

The Sandur Manganese & Iron Ores Limited

(An ISO 9001:2015; ISO 14001:2015 and 45001:2018 certified company)
CIN: L85110KA1954PLC000759; Website: www.sandurgroup.com

REGISTERED OFFICE

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CORPORATE OFFICE

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Ref No: SMIORE/PLANT/ENV/MR/2023-24/87

08.09.2023

To,
The Environmental Officer,
Regional Office & Zonal office
Karnataka State Pollution Control Board
Sri Sai Sharan plaza, No. 71/A, 2nd floor,
Dam road, Hosapete- 583203, Vijayanagar District.

Subject: Submission of monthly monitoring report for the month of August-2023.

Reference: 1) CFO No. AW-329576 PCB ID 29470 Dated 02.02.2022
2) Amendment CFO No. AW-335581 PCB ID 29470 Dated 17.01.2023

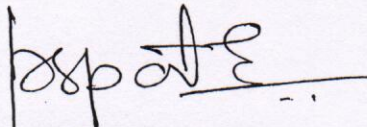
Dear Sir,

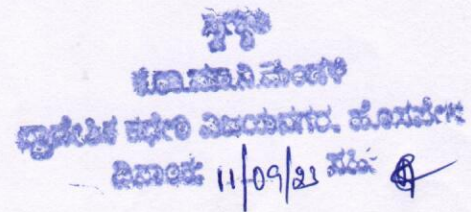
With reference to the above subject, herewith we are submitting the environmental monitoring report of our plant for the month of August-2023 for your kind information.

Kindly acknowledge receipt of the same.

Thanking you,

The Sandur Manganese & Iron Ores Limited,


Authorized Signatory



Encl: Environmental Monitoring Report- August 2023

MINES OFFICE: Deogiri - 583112, Sandur Taluk, Ballari District
Tel: +91 8395 271025 / 28 / 29 / 40; Fax: +91 8395 271066

PLANT OFFICE: Metal & Ferroalloy Plant, Vyasankere, Mariyammanahalli - 583 222, Hosapete Taluk, Ballari District
Tel: +91 8394 244450 / 244335

ENVIRONMENTAL MONITORING REPORT

August, 2023

Project : The Sandur Manganese & Iron Ores Ltd.
(Metal & Ferro Alloys Plant),
Vyasanakere, Hanumanahalli Village,
Hospet Taluk,

CONSULTANT

MINERAL ENGINEERING SERVICES
(Accredited by QCI-NABET ORG000756)
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ENVIRONMENTAL LABORATORY
Unit of Mineral Engineering Services
(Accredited by NABL &, MOEF&CC Under
E(P) 1986)
#948, 2nd Cross, Kammanahalli Main
Road, St Thomas Town Post, Bangalore-
560 084, Karnataka,

LISsaT OF TABLES

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ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES)

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MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025



TEST REPORT

Table No. 1

AMBIENT AIR QUALITY

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,							
Sample Collected by : Environmental Laboratory Representative							
Station at & Code : A1, Near Existing AAQMS 01 (SMIORE Schools)							
Duration : 24 Hrs							
Issue date : 04.09.2023							
Reference IS 5182 & Lab SOP							
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
04.08.2023	N/23/08/2-0082	7	9	48	24	<20	<1
05.08.2023	N/23/08/2-0139	6	12	48	26	<20	<1
07.08.2023	N/23/08/3-0045	10	11	53	24	<20	<1
08.08.2023	N/23/08/3-0082	10	13	47	22	<20	<1
18.07.2023	N/23/08/4-0132	11	12	54	28	<20	<1
19.08.2023	N/23/08/4-203	9	10	50	28	<20	<1
21.08.2023	N/23/08/5-0026	10	12	57	29	<20	<1
22.08.2023	N/23/08/5-0060	6	12	41	22	<20	<1
29.08.2023	N/23/09/1-0094	6	10	56	29	<20	<1
30.08.2023	N/23/09/1-0098	10	12	54	27	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
04.08.2023	N/23/08/2-0082	0.15	<0.1	<0.5	<0.5	0.06	23
05.08.2023	N/23/08/2-0139	<0.1	<0.1	<0.5	<0.5	0.08	20
07.08.2023	N/23/08/3-0045	0.12	<0.1	<0.5	<0.5	0.13	24
08.08.2023	N/23/08/3-0082	<0.1	<0.1	<0.5	<0.5	0.25	22
18.07.2023	N/23/08/4-0132	0.15	<0.1	<0.5	<0.5	0.35	26
19.08.2023	N/23/08/4-203	0.18	<0.1	<0.5	<0.5	0.24	23
21.08.2023	N/23/08/5-0026	0.18	<0.1	<0.5	<0.5	0.22	20
22.08.2023	N/23/08/5-0060	0.18	<0.1	<0.5	<0.5	0.21	24
29.08.2023	N/23/09/1-0094	0.06	<0.1	<0.5	<0.5	0.25	23
30.08.2023	N/23/09/1-0098	0.12	<0.1	<0.5	<0.5	0.32	20
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

