

Ref: OMPL(UNIT- I)/ENV\_Statement/2022-23

Date- 26.09.2023

To,  
The Member Secretary,  
West Bengal Pollution Control Board  
Parivesh Bhawan,  
10A, Block LA, Sector - III, Salt Lake City  
Kolkata - 700098



Sub: Environmental Statement for the Financial Year ending the 31<sup>st</sup> March, 2023  
submitted by M/s - Orissa Metaliks Private Limited (Unit - I).

Dear Sir,

With respect to the above subject matters, we hereby enclosed the Environmental statement for the financial year ending the 31<sup>st</sup> March, 2023 as per rule - 14, Form - V for your ready reference.

You are requested kindly acknowledge the same.

Thanking you,  
For, M/s- Orissa Metaliks Private Limited (Unit - I)

ORISSA METALIKS PVT. LTD.

  
Director/Authorized Signatory  
**Authorized Signatory**

Encl. Stated as above.

**ENVIRONMENTAL STATEMENT FOR  
THE FINANCIAL YEAR  
2022-2023**

**FORM - V**

**M/S. ORISSA METALIKS PVT. LTD.  
(UNIT - I)**



**Factory Address:**

**M/s - Orissa Metaliks Pvt. Ltd.  
(Unit - I)**

*Village - Gokulpur, P.O. - Shyamraipur,  
P.S. - Kharagpur (L) Dist. - Paschim Medinipur  
(W), Pin - 721301, West Bengal*

ORISSA METALIKS PVT. LTD.  
Director/Authorised Signatory

[FORM-V]

(Rule-14)

**Environmental Statement for the financial year ending the 31<sup>st</sup> March  
2023**

**PART - I**

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

**Register & Corporate Office address:**

**M/s Orissa Metaliks Private Limited (Unit - I)**

1, Garstin Place, Orbit House

3<sup>rd</sup> Floor, Room No- 3B

Kolkata - 700001

West Bengal

**M/s Orissa Metaliks Private Limited (Unit - I)**

Village - Gokulpur, P.O. - Shyamraipur, P.S - Kharagpur (Local)

Dist. - Medinipur (West), Pin - 721301

West Bengal

- ii) **Industry Category**

Red Category

- iii) **Production Capacity**

Sl. No.	Name of the Product	Production Capacity As per CFO CO113621 dated 14/01/2022	Actual Production	Actual Production
			2021-2022	2022-2023
1	Sponge Iron	7,80,000 TPA	7,63,888.91 TPA	7,78,163.56 TPA
2	Captive Power Plant (WHRB based)	52 MW	5,93,84,730 KWH	11,18,79,904 KWH
3	Captive Power (AFBC based)	6 MW	5,50,20,350 KWH	4,18,99,200 KWH
4	Captive Power (CFBC based)	25 MW	30,88,43,760 KWH	19,40,45,672 KWH

- iv) **Year of Establishment: - 2007**

- v) **Date of the last Environment Statement Submitted :- 24/11/2022**

ORISSA METALIKS PVT. LTD.

Director/Authorised Signatory

## PART - B

**i) Water and river material consumption:-**

1. Water Consumption (m<sup>3</sup>/day) = 1771.0 KLD
2. Process = 0 KLD
3. Cooling = 1766.0 KLD
4. Domestic Purpose = 05 KLD

**Consumption per unit of production:-**

Name of the product	Water Consumption of product output during the current financial year (2021-2022)	Water Consumption of product output during the current financial year (2022-2023)
Sponge Iron	504 KLD	514.0 KLD
Captive Power Plant	1525 KLD	1253.0 KLD

\*All data are furnished in the basis of makeup water per day and production capacity is as per CFO permission:-

**ii) Raw Material Consumption :-**

Name of Raw Materials	Name of Products	Consumption of Raw Materials per unit of Output	
		During Previous Financial year 2021-2022	During current financial year 2022-2023
Iron Ore	<b>Sponge Iron</b>	0.906	0.549
Iron Ore Pellet		0.624	0.974
Coal		1.358	1.00
Dolomite		0.073	0.056
Dolochar	<b>F.B.C Base</b>	148007.85	1,57,576.99
Coal	<b>CPP</b>	1,11,475	1,49,682.17
Captive Power Plant WHRB Base	<b>POWER</b>	Waste gases from sponge iron units are used. Hence it is not practicable to arrive at consumption of raw material per unit of output.	Waste gases from sponge iron units are used. Hence it is not practicable to arrive at consumption of raw material per unit of output.

ORISSA METALIKS PVT. LTD.

  
Director/Authorised Signatory

### PART - C

Pollutants	Quantity of pollutant discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standard with reason
Nil	<p>As the industry is being operated on dry process technology, no effluent is generated from the manufacturing process.</p> <p>However the waste water generated during the cooling, spraying etc. Waste water is treated through primary ETP. Clean water is used for reduce the fugitive emission and green belt development after conformity with the CPCB guideline. Domestic waste water generated from residential colony and office toilets is treated by septic tanks and Soak-pits.</p>		

#### A. Air Pollution:

##### Pollutant type: - Particular Matter

Source of Pollutants	Quantity of pollutant discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standard with reason
<b>Sponge Iron Unit:</b>			
Rotary Kiln 1 & 2	19.035 kg/day	14.645 mg/Nm <sup>3</sup>	Within the limit as per CFO warded from WBPCB & MoEF/CPCB notification. The analysis report is annexed as <b>Annexure I.</b>
Rotary Kiln 3 & 4	20.98 kg/day	15.125 mg/Nm <sup>3</sup>	
Rotary Kiln 5 & 6	25.19 kg/day	16.06 mg/Nm <sup>3</sup>	
Rotary Kiln 7 & 8	102.82 kg/day	27.54 mg/Nm <sup>3</sup>	
Rotary Kiln 9	101.84 kg/day	25.94 mg/Nm <sup>3</sup>	
Power Plant			
i)    AFBC Boiler	45.638 kg/day	27.49 mg/Nm <sup>3</sup>	
ii)   CFBC Boiler	53.84 kg/day	20.64 mg/Nm <sup>3</sup>	

ORISSA METALIKS PVT. LTD.

