Metric Ton.
3	Cotton waste/ Jute containing Oil (Rule- 5.2)	0.001 Metric Ton.

Used oil is sold to WBPCB authorized vendor and Cotton waste/ Jute containing oil is sent to CHWSTDF.

Organic bio-degradable solid wastes are used for organic manure creation and used for Green Belt development purpose.

PART- G

In respect of the pollution abatement measures taken up on conservation of natural resources and on the cost of production.

We have adopting some good manufacturing practice for betterment of plant environment like:

1. APC dust is used for land filling purposes at abandoned mine pits.
2. Charcoal/ Dolochar is sent to Power Plant for reuse.

PART- H

Additional measures/ investment proposal for environment protection including abatement of pollution prevention of pollution

We are adopting the 'Zero Water Discharge' philosophy for our day to day plant operation i.e. Reduce – Recycle– Reuse the water. We are also adopted the surface run-off water harvesting and roof top rain water harvesting (proposed) schemes for minimizing the Ground water uses.

Environment protection and pollution controls have been the priority for the industry. Any suggestions or improvements made by the Pollution Control Board would be implemented.

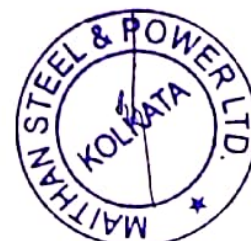
PART- I

Any other particular for improving the quality of the environment

In addition to training of employees in various aspects of pollution control activities of the plant, programmes like celebration of World Environment Day, World Safety Day, screening of films on environment; Bonomahotsav etc. regularly carried out in order to create greater awareness towards environment protection amongst employees and the people in the neighbouring areas.

All the environmental standards/ stipulations are being fully maintained by the company Management on priority basis.

Constant efforts are being made in making use of the updated technologies.





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Manoj Talkies Basement, Kumarpur

Asansol - 713304

Dist. Paschim Bardhaman (W.B.)

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR NO – TC51092300000509F

Format No. : EC/TRT/42/FM/01

TEST REPORT

Report Release Date	: 03.04.2023	Sample Ref. No.(ARF)	: EC/ARF/29/230321
Test Report No	: EC/TR/42/03035	Source of Sample	: Sponge Iron Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 27.03.2023
Sample Collected by	: Mr. Sumit Sarkar & Team	Period of Analysis	: 29.03.2023
Sample Details	: Stack Emission	Sampling Location	: ESP Stack
Name & Address	: Maithan Steel & Power Limited (Unit – I) Vill + P.O – Bonra, P.S – Neturia Dist – Purulia West Bengal – 723121	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 230
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION

1	Particular of the Plant	: Sponge Iron Plant
2	Emission Due to	: Reduction of Iron Ore & Oxidation of Coal
3	Stack Connected to	: Rotary Kiln No. 1 & 2 (100 TPDx2) Both in Operation
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 33.0 m
6	Height of Sampling Port from G.L.	: 20.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.80 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: Iron Ore – 6.2 MT/hr each kiln

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coal, As Reducing Agent
2	Energy Consumption	: Coal – 4.0 MT/hr each kiln
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		Method	
1	Flue Gas Temperature	132 °C	IS 11255 : Part 3
2	Barometric Pressure	752 mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.25 m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	48347 Nm ³ /hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	26.14 mg/Nm ³	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	8.8 %	IS 13270
7	Concentration of SO ₂	111.75 mg/Nm ³	IS 11255 : Part 2
8	Concentration of NO _x	62.16 mg/Nm ³	IS 11255 : Part 7

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory

Authorised Signatory

Dr. Mousumi Pal
Ph.D.(Env.), Scientist
Authorised Signatory



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ULR NO – TC510923000000507F

Format No. : EC/TRT/42/FM/01

TEST REPORT

Report Release Date	: 03.04.2023	Sample Ref. No.(ARF)	: EC/ARF/29/230321
Test Report No	: EC/TR/42/03033	Source of Sample	: Sponge Iron Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 27.03.2023
Sample Collected by	: Mr. Sumit Sarkar & Team	Period of Analysis	: 29.03.2023
Sample Details	: Stack Emission	Sampling Location	: Bag Filter Stack
Name & Address	: Maithan Steel & Power Limited (Unit – I) Vill + P.O – Bonra, P.S – Neturia Dist – Purulia West Bengal – 723121	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 228
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION

1	Particular of the Plant	: Sponge Iron Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Bag Filter at Cooler Discharge
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 25.0 m
6	Height of Sampling Port from G.L.	: 15.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 0.50 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 100 TPD x 2

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		Method	
1	Flue Gas Temperature	49 °C	IS 11255 : Part 3
2	Barometric Pressure	752 mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.51 m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	4868 Nm ³ /hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	20.64 mg/Nm ³	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	----	IS 13270
7	Concentration of SO ₂	----	IS 11255 : Part 2
8	Concentration of NO _x	----	IS 11255 : Part 7

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ULR NO – TC51092300000508F

Format No. : EC/TRT/42/FM/01

TEST REPORT

Report Release Date	: 03.04.2023	Sample Ref. No.(ARF)	: EC/ARF/29/230321
Test Report No	: EC/TR/42/03034	Source of Sample	: Sponge Iron Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 27.03.2023
Sample Collected by	: Mr. Sumit Sarkar & Team	Period of Analysis	: 29.03.2023
Sample Details	: Stack Emission	Sampling Location	: Bag Filter Stack
Name & Address	: Maithan Steel & Power Limited (Unit – I) Vill + P.O – Bonra, P.S – Neturia Dist – Purulia West Bengal – 723121	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 229
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION

1	Particular of the Plant	: Sponge Iron Plant
2	Emission Due to	: Process Activity
3	Stack Connected to	: Bag Filter at I-Bin (Intermediate Bin)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 30.0 m
6	Height of Sampling Port from G.L.	: 20.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 0.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		Method	
1	Flue Gas Temperature	42 °C	IS 11255 : Part 3
2	Barometric Pressure	752 mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	6.82 m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	6506 Nm ³ / hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	24.75 mg/Nm ³	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	----	IS 13270
7	Concentration of SO ₂	----	IS 11255 : Part 2
8	Concentration of NO _x	----	IS 11255 : Part 7

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ULR NO – TC510923000000510F

Format No. : EC/TRT/42/FM/01

TEST REPORT

Report Release Date : 03.04.2023	Sample Ref. No.(ARF) : EC/ARF/29/230321
Test Report No : EC/TR/42/03036	Source of Sample : Sponge Iron Plant
Type of Sample : Dust & Gaseous Emission	Sampling Date : 27.03.2023
Sample Collected by : Mr. Sumit Sarkar & Team	Period of Analysis : 29.03.2023
Sample Details : Stack Emission	Sampling Location : Bag Filter Stack
Name & Address : Maithan Steel & Power Limited	Sample Condition : Sealed & Preserved
(Unit – I)	Sample Stamped as : TH – 231
Vill + P.O – Bonra, P.S – Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan & Procedure : EC/SOP/03/01
West Bengal – 723121	Remarks : ----
	Deviation if any : None

GENERAL INFORMATION

1 Particular of the Plant	: Sponge Iron Plant
2 Emission Due to	: Process Activity
3 Stack Connected to	: Bag Filter at Product House
4 Material of Construction	: M.S
5 Stack Height from G.L.	: 24.38 m
6 Height of Sampling Port from G.L.	: 7.62 m
7 Height of Sampling Port from L.D.Z.	: ----
8 Dimension of Stack at Sampling Port	: 0.60 m
9 Shape of the Stack	: Circular Ø
10 Working Load	: 100 TPD x 2

FUEL CHARACTERISTIC REPORT

1 Source of Energy	: ----
2 Energy Consumption	: ----
3 Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		Method
1 Flue Gas Temperature	40 °C	IS 11255 : Part 3
2 Barometric Pressure	752 mm Hg	IS 11255 : Part 3
3 Velocity of Flue Gas	6.99 m/sec	IS 11255 : Part 3
4 Flue Gas Quantity	6708 Nm ³ / hr	IS 11255 : Part 3
5 Concentration of Particulate Matter	16.94 mg/Nm ³	IS 11255 : Part 1
6 Concentration of Carbon Dioxide	----	IS 13270
7 Concentration of SO ₂	----	IS 11255 : Part 2
8 Concentration of NO _x	----	IS 11255 : Part 7

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