Arshiya Kousar
ARSHIYA KOUSAR
Dy. T.M. Chemical

Authorised Signatory



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TEST REPORT

Table No. 2

AMBIENT AIR QUALITY

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd.
(Metal & Ferro Alloys Plant),
Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,

Sample Collected by : Environmental Laboratory Representative
Station at & Code : A2, Existing Water Reservoir (Near WTP Plant)
Duration : 24 Hrs
Issue date : 04.09.2023
Reference IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
04.08.2023	N/23/08/2-0083	6	12	40	22	<20	<1
05.08.2023	N/23/08/2-0140	9	12	38	17	<20	<1
07.08.2023	N/23/08/3-0046	8	9	48	26	<20	<1
08.08.2023	N/23/08/3-0083	11	18	54	25	<20	<1
18.07.2023	N/23/08/4-0133	5	9	56	30	<20	<1
19.08.2023	N/23/08/4-204	7	12	54	26	<20	<1
21.08.2023	N/23/08/5-0027	9	11	54	23	<20	<1
22.08.2023	N/23/08/5-0061	7	9	48	24	<20	<1
29.08.2023	N/23/09/1-0095	12	14	52	28	<20	<1
30.08.2023	N/23/09/1-0099	12	14	58	32	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
04.08.2023	N/23/08/2-0083	0.15	<0.1	<0.5	<0.5	0.05	26
05.08.2023	N/23/08/2-0140	0.16	<0.1	<0.5	<0.5	0.08	21
07.08.2023	N/23/08/3-0046	0.12	<0.1	<0.5	<0.5	0.29	20
08.08.2023	N/23/08/3-0083	0.07	<0.1	<0.5	<0.5	0.32	22
18.07.2023	N/23/08/4-0133	0.13	<0.1	<0.5	<0.5	0.24	28
19.08.2023	N/23/08/4-204	0.13	<0.1	<0.5	<0.5	0.31	26
21.08.2023	N/23/08/5-0027	0.11	<0.1	<0.5	<0.5	0.14	23
22.08.2023	N/23/08/5-0061	0.13	<0.1	<0.5	<0.5	0.17	26
29.08.2023	N/23/09/1-0095	0.05	<0.1	<0.5	<0.5	0.11	21
30.08.2023	N/23/09/1-0099	0.10	<0.1	<0.5	<0.5	0.26	30
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

Arshiya Housar
ARSHIYA HOUSAR
Dy. T.M. Chemical
Authorised Signatory



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TEST REPORT

Table No. 3

AMBIENT AIR QUALITY

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,							
Sample Collected by : Environmental Laboratory Representative							
Station at & Code : A3, Galemmanagudi							
Duration : 24 Hrs							
Issue date : 04.09.2023							
Reference IS 5182 & Lab SOP							
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
04.08.2023	N/23/08/2-0084	10	13	55	27	<20	<1
05.08.2023	N/23/08/2-0141	7	10	42	21	<20	<1
07.08.2023	N/23/08/3-0047	7	10	45	27	<20	<1
08.08.2023	N/23/08/3-0084	10	12	43	18	<20	<1
18.07.2023	N/23/08/4-0134	8	11	53	26	<20	<1
19.08.2023	N/23/08/4-205	6	9	48	21	<20	<1
21.08.2023	N/23/08/5-0028	8	10	51	25	<20	<1
22.08.2023	N/23/08/5-0062	8	11	45	20	<20	<1
29.08.2023	N/23/09/1-0096	11	12	43	21	<20	<1
30.08.2023	N/23/09/1-0100	9	11	49	25	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
04.08.2023	N/23/08/2-0084	0.15	<0.1	<0.5	<0.5	0.05	20
05.08.2023	N/23/08/2-0141	0.12	<0.1	<0.5	<0.5	0.24	20
07.08.2023	N/23/08/3-0047	0.12	<0.1	<0.5	<0.5	0.24	28
08.08.2023	N/23/08/3-0084	0.18	<0.1	<0.5	<0.5	0.20	25
18.07.2023	N/23/08/4-0134	0.11	<0.1	<0.5	<0.5	0.19	22
19.08.2023	N/23/08/4-205	<0.1	<0.1	<0.5	<0.5	0.21	21
21.08.2023	N/23/08/5-0028	0.13	<0.1	<0.5	<0.5	0.15	25
22.08.2023	N/23/08/5-0062	0.17	<0.1	<0.5	<0.5	0.22	25
29.08.2023	N/23/09/1-0096	0.08	<0.1	<0.5	<0.5	0.36	20
30.08.2023	N/23/09/1-0100	0.14	<0.1	<0.5	<0.5	0.28	24
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