  
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### **PART - D**

#### **Hazardous Waste**

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

<b>Hazardous Waste</b>	<b>Total Quantity (Kg)</b>	
	<b>During the previously financial year (2021-2022)</b>	<b>During the current financial year (2022-2023)</b>
From Process	For Liquid HWZ =1.88 TPA For Solid HWZ =0.00875 TPA	For Liquid HWZ =1.75 TPA For Solid HWZ = 0.03961 TPA
For pollution control facilities	0.065 TPA	0.40068 TPA

### **PART - E**

#### **Solid waste**

	<b>Total Quantity</b>	
	<b>During the financial year (2021-2022)</b>	<b>During the current financial year (2022-2023)</b>
a) From process	26,887.8 TPA	24,506.18 TPA
b) From pollution control facilities	66,252.66 TPA	54,469.76 TPA
c) Quantity recycled or reutilized in the unit	97,055 TPA	1,48,000 TPA
d) Sold	90,873 TPA	45,210 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.**

<b>Sl. No.</b>	<b>Name of the Hazardous Waste</b>	<b>Quantity per Annum</b>
1.	Waste Oil (Rule 5.1)	1.75 TPA
2.	Cotton Waste/ Jute Containing Oil (Rule- 5.2)	0.03961 TPA
3.	Bag Filter (Rule - 35.1)	0.40068 TPA

All hazardous waste will be disposed of by WBPCB authorized vendors.

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

ORISSA METALIKS PVT. LTD.

Director/Authorised Signatory

## **PART - G**

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

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

1. Bag-filters dust reused in the kiln inlet Hood. Through pneumatic conveying system from CD and coal crushers, IB, PH etc. for enhance the boiler flow to generation of power.
2. Char/Dolochar is used in CFBC/AFBC boiler for power generation.
3. Waste gas from DRI is used for power generation.
4. Using Fly-Ash in associate company cement plant to produce cement and also making bricks through solid waste management practice.
5. Online real time Continuous Stack System is installed and data is being transferred to CPCB server.

## **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 - Reuse the water, we are also adopting the 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 employees in various aspects of pollution control activities of the plant, programs 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 towards environment protection amongst employees and the people in the neighboring areas. All the environmental standards/stipulation will be fully maintained by the Plant Management on the priority basis.

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

ORISSA METALIKS PVT. LTD.

Director/Authorized Signatory



WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Raghunathchak, P.O Barghasipur, P.S- Bhabanipur, Haldia  
Purba Medinipur- 721657

Analysis Report of Gaseous Emission  
Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metalliks Pvt Ltd.(Unit-I)		
2. Address	VIII- Gokulpur, Po- Shyamraipur, Kharagpur, Paschim Medinipur		
3. Category & Type	Rcd, Integrated Steel Plant		
4. Sampling Date	10.06.2022		
5. Duration of Sampling	32 min		
6. Name of Laboratory	Bharat Foundation		
7. Height of Stack from ground (m)	60.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	8.0384		
9. Stack connected to	Rotary Kiln(2 nos), No.-7(350 TPD) & No.-8(600 TPD) Only No.- 8 Was in operation		
10. Emission due to (Furnace /Boiler)	Combustion Of Coal & Pellet		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	No.-7(320 TPD) No.-8 (50 TPD)		
14. Fuel used	Coal		
15. Rated Fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	Coal-22 TPH & pellet- 33 TPH		
17. Nature of Furnace /Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	150.0		
19. Flue gas velocity m/s	11.69	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.13
21. Corrected flue gas volume (Nm <sup>3</sup> )	1.0388	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -10.8%, O <sub>2</sub> -10.0%
23. To be compensated at (% , if required)	At 12% CO <sub>2</sub>		
24. Initial wt of thimble (gm)	1.7285	25. Final wt of thimble (gm)	1.7548
26. Wt. of PM (g)	26.30	27. Particulate matter (mg/Nm <sup>3</sup> )	28.13
28. Barometric Pressure Head	757 mm of Hg	29. Diameter of the nozzle	9.525 mm
30. Others:-		31. Thimble No.	904
32. Sampled by:	K. Sahoo , AEE, HRO		

\*Done by Bharat Foundation

*Gangadhar Dasgupta*  
05/07/22  
Scientist

*K. Sahoo*  
15/07/22  
Signature of In-Charge

Copy to:

1. Chief Engineer, O & E, WBPCB.
2. Dr. R.K.Saha, Chief Scientist, WBPCB
3. Asst. Environmental Engineer, H.R.O., WBPCB (two copies)

*B*



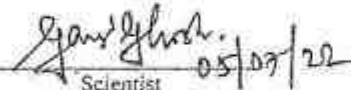


WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Raghunathchak, P.O. Barghasipur, P.S.- Bhabanipur, Haldia  
Purba Medinipur- 721657

Analysis Done at Haldia Regional Laboratory : Analysis Report of Gaseous Emission

1. Name of Industry		M/s Orissa Metaliks Pvt Ltd.(Unit-I)	
2. Address		Vill- Gokulpur, Po- Shyamraipurn, Kharsggpur, Paschim Medinipur	
3. Category & Type		Red, Integrated Steel Plant	
4. Sampling Date		10.06.2022	
5. Duration of Sampling		32 min	
6. Name of Laboratory		Bharat Foundation	
7. Height of Stack from ground (m)		60.0	
8. Cross section of Stack at sampling point(m <sup>2</sup> )		8.0384	
9. Stack connected to		Rotary Kiln No.-9	
10. Emission due to (Furnace /Boiler)		Combustion Of Coal & Pellet	
11. Average operational hours of boiler/ furnace (per month)		720 hrs/month	
12. APC System (if any)		ESP	
13. Working load of source (MT/hr)		470 TPD	
14. Fuel used		Coal & Pellet	
15. Rated Fuel consumption (Kg or l/hr)		-	
16. Working Fuel consumption (Kg or l/hr)		18 TPH	
17. Nature of Furnace /Boiler		Rotary Kiln	
18. Flue gas Temp. (°C)		165.0	
19. Flue gas velocity m/s	10.03	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.20
21. Corrected flue gas volume (Nm <sup>3</sup> )	1.0978	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -11.2%, O <sub>2</sub> -9.4%
23. To be compensated at (% , if required)		At 12% CO <sub>2</sub>	
24. Initial wt of thimble (gm)	1.7119	25. Final wt of thimble (gm)	1.7405
26. Wt. of PM (g)	28.60	27. Particulate matter (mg/Nm <sup>3</sup> )	27.91
28. Barometric Pressure Head	757 mm of Hg	29. Diameter of the nozzle	9.325 mm
30. Others:-		31. Thimble No.	905
32. Sampled by:		K. Sahoo , AEE, HRO	

\*Done by Bharat Foundation

  
Scientist 05/07/22

  
Signature of In-Charge 05/07/22

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Dr. R.K.Saha, Chief Scientist, WBPCB
  3. Asst. Environmental Engineer, H.R.O., WBPCB (two copies)





WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Raghunathchak, P.O Barghasipur, P.S- Bhabanipur, Haldia  
Purba Medinipur- 721637

Analysis Report of Gaseous Emission  
Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks Pvt Ltd.(Unit-1)		
2. Address	Villi- Gokulpur, Po- Shyamraipurm, Kharagpur, Paschim Medinipur		
3. Category & Type	Red, Integrated Steel Plant		
4. Sampling Date	10.06.2022		
5. Duration of Sampling	35 min		
6. Name of Laboratory	Bharat Foundation		
7. Height of Stack from ground (m)	60.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	3.14		
9. Stack connected to	AFBC Boiler		
10. Emission due to (Furnace /Boiler)	Combustion Of Coal & Dolochar		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	27 TPH		
14. Fuel used	Coal & Dolochar		
15. Rated Fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	Coal-3.6 TPh & Dolochar-5.9 TPH		
17. Nature of Furnace /Boiler	AFBC Boiler		
18. Flue gas Temp. (°C)	95.0		
19. Flue gas velocity m/s	7.80	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	10.02
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9332	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -11.4%, O <sub>2</sub> -9.2%
23. To be compensated at (%. if required)	At 12% CO <sub>2</sub>		
24. Initial wt of thimble (gm)	1.7080	25. Final wt of thimble (gm)	1.7318
26. Wt. of PM (g)	23.80	27. Particulate matter (mg/Nm <sup>3</sup> )	26.85
28. Barometric Pressure Head	757 mm of Hg	29. Diameter of the nozzle	9.525 mm
30. Others:-		31. Thimble No.	906
32. Sampled by:	K. Sahoo , AEE, HRO		

\*Done by Bharat Foundation

*Ganesh Chandra*  
Scientist 05/07/22

*K. Sahoo*  
Signature of In-Charge 05/07/22

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Dr. R.K. Saha, Chief Scientist, WBPCB
  3. Asst. Environmental Engineer, H.R.O., WBPCB (two copies)



WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Raghunathchak, P.O Barghosipur, P.S- Bhabanipur, Haldia  
Purba Medinipur- 721657

Analysis Report of Air Quality Monitoring Inside Industry

Analysis Done at Haldia Regional Laboratory:

1. Name of Industry	M/s Orissa Metalics Pvt. Ltd. (Unit-1)
2. Address	Gokulpur, P.O-Shyamraipur, Kharagpur, Paschim Midnapore
3. Type of the Industry	Red/Sponge & Iron Unit
4. Sampling Location	Raw Material Handling Section
5. Sampling Date	10/06/2022
6. Total Time of Sampling (min)	240
<u>Sampling &amp; Calculation of PM<sub>10</sub></u>	
1. Filter Paper No.	60
2. Initial Weight (gm)	2.8406
3. Final Weight (gm)	2.9530
4. Weight difference (gm)	0.1124
5. Air Volume (m <sup>3</sup> )	279.71
6. Particulate Matter PM <sub>10</sub> (µg/M <sup>3</sup> )	401.85
<u>Sampling &amp; Calculation of TSPM</u>	
1. Dust Container No.	5
2. Initial Weight (gm)	17.2324
3. Final Weight (gm)	17.2887
4. Container Weight difference (gm)	0.0563
5. Filter Paper Weight difference (gm)	0.1124
6. Total Weight difference (gm)	0.1687
7. Air Volume (m <sup>3</sup> )	279.71
8. Particulate Matter TSPM (µg/M <sup>3</sup> )	603.13
9. Sampled by:	K.Sahoo, AEE, HRO

  
Signature of In-Charge

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Dr. R.K. Saha, Chief Scientist, WBPCB
  3. AEE & I/C, H.R.O., WBPCB (two copies)





WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Raghunathchak, P.O. Barghasipur, P.S. Bhatnagar, Haldia  
Purba Medinipur- 721657

Analysis Report of Air Quality Monitoring Inside Industry

Analysis Done at Haldia Regional Laboratory:

1. Name of Industry	M/s Orissa Metalica Pvt. Ltd. (Unit-1)
2. Address	Gokulpur, P.O. Shyamraipur, Kharuggur, Paschim Medinipore
3. Type of the Industry	Red Sponge & Iron Unit
4. Sampling Location	Near Product House
5. Sampling Date	24/11/2022
6. Total Time of Sampling (min)	240
<u>Sampling &amp; Calculation of PM<sub>10</sub></u>	
1. Filter Paper No.	69
2. Initial Weight (gm)	2.8215
3. Final Weight (gm)	3.0718
4. Weight difference (gm)	0.2503
5. Air Volume (m <sup>3</sup> )	281.2
6. Particulate Matter PM <sub>10</sub> (µg/M <sup>3</sup> )	890.11
9. Sampled by:	K. Sahoo, AEF, HRO

*K. Sahoo*  
08/12/22  
Signature of In-Charge

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
  3. AEE & I/C, H.R.O., WBPCB (two copies)



WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Raghunathchak, P.O. Barghassipur, P.S. Bhabanipur, Haldia  
Purba Medinipur- 721657

Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks (p) Ltd (Unit-1)		
2. Address	Vill- Gokulpur, PO- Samraipur, Kharagpur, Paschim Medinipur		
3. Category & Type	Red, Steel plant		
4. Sampling Date	24/11/2022		
5. Duration of Sampling	33 min		
6. Name of Laboratory	S M Scientific Services		
7. Height of Stack from ground (m)	60.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	8.29		
9. Stack connected to	Rotary Kiln No.-9 (500 TPD)		
10. Emission due to (Furnace /Boiler)	Combustion Of Coal & Pellet		
11. Average operational hours of boiler/ furnace (per month)	720 Hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	470 TPD		
14. Fuel used	Coal & Pellet		
15. Rated Fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	Coal-18.0 TPH & Pellet-30.0 TPH		
17. Nature of Furnace /Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	113.0		
19. Flue gas velocity m/s	7.75	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.023
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.7940	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -11.0% & O <sub>2</sub> -8.8%
23. To be compensated at (% if required)	-		
24. Initial wt of thimble (gm)	1.907	25. Final wt of thimble (gm)	1.5113
26. Wt. of PM (mg)	20.60	27. Particulate matter (mg/Nm <sup>3</sup> )	25.94
28. Barometric Pressure Head	760 mm of Hg	29. Diameter of the nozzle	9.523 mm
30. Others:-		31. Thimble No.	161
32. Sampled by:	K. Sahoo, N C Barai AEE, HRO & P. Mukherjee, JEE, HRO		

\* Done by S M Scientific Services

Scientist

*for Sanjib Kumar*  
08/12/22  
Signature of In-Charge

Copy to:

