

Ref. MSPL-I/ ENV_Statement / 2022-2023

Date: 29-Aug -2022

To,
The Member Secretary,
West Bengal pollution control Board
Parivesh Bhawan
10A, Block LA, Sector - III, Salt Lake City
Kolkata- 700 098



**Sub. Environmental Statement for the Financial Year ending the 31st March, 2022
Submitted by M/s Maithan Steel & Power Limited (Unit-I)**

Dear Sir,

With reference to the above subject matters, we hereby enclosed the Environmental statement for the financial year ending the 31st March 2022 as per rule - 14, Form - V for your ready reference.

So, kindly acknowledge the same.

Thanking you

For, M/s Maithan Steel & Power Limited (Unit-I)

A handwritten signature in black ink is written over a circular stamp. The stamp contains the text "MAITHAN STEEL & POWER LTD" around the top edge and "KOLKATA" in the center. Below the signature, the text "Authorized Signatory" is printed.

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.: Purulia, (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 2021-2022

FORM-V

Factory address:

M/s Maithan Steel & Power Limited (Unit-I)
P.O-Bonra, P.S-Neturia,
Dist. – Purulia, Pin-723121, West Bengal



[FORM - V]
(Rule - 14)

Environmental Statement for the financial year ending the 31st March 2022

PART - A

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

Registered & Corporate office address:

Mr. Madhur Agarwalla
Director

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

Factory address / location:

M/s Maithan Steel & Power Limited (Unit-I)
P.O-Bonra, P.S-Neturia,
Dist -Purulia, Pin-723121
West Bengal

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: 25th September, 2021

PART - B

(i) Water and River Material Consumption

(1) Water consumption (m³/Day): 109 KLD

(2) Process: NIL

(3) Cooling: 104.5 KLD

(4) Domestic: 4.5 KLD

Name of the Products	Process Water consumption per unit of product output (m ³ /day)	
	During Financial year- 2020-2021	During Financial year- 2021-2022
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 (2020-2021)	During current Financial year (2021-2022)



Iron Ore/Pellets	Sponge Iron	1.88	1.98
Coal		0.79	1.177
Dolomite		0.07	0.08

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 generated during the cooling, spraying etc. Clean water is used for preventive 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 tank 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			Within the limit as per CFO awarded from WBPCB & MoEF /CPCB Notification
i. Rotary Kiln 1 & 2 (2 x 100 TPD DRI)	31.06 Kg/day	25.85 mg/Nm ³	The analysis report is enclosed as Annexure-I .
ii. Intermediate Bin	3.77 Kg/day	24.45 mg/Nm ³	
iii. Product House	3.25 Kg/day	21.89 mg/Nm ³	
iv. Cooler Discharge	2.44 Kg/day	23.41 mg/Nm ³	

PART - D

Hazardous Waste

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

Hazardous Waste	Total Quantity (Kg)	
	During the Current Financial Year (2020-2021)	During the Current Financial Year (2021-2022)
From Process	For Liquid (Hazardous): 0.151 Tonne For Solid (Hazardous) : 0.0039 Tonne	For Liquid (Hazardous): 0.136 Tonne For Solid (Hazardous) : 0.001Tonne
From Pollution control facilities	None	None

PART - E

Solid Waste



		Total Quantity	Total Quantity
		During the Current Financial Year (2020-2021)	During the Current Financial Year (2021-2022)
A	From Process	14,648.5 TPA	14,998 TPA
B	From Pollution control facilities	2,034.5 TPA	2,083 TPA
C	1 Quantity recycled or re-utilized within unit	---	---
	2 Disposed	16,683 TPA	17,081 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 Annam
1	Used Oil/ Waste Oil (Rule 5.1)	0.136 Metric Tonne
3	Cotton waste / Jute containing Oil (Rule - 5.2)	0.001 Metric Tonne

Waste 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. Coalchar/ Dolochar is sent to Power Plant.

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 adopting the Rain 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; tree plantation etc. will be 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 / stipulation will be fully maintained by the plant Management on priority basis.