1. Chief Engineer, O & E, WBPCB.
2. Chief Scientist, WBPCB
3. AEE & I/C, H.R.O., WBPCB (two copies)



WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Raghunathchak, P.O. Burghatipur, P.S. Bhabanipur, Haldia  
Purba Medinipur- 721657

Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks (p) Ltd (Unit-1)		
2. Address	Vill- Gokulpur, P.O- Samraipur, Kharajpur, Paschim Medinipur		
3. Category & Type	Red, Steel plant		
4. Sampling Date	24/11/2022		
5. Duration of Sampling	31 min		
6. Name of Laboratory	S M Scientific Services		
7. Height of Stack from ground (m)	52.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	3.14		
9. Stack connected to	Rotary Kiln No.-1 & 2 (Attached with common stack)		
10. Emission due to (Furnace /Boiler)	Oxidation Of Coal & Reduction of Iron ore		
11. Average operational hours of boiler/ furnace (per month)	720 Hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	100 TPD×2		
14. Fuel used	Coal		
15. Rated Fuel consumption (Kg or Mhr)	-		
16. Working Fuel consumption (Kg or Mhr)	4.0 TPH (each)		
17. Nature of Furnace /Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	120.0		
19. Flue gas velocity (m/s)	8.25	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.023
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.7970	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -10.2% & O <sub>2</sub> -9.4%
23. To be compensated at (% if required)	-		
24. Initial wt of thimble (gm)	1.4900	25. Final wt of thimble (gm)	1.4990
26. Wt. of PM (mg)	9.0	27. Particulate matter (mg/Nm <sup>3</sup> )	11.29
28. Barometric Pressure Head	760 mm of Hg	29. Diameter of the nozzle	9.523 mm
30. Others:-		31. Thimble No.	167
32. Sampled by:	K. Sahoo, N C Barai AEE, HRO & P. Mukherjee, JEE, HRO		

\*Done by S M Scientific Services

Scientist

*for* *S. Sanyal* 08/12/22  
Signature of In-Charge

Copy to:  
1. Chief Engineer, O & E, WBPCB.  
2. Chief Scientist, WBPCB  
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*R* 6



WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Rajhathalia, P.O. Barghasipur, P.S. Bhabanipur, Haldia  
Purba Medinipur- 721657

Analysis Report of Gaseous Emission  
Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks (p) Ltd (Unit-1)		
2. Address	Vill- Gokulpur, P.O- Samsipur, Khiragpur, Paschim Medinipur		
3. Category & Type	Red, Steel plant		
4. Sampling Date	24/11/2022		
5. Duration of Sampling	30 min		
6. Name of Laboratory	S M Scientific Services		
7. Height of Stack from ground (m)	52.0		
8. Cross section of Stack at sampling point (m <sup>2</sup> )	3.14		
9. Stack connected to	Rotary Kiln No.3 & 4 (Attached with common stack)		
10. Fuel used in (Furnace/ Boiler)	Combustion Of Coal & Reduction of Iron ore		
11. Average operational hours of boiler/ furnace per month	720 hrs/month		
12. A/C System (if any)	ESP		
13. Working load of source (MT/hr)	100 TPH=2		
14. Fuel used	Coal		
15. Rated Fuel consumption (Kg or T/hr)	-		
16. Working Fuel consumption (Kg or T/hr)	4.0 TPH (each)		
17. Nature of Furnace/ Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	132.0		
19. Flue gas velocity (m/s)	8.89	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.02
21. Corrected flue gas volume (N=1)	6.8000	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -10.6% & O <sub>2</sub> -9.0%
23. To be compensated at (% if required)	-		
24. Initial wt of thimble (gm)	1.4386	25. Final wt of thimble (gm)	1.4504
26. Wt. of PM (mg)	11.80	27. Particulate matter (mg/Nm <sup>3</sup> )	14.75
28. Barometric Pressure, Head	760 mm of Hg	29. Diameter of the nozzle	9.523 mm
30. Others -		31. Thimble No.	162
32. Sampled by	K. Sahoo, N C Barui AEE, HRO & P. Mukherjee, JEE, HRO		

\*Done by S M Scientific Services

Signature

for *S. Sanyal* 05/11/22  
Signature of In-Charge

- Copy to
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
  3. A.I. & I.C., H.R.O., WBPCB (two copies)

*AS*



Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory

1. Name of Industry		M/s Orissa Metals Pvt. Ltd. (I.I.)	
2. Address		Vile Gokulpur, P.S. Shyamnagar, Paschim Medinipur	
3. Category & Type		Red. Integrated Steel Plant	
4. Sampling Date		24/11/2022	
5. Diameter of Sampling		28 mm	
6. Name of Laboratory		Envirocheck	
7. Height of Stack from ground (m)		52.0	
8. Construction of Stack at sampling point(m)		I-I	
9. Stack connected to		Rotary Kiln-5 & 6 through WHRD(attached common stack).	
10. Emission due to (Furnace/Boiler)		Oxidation of Coal & reduction of Iron Ore	
11. Average operational hours of boiler/furnace (per month)		720 hrs/month	
12. APC System (if any)		ESP	
13. Working load of source (MT/hr)		100 (TP) x 2 (Both Running)	
14. Fuel used		Coal	
15. Natural Fuel consumption (Kg or T/hr)		-	
16. Rotary Fuel consumption (Kg or T/hr)		~ 1914 Each Kilo	
17. Name of Furnace/Boiler		Rotary Kiln	
18. Flue gas Temp. (°C)		130.0	
19. Flue gas velocity (m/s)	10.98	20. Volume of Flue gas drawn in (m <sup>3</sup> )	1.008
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9457	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> = 9.3% & O <sub>2</sub> = 10.6%
23. To be compensated at (% if required)		-	
24. Initial wt. of thimble (gm)	1.5334	25. Final wt. of thimble (gm)	1.5459
26. Wt. of PM (mg)	12.50	27. Particulate matter (mg/Nm <sup>3</sup> )	13.22
28. Barometric Pressure Head	757 mm of Hg	29. Diameter of the nozzle	4.52 mm
30. Others:-		31. Thimble No.	156
32. Sampled by		K. Saboo & N.C. Barai, AEE, HRO & P. Mukherjee, JEF, HRO	

\*Done by Envirocheck

*Signature*

*Signature*  
 08/11/22  
 Signature of In-Charge

- Copies to:
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
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*Signature*





WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Rajghumtichak, PO Birghatipur, P.S. - Bhadravapuri, Haldia  
Port Blair - 721007

Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry		M/s Orissa Metaliks (p) Ltd (Unit-1)	
2. Address		Vill- Gokulpur, PO- Saurvaipur, Khargapur/Prachin Medinipur	
3. Category & Type		Red, Integrated Steel plant	
4. Sampling Date		24/11/2022	
5. Duration of Sampling		32 min	
6. Name of Laboratory		M/S Envirocheck	
7. Height of Stack from ground (m)		60.0	
8. Cross section of Stack at sampling point (m <sup>2</sup> )		3.14	
9. Stack connected to		AFBC Boiler(30 TPH)	
10. Emission due to (Furnace /Boiler)		Combustion Of Coal	
11. Average operational hours of boiler/ furnace (per month)		720 Hrs/month	
12. APC System (if any)		ESP	
13. Working load of source (MT/hr)		30 TPH	
14. Fuel used		Coal & Dolochar	
15. Rated Fuel consumption (Kg or l/hr)		-	
16. Working Fuel consumption (Kg or l/hr)		Coal-3.6 TPH & Dolochar-5.9 TPH	
17. Nature of Furnaces /Boiler		AFBC Boiler	
18. Flue gas Temp. (°C)		110.0	
19. Flue gas velocity m/s	9.03	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.024
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9501	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -11.4% & O <sub>2</sub> -8.2%
23. To be compensated at (% , if required)		At 6% O <sub>2</sub>	
24. Initial wt of thimble (gm)	1.4334	25. Final wt of thimble (gm)	1.4562
26. Wt. of PM (mg)	22.80	27. Particulate matter (mg/Nm <sup>3</sup> )	28.13
28. Barometric Pressure Head	757 mm of Hg	29. Diameter of the nozzle	9.52 mm
30. Others- SO <sub>2</sub> & NO <sub>x</sub>		31. Thimble No.	157
32. Sampled by:		K. Sahoo, N C Barai AEE, HRO & P. Mukherjee, JEE, HRO	

\*Done by Envirocheck

Scientist

*[Signature]*  
Signature of In-Charge

Copy to:

1. Chief Engineer, O & E, WBPCB.
2. Chief Scientist, WBPCB
3. AEE & I/C, H.R.O., WBPCB (two copies)

*[Handwritten Signature]*



WEST BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Rajhatalchak, P.O. Bargaonpur, P.S. Haldia, Dist. Purba Medinipur-721007

Analysis Report of Gaseous Emission

Analysis Date at Haldia Regional Laboratory :

1. Name of Industry	M/s Omze Metals Pvt. Ltd (Unit 1)		
2. Address	VIII, Gokulpur, P.S. Shyamrajpur, Paschim Medinipur		
3. Category & Type	Red-Integrated Steel Plant		
4. Sampling Date	24/11/2022		
5. Division of Sampling	12. 1100		
6. Name of Laboratory	Envirocheck		
7. Height of Stack from ground (m)	60.0		
8. Cross section of Stack at sampling point(s)	8.045		
9. Stack connected to	Rotary Kiln-7 & 8 through WHRB (attached common stack). Both were running (320 TPD & 600 TPD)		
10. Emission due to (Furnace/Boiler)	Combustion of coal & Pellet		
11. Average operational hours of boiler/furnace (hr/month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	Rotary Kiln 7- 320 TPD & Rotary Kiln 8 - 320 TPD		
14. Fuel used	Coal & Pellet		
15. Rated Fuel consumption (Kg or Dhr)	-		
16. Working Fuel consumption (Kg or Dhr)	Rotary Kiln 7- 3.8 TPH, Pellet- 20 TPH & Rotary Kiln 8 - Coal- 22 TPH & Pellet- 33 TPH		
17. Name of Furnace/Boiler	Rotary Kiln (350 TPD & 600 TPD)		
18. Flue gas Temp. (°C)	135.0		
19. Flue gas velocity (m/s)	4.32	20. Volume of Flue gas drawn in (lit (m <sup>3</sup> ))	1.024
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9762	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> - 10.6% & O <sub>2</sub> - 8.8%
23. To be compensated at (%), if required	-		
24. Initial wt of thimble (gm)	1.4431	25. Final wt of thimble (gm)	1.4705
26. Wt. of PM (mg)	27.40	27. Particulate matter (mg/Nm <sup>3</sup> )	28.24
28. Barometric Pressure Head	757 mm of Hg	29. Diameter of the nozzle	9.52 mm
30. Others:-		31. Thimble No	152
32. Sampled by	K. Sahoo & N.C. Barai, AEE, HRO & P. Mukherjee, JEE, HRO		

\*Done by Envirocheck

~~Signature~~

Signature of In-Charge

Copy to:

1. Chief Engineer, O & E, WBPCB
2. Chief Scientist, WBPCB
3. AEE & IC, H.R.S., WBPCB (two copies)

WEST BENGAL POLLUTION CONTROL BOARD  
 HALDIA REGIONAL LABORATORY  
 Engdembarak, PO Barginalpur, PS-Blitaripur, Haldia  
 Purba Medinipur-721657

Analysis Report of Gaseous Emission

Tests Done at Haldia Regional Laboratory :

1. Name of Industry		M/s Griha Metals (p) Ltd (Unit-1)	
2. Address		Vill- Gokulpur, PO- Sarvapur, Kharagpur, Panchm Medinipur	
3. Category & Type		Red, Integrated Steel plant	
4. Sampling Date		25/11/2022	
5. Duration of Sampling		27 min	
6. Name of Laboratory		M/S Envirocheck	
7. Height of Stack from ground (m)		52.0	
8. Cross section of Stack at sampling point (m <sup>2</sup> )		3.80	
9. Stack connected to		CFBC Boiler (100 TPH)	
10. Emission due to (Furnace /Boiler)		Combustion of Coal & Dolochar	
11. Average operational hours of boiler/ furnace (per month)		720 Hrs/month	
12. APC System (if any)		ESP	
13. Working load of source (MT/hr)		100 TPH, Load-92 TPH	
14. Fuel used		Coal & Dolochar	
15. Rated Fuel consumption (Kg or ltr)		Coal-8.75 TPH & Dolochar-16.25 TPH	
16. Working Fuel consumption (Kg or ltr)		-	
17. Nature of Furnace /Boiler		CFBC Boiler	
18. Flue gas Temp. (°C)		117.0	
19. Flue gas velocity (m/s)	10.73	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.026
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9684	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -11.0% & O <sub>2</sub> -8.8%
23. To be compensated at (%; If required)		-	
24. Initial wt of thimble (gm)	1.4879	25. Final wt of thimble (gm)	1.5036
26. Wt. of PM (mg)	15.7	27. Particulate matter (mg/Nm <sup>3</sup> )	16.21
28. Barometric Pressure Head	757 mm of Hg	29. Diameter of the nozzle	9.5 mm
30. Others- SO <sub>x</sub> & NO <sub>x</sub>		31. Thimble No.	165
32. Sampled by:		K. Sahoo AEE, HRO	