Constant efforts will be made in making use of the updated technologies.





Eco Care

Phone : (0341) 2252011

Email : ecocareasansol@rediffmail.com

Specialised House on Environmental Monitoring, Analysis, Assessment & Management
ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

Manoj Talkies Basement, Kumarpur
Asansol - 713304
Dist. Paschim Bardhaman (W.B.)

ULR NO – TC510922000000400F

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

TEST REPORT

Report Release Date	: 28.03.2022	Sample Ref. No.(ARF)	: EC/ARF/29/220350
Test Report No	: EC/TR/42/03309	Source of Sample	: Sponge Iron Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 21.03.2022
Sample Collected by	: Mr. Sumit Sarkar & Team	Period of Analysis	: 24.03.2022
Sample Details	: Stack Emission	Sampling Location	: ESP Stack
Name & Address	: Maithan Steel & Power Limited (Unit – I) Bonra, Neturia Dist – Purulia West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 447
		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 – 5.5 MT/hr each kiln

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Coal (As reducing Agent)
2	Energy Consumption	: 3.8 MT/hr each kiln
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		Method	
1	Flue Gas Temperature	135 ⁰ C	IS 11255 : Part 3
2	Barometric Pressure	756 mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	8.18 m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	50492 NM ³ /hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	25.85 mg/NM ³	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	8.8 %	IS 13270
7	Concentration of SO ₂	129.08 mg/NM ³	IS 11255 : Part 2
8	Concentration of NO _x	78.41 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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Asansol - 713304

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Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR NO – TC51092200000401F

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

TEST REPORT

Report Release Date	: 28.03.2022	Sample Ref. No.(ARF)	: EC/ARF/29/220350
Test Report No	: EC/TR/42/03310	Source of Sample	: Sponge Iron Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 21.03.2022
Sample Collected by	: Mr. Sumit Sarkar & Team	Period of Analysis	: 24.03.2022
Sample Details	: Stack Emission	Sampling Location	: Bag Filter Stack
Name & Address	: Maithan Steel & Power Limited (Unit – I) Bonra, Neturia Dist – Purulia West Bengal	Sample Condition	: Sealed
		Sample Stamped as	: TH – 448
		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 x2

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	55 °C	IS 11255 : Part 3
2	Barometric Pressure	756 mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.37 m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	4713 NM ³ /hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	23.41 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 - TC51092200000402F

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

TEST REPORT

Report Release Date	: 28.03.2022	Sample Ref. No.(ARF)	: EC/ARF/29/220350
Test Report No	: EC/TR/42/03311	Source of Sample	: Sponge Iron Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 22.03.2022
Sample Collected by	: Mr. Sumit Sarkar & Team	Period of Analysis	: 24.03.2022
Sample Details	: Stack Emission	Sampling Location	: Bag Filter Stack
Name & Address	: Maithan Steel & Power Limited (Unit - I) Bonra, Neturia Dist - Purulia West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH - 449
		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 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.	: 7.62m
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	45 °C	IS 11255 : Part 3
2	Barometric Pressure	756 mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.09 m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	6734 NM ³ / hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	21.89 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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Asansol - 713304
Dist. Paschim Bardhaman (W.B.)

ULR NO - TC51092200000403F

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

TEST REPORT

Report Release Date	: 28.03.2022	Sample Ref. No.(ARF)	: EC/ARF/29/220350
Test Report No	: EC/TR/42/03312	Source of Sample	: Sponge Iron Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 22.03.2022
Sample Collected by	: Mr. Sumit Sarkar & Team	Period of Analysis	: 24.03.2022
Sample Details	: Stack Emission	Sampling Location	: Bag Filter Stack
Name & Address	: Maithan Steel & Power Limited (Unit - I) Bonra, Neturia Dist - Purulia West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH - 450
		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	36 °C	IS 11255 : Part 3.
2	Barometric Pressure	756 mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.16 m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	6993 NM ³ /hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	24.45 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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