\* Done by Envirocheck

\_\_\_\_\_  
 Scientist

*K. Sahoo*  
 Signature of In-Charge  
 08/12/22

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
  3. AEE & VC, H.R.O., WBPCB (two copies)

*[Handwritten Signature]*

Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory:

1. Name of Industry		M/s. Green Minerals (P) Ltd. Haldia	
2. Address		Vill: Govindpur, PO: Bagdaha, Khardaha, Paschim Medinipur	
3. Category & Type		Red, DR1	
4. Sampling Date		25/11/2022	
5. Duration of Sampling		20 min	
6. Name of Laboratory		S M Scientific Services	
7. Height of Stack, from ground (m)		30.0	
8. Cross section of Stack at sampling point (m <sup>2</sup> )		0.4558	
9. Stack connected to		Cooler Discharge of DR1- 1A 3 (Attached with common stack)	
10. Emission due to (Furnace/Boiler)		Process Activity	
11. Average operational hours of boiler/furnace (per month)		723 Hrs/month	
12. APC System (if any)		Bag Filter	
13. Working load of source (MT/hr)		-	
14. Fuel used		-	
15. Rated Fuel consumption (Kg or l/hr)		-	
16. Working Fuel consumption (Kg or l/hr)		-	
17. Nature of Furnace/Boiler		-	
18. Flue gas Temp. (°C)		41.0	
19. Flue gas velocity m/s	9.00	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.014
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9450	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	-
23. To be compensated at (% if required)		-	
24. Initial wt of thimble (gm)	1.4450	25. Final wt of thimble (gm)	1.4457
26. Wt. of PM (mg)	0.70	27. Particulate matter (µg/Nm <sup>3</sup> )	0.74
28. Barometric Pressure Head	761 mm of Hg	29. Diameter of the nozzle	9.523 mm
30. Others:-		31. Thimble No.	163
32. Sampled by:		K. Sahoo, AEE, HRO	

\*Done by S M Scientific Services

Scientist

*K. Sahoo*  
 08/12/22  
 Signature of In-Charge

Copy to:

1. Chief Engineer, O & E, WBPCB.
2. Chief Scientist, WBPCB.
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Analysis Done at Haldia Regional Laboratory : Analysis Report of Gaseous Emission

1. Name of Industry		M/s Orissa Metalika (P) Ltd (Unit-1)	
2. Address		Vill- Gokulpur, PO- Samaspur, Kharagpur, Paschim Medinipur	
3. Category & Type		Red	
4. Sampling Date		25/11/2022	
5. Duration of Sampling		34 min	
6. Name of Laboratory		S M Scientific Services	
7. Height of Stack from ground (m)		30.0	
8. Cross section of Stack at sampling point (m <sup>2</sup> )		0.5024	
9. Stack connected to		Cooler Discharge of DRI-3 & 4 (Attached with common stack)	
10. Emission due to (Furnace/Boller)		Process Activity	
11. Average operational hours of boiler/ furnace (per month)		720 Hours/month	
12. APC System (if any)		Bag Filter	
13. Working load of source (MT/hr)		-	
14. Fuel used		-	
15. Rated Fuel consumption (kg or l/hr)		-	
16. Working Fuel consumption (kg or l/hr)		-	
17. Nature of Furnace/Boller		-	
18. Flue gas Temp. (°C)		39.0	
19. Flue gas velocity m/s	9.57	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.508
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9230	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	-
23. To be compensated at (% if required)		-	
24. Initial wt of thimble (gm)	1.4305	25. Final wt of thimble (gm)	1.4329
26. Wt. of PM (mg)	2.40	27. Particulate matter (mg/Nm <sup>3</sup> )	2.60
28. Barometric Pressure Head	761 mm of Hg	29. Diameter of the nozzle	9.523 mm
30. Others:-		31. Thimble No.	164
32. Sampled by:		K. Sahoo, AEE, HRO	

\*Done by S M Scientific Services

\_\_\_\_\_  
 Scientist

*K. Sahoo* 08/12/22  
 Signature of In-Charge

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
  3. AEE & I/C, H.R.O., WBPCB (two copies)





WEST-BENGAL POLLUTION CONTROL BOARD  
HALDIA REGIONAL LABORATORY  
Seyyidarambada, P.O. Banghalapur, P.S. Baidyapur, Haldia  
Pin-721657

Analysis Report of Air Quality Monitoring Inside Industry

Analysis Done at Haldia Regional Laboratory:

1. Name of Industry	M/s Orissa Metals Pvt. Ltd. (Unit-1)
2. Address	Gokulpur, P.O. Sityamraipur, Kharagpur, PaschimMidnapore
3. Type of the Industry	Red Sponge & Iron Unit
4. Sampling Location	Between Rotary Kiln 1 & 2 & rotary Kiln 3 & 4(DRI)
5. Sampling Date	25-11-2022
6. Total Time of Sampling(min)	240
<u>Sampling &amp; Calculation of PM<sub>10</sub></u>	
1. Filter Paper No.	68
2. Initial Weight(gm)	2.8287
3. Final Weight(gm)	3.0226
4. Weight difference(gm)	0.1939
5. Air Volume(m <sup>3</sup> )	208
6. Particulate Matter PM <sub>10</sub> (µg/M <sup>3</sup> )	723.51
9. Sampled by:	K. Sahoo, AEE, HRO

  
Signature of In-Charge

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
  3. AEE & I/C, H.R.O., WBPCB (two copies)



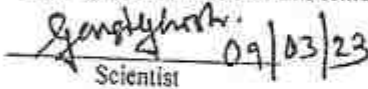


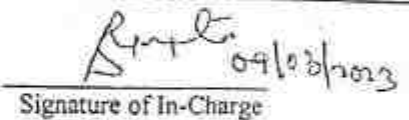
Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks Pvt. Ltd(Unit-1)		
2. Address	Vill- Gokulpur, PS- Shyamraipur, Kharagpur, Dist- Paschim Medinipur		
3. Category & Type	Red/Integrated Steel Plant		
4. Sampling Date	28/02/2023		
5. Duration of Sampling	24 min		
6. Name of Laboratory	M/s Enviro Cell Laboratory		
7. Height of Stack from ground (m)	52.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	3.14		
9. Stack connected to	Rotary kilnNo-5 & 6 , through WHRB(attached with a common stack)		
10. Emission due to (Furnace /Boiler)	Oxidation of Coal & reduction of Iron ore		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	100 TPD(Each Kiln)		
14. Fuel used	Coal		
15. Rated Fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	Coal-5.2 TPH & Iron Ore-6.7 TPH(Each Kiln)		
17. Nature of Furnace /Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	145.0		
19. Flue gas velocity m/s	7.08	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.008
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9654	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -9.6% & O <sub>2</sub> -9.8%
23. To be compensated at (%. if required)	At 12% CO <sub>2</sub>		
24. Initial wt of thimble (gm)	1.6352	25. Final wt of thimble (gm)	1.6498
26. Wt. of PM (mg)	14.60	27. Particulate matter (mg/Nm <sup>3</sup> )	18.90
28. Barometric Pressure Head	755 mm of Hg	29. Diameter of the nozzle	12.7 mm
30. Others:		31. Thimble No.	325
32. Sampled by:	A, Das & K, Sahoo, AEE, HRO		

\*Done by M/s Enviro Cell Laboratory

  
Scientist 09/03/23

  
Signature of In-Charge 09/03/2023

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
  3. AEE & I/C, H.R.O, WBPCB (two copies)







Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks Pvt. Ltd(Unit-1)		
2. Address	Vill- Gokulpur, PS- Shyamraipur, Kharagpur, Dist- Paschim Medinipur		
3. Category & Type	Red/Integrated Steel Plant		
4. Sampling Date	27/02/2023		
5. Duration of Sampling	25 min		
6. Name of Laboratory	M/s Enviro Cell Laboratory		
7. Height of Stack from ground (m)	52.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	3.14		
9. Stack connected to	Rotary kiln No-3 & 4, through WHRB(attached with a common stack)		
10. Emission due to (Furnace /Boiler)	Oxidation of Coal & reduction of Iron ore		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	100 TPD		
14. Fuel used	Coal		
15. Rated Fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	Coal-5.2 TPH & Iron Ore-6.7 TPH		
17. Nature of Furnace /Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	142.0		
19. Flue gas velocity m/s	6.53	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.0
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9609	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -10.0% & O <sub>2</sub> -9.6%
23. To be compensated at (% , if required)	At 12% CO <sub>2</sub>		
24. Initial wt of thimble (gm)	1.445	25. Final wt of thimble (gm)	1.4600
26. Wt. of PM (mg)	15.50	27. Particulate matter (mg/Nm <sup>3</sup> )	19.36
28. Barometric Pressure Head	755 mm of Hg	29. Diameter of the nozzle	12.7 mm
30. Others:		31. Thimble No.	321
32. Sampled by:	A. Das, AEE, HRO & P. Mukherjee, JEE, HRO		

\*Done by M/s Enviro Cell Laboratory

*Raghunathchak*  
Scientist 27/03/23

*Rupali*  
Signature of In-Charge 07/03/2023

Copy to:  
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2. Chief Scientist, WBPCB  
3. AEE & I/C, H.R.O, WBPCB (two copies)

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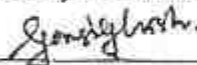


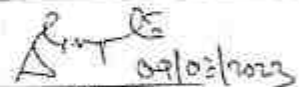
Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks Pvt. Ltd(Unit-1)		
2. Address	Vill- Gokulpur, PS- Shyamraipur, Kharagpur, Dist- Paschim Medinipur		
3. Category & Type	Red/Integrated Steel Plant		
4. Sampling Date	28/02/2023		
5. Duration of Sampling	27 min		
6. Name of Laboratory	M/s Enviro Cell Laboratory		
7. Height of Stack from ground (m)	30.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	0.5024		
9. Stack connected to	Cooler Discharge of DRI 1 & 2(attached with common stack) ( Both running)		
10. Emission due to (Furnace /Boiler)	Process Activity(Cooling Of Sponge Iron)		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	Common Bag Filter		
13. Working load of source (MT/hr)	-		
14. Fuel used	NIL		
15. Rated Fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	NIL		
17. Nature of Furnace /Boiler	Cooler Discharge		
18. Flue gas Temp. (°C)	42.0		
19. Flue gas velocity m/s	8.10	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.026
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9925	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> <0.2% & O <sub>2</sub> -20.6%
23. To be compensated at (%. if required)	-		
24. Initial wt of thimble (gm)	1.5598	25. Final wt of thimble (gm)	1.5610
26. Wt. of PM (mg)	1.20	27. Particulate matter (mg/Nm <sup>3</sup> )	1.21
28. Barometric Pressure Head	755 mm of Hg	29. Diameter of the nozzle	9.53 mm
30. Others:		31. Thimble No.	319
32. Sampled by:	A, Das & K, Sahoo, AEE, HRO		

\*Done by M/s Enviro Cell Laboratory

  
Scientist 09/03/23

  
Signature of In-Charge 09/03/2023

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
  3. AEE & I/C, H.R.O, WBPCB (two copies)





Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks Pvt. Ltd(Unit-1)		
2. Address	Vill- Gokulpur, PS- Shyamraipur, Kharagpur, Dist- Paschim Medinipur		
3. Category & Type	Red		
4. Sampling Date	27/02/2023		
5. Duration of Sampling	25 min		
6. Name of Laboratory	M/s Enviro Cell Laboratory		
7. Height of Stack from ground (m)	60.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	3.29		
9. Stack connected to	Rotary kilnNo-9 through WHRB		
10. Emission due to (Furnace /Boiler)	Combustion of Coal & Pellet		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	470 TPD		
14. Fuel used	Coal & Pellet		
15. Rated fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	28 TPH(Iron) & Coal-27.1 TPH		
17. Nature of Furnace /Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	160.0		
19. Flue gas velocity m/s	6.76	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.0
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9546	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -10.0% & O <sub>2</sub> -9.6%
23. To be compensated at (% if required)	At 12% CO <sub>2</sub>		
24. Initial wt of thimble (gm)	1.5243	25. Final wt of thimble (gm)	1.5430
26. Wt. of PM (mg)	18.70	27. Particulate matter (mg/Nm <sup>3</sup> )	23.51
28. Barometric Pressure Head	755 mm of Hg	29. Diameter of the nozzle	12.7 mm
30. Others:		31. Thimble No.	322
32. Sampled by:	A, Das, AEE, HRO & P. Mukherjee, JEE, HRO		

\*Done by M/s Enviro Cell Laboratory

*Ranajit Ghosh*  
Scientist 07/03/23

*Sybil*  
Signature of In-Charge 09/03/23

- Copy to:
1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
  3. AEE & I/C, H.R.O, WBPCB (two copies)

*Am*



**Analysis Report of Gaseous Emission**

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metals Pvt. Ltd(Unit-1)		
2. Address	VIII- Gokulpur, PS- Shyamraipur, Kharagpur, Dist- Paschim Medinipur		
3. Category & Type	Red Integrated Steel Plant		
4. Sampling Date	28/02/2023		
5. Duration of Sampling	25 min		
6. Name of Laboratory	M/s Enviro Cell Laboratory		
7. Height of Stack from ground (m)	60.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	8.29		
9. Stack connected to	Rotary Kiln No.-7 & 8 Through WHRB(attached with common stack)		
10. Emission due to (Furnace /Boiler)	Combustion Of Coal		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	Kiln 7-320 TPD, Kiln.-8-580 TPD		
14. Fuel used	Coal		
15. Rated Fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	Kiln No.7 -17.8 TPH(Coal),18.5 TPH(Pellet), Kiln No.-8-32.5 TPH(Coal), 33.0 TPH(Pellet)		
17. Nature of Furnace /Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	140.0		
19. Flue gas velocity m/s	6.55	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.0
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9641	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -10.6% & O <sub>2</sub> -8.8%
23. To be compensated at (% , if required)	At 12% CO <sub>2</sub>		
24. Initial wt of thimble (gm)	1.5020	25. Final wt of thimble (gm)	1.5249
26. Wt. of PM (mg)	22.90	27. Particulate matter (mg/Nm <sup>3</sup> )	26.84
28. Barometric Pressure Head	755 mm of Hg	29. Diameter of the nozzle	12.7 mm
30. Others:		31. Thimble No.	324
32. Sampled by:	A, Das & K, Sahoo, AEE, HRO		

\*Done by M/s Enviro Cell Laboratory

*[Signature]*  
Scientist 09/03/23

*[Signature]*  
Signature of In-Charge 09/03/2023

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1. Chief Engineer, O & E, WBPCB.
  2. Chief Scientist, WBPCB
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*[Handwritten mark]*



Analysis Report of Gaseous Emission  
Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Oriya Metaliks Pvt. Ltd.(Unit-1)		
2. Address	Vill- Gokulpur, PS- Shyamraipur, Kharagpur, Dist- Paschim Medinipur		
3. Category & Type	Red/Integrated Steel Plant		
4. Sampling Date	28/02/2023		
5. Duration of Sampling	24 min		
6. Name of Laboratory	M/s Enviro Cell Laboratory		
7. Height of Stack from ground (m)	52.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	3.80		
9. Stack connected to	CFBC Boiler(100 TPH)		
10. Emission due to (Furnace /Boiler)	Combustion Of Coal & Dolochar		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	90 TPD		
14. Fuel used	Coal		
15. Rated Fuel consumption (Kg or l/hr)	-		
16 Working Fuel consumption (Kg or l/hr)	Coal-11.0 TPH & Dolochar-11.0 TPH		
17.Nature of Furnace /Boiler	Boiler		
18.Flue gas Temp. (°C)	128.0		
19. Flue gas velocity m's	12.08	20. Volume of Flue gas drawn in lit (m <sup>3</sup> )	1.008
21.Corrected flue gas volume (Nm <sup>3</sup> )	0.9591	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -11.0% & O <sub>2</sub> -8.4%
23. To be compensated at (% , if required)	At 6% O <sub>2</sub>		
24. Initial wt of thimble (gm)	1.4610	25.Final wt of thimble (gm)	1.4812
26. Wt. of PM (mg)	20.20	27. Particulate matter (mg/Nm <sup>3</sup> )	25.07
28. Barometric Pressure Head	755 mm of Hg	29. Diameter of the nozzle	9.53 mm
30.Others:		31.Thimble No.	326
32. Sampled by:	A, Das & K, Sahoo,AEE, HRO		

\*Done by M/s Enviro Cell Laboratory

*Sanyal*  
Scientist 09/03/23

*S. Das*  
Signature of In-Charge 09/03/2023

- Copy to:
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  2. Chief Scientist, WBPCB
  3. AEE & I/C, H.R.O, WBPCB (two copies)



Analysis Report of Gaseous Emission

Analysis Done at Haldia Regional Laboratory :

1. Name of Industry	M/s Orissa Metaliks Pvt. Ltd(Unit-1)		
2. Address	VIII- Gokulpur, PS- Shyamraipur, Kharagpur, Dist- Paschim Medinipur		
3. Category & Type	Red		
4. Sampling Date	27/02/2023		
5. Duration of Sampling	27 min		
6. Name of Laboratory	M/s Enviro Cell Laboratory		
7. Height of Stack from ground (m)	52.0		
8. Cross section of Stack at sampling point(m <sup>2</sup> )	3.14		
9. Stack connected to	Rotary kiln No-1 & 2 through WHRB(attached with common stack)		
10. Emission due to (Furnace /Boiler)	Oxidation of Coal & Reduction of Iron Ore		
11. Average operational hours of boiler/ furnace (per month)	720 hrs/month		
12. APC System (if any)	ESP		
13. Working load of source (MT/hr)	100 TPD		
14. Fuel used	Coal		
15. Rated Fuel consumption (Kg or l/hr)	-		
16. Working Fuel consumption (Kg or l/hr)	Coal-5.2 TPH & Iron Ore-6.7 TPH		
17. Nature of Furnace /Boiler	Rotary Kiln		
18. Flue gas Temp. (°C)	135.0		
19. Flue gas velocity m/s	6.28	20. Volume of Flue gas drawn in-lit (m <sup>3</sup> )	1.026
21. Corrected flue gas volume (Nm <sup>3</sup> )	0.9795	22. Percentage CO <sub>2</sub> & O <sub>2</sub>	CO <sub>2</sub> -9.8% & O <sub>2</sub> -9.6%
23. To be compensated at (%. if required)	At 12% CO <sub>2</sub>		
24. Initial wt of thimble (gm)	1.5302	25. Final wt of thimble (gm)	1.5446
26. Wt. of PM (mg)	14.40	27. Particulate matter (mg/Nm <sup>3</sup> )	18.00
28. Barometric Pressure Head	755 mm of Hg	29. Diameter of the nozzle	12.7 mm
30. Others:		31. Thimble No.	323
32. Sampled by:	A, Das, AEE, HRO & P. Mukherjee, JEE, HRO		

\*Done by M/s Enviro Cell Laboratory

*Gourab Chakrabarti*  
09/03/2023  
Scientist

*Signature*  
09/03/2023  
Signature of In-Charge

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1. Chief Engineer, O & E, WBPCB.  
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