Arshiya Kousar
ARSHIYA KOUSAR
Dy. T.M. Chemical
Authorised Signatory



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TEST REPORT

Table No. 4

AMBIENT AIR QUALITY

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,							
Sample Collected by : Environmental Laboratory Representative							
Station at & Code : A4, Near Plant Railway Siding							
Duration : 24 Hrs							
Issue date : 04.09.2023							
Reference IS 5182 & Lab SOP							
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
04.08.2023	N/23/08/2-0085	5	9	51	26	<20	<1
05.08.2023	N/23/08/2-0142	5	9	30	18	<20	<1
07.08.2023	N/23/08/3-0048	9	11	51	24	<20	<1
08.08.2023	N/23/08/3-0085	6	9	47	25	<20	<1
18.07.2023	N/23/08/4-0135	9	10	46	17	<20	<1
19.08.2023	N/23/08/4-206	8	12	44	22	<20	<1
21.08.2023	N/23/08/5-0029	10	11	49	22	<20	<1
22.08.2023	N/23/08/5-0063	6	10	51	25	<20	<1
29.08.2023	N/23/09/1-0097	14	16	50	25	<20	<1
30.08.2023	N/23/09/1-0101	8	10	54	28	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
04.08.2023	N/23/08/2-0085	0.15	<0.1	<0.5	<0.5	0.34	20
05.08.2023	N/23/08/2-0142	0.11	<0.1	<0.5	<0.5	0.32	23
07.08.2023	N/23/08/3-0048	0.12	<0.1	<0.5	<0.5	0.25	26
08.08.2023	N/23/08/3-0085	<0.1	<0.1	<0.5	<0.5	0.17	21
18.07.2023	N/23/08/4-0135	<0.1	<0.1	<0.5	<0.5	0.13	20
19.08.2023	N/23/08/4-206	0.11	<0.1	<0.5	<0.5	0.16	23
21.08.2023	N/23/08/5-0029	<0.1	<0.1	<0.5	<0.5	0.21	26
22.08.2023	N/23/08/5-0063	0.11	<0.1	<0.5	<0.5	0.21	28
29.08.2023	N/23/09/1-0097	0.11	<0.1	<0.5	<0.5	0.25	21
30.08.2023	N/23/09/1-0101	0.11	<0.1	<0.5	<0.5	0.21	20
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

Arshiyakousar
ARSHIYAKOUSAR

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

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ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES)

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TEST REPORT

Table No. 5

Stack Monitoring Report

Report No. : N010223091

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasnakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,	
Location	: ARC Furnace area
Stack ID	: Stack Attached to Furnace - 3
Sample Collected by	: Environmental Laboratory Representative
Date of Collection	: 30.08.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 01.09.2023
Lab Code	: N/23/09/1-0102
Issue date	: 04.09.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature (°C)	29
3	Stack Temperature (°C)	96
4	Velocity (m/s)	8.1
5	Stack Height (M)	35
6	Stack Diameter (M)	2.5
7	Cross Sectional Area in meter square (m ²)	4.9109
8	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	103656
9	Sample Condition When Received	Satisfactory
10	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
11	Serial No. of the Equipment	338 DTH 14
12	Calibration done on and due on	Done on 19.11.2022 and Due on 18.11.2024

Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Tolerance Limits Ref - G.S.R. 227(E) dated 31.03.2012	Test Method
1	Particulate Matter	mg/Nm ³	32.60	150	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO ₂),	mg/Nm ³	22.40	--	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO ₂)	mg/Nm ³	42.00	--	IS: 11255(Part-7) 2017
4	CO	%	0.21	--	Flue gas analyser
5	Oxygen (O ₂)	%	5.63	--	Flue gas analyser

Arshiy Kousar
ARSHIYA KOUSAR
Dy. T.M. Chemical

Govt. Analyst / Authorised Signatory



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TEST REPORT

Table No. 6

Stack Monitoring Report

Report No. : N010323091

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,	
Location	: Coke Oven Plant
Stack ID	: Stack Attached to WHRB -01
Sample Collected by	: Environmental Laboratory Representative
Date of Collection	: 30.08.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 01.09.2023
Lab Code	: N/23/09/1-0103
Issue date	: 04.09.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature ($^{\circ}\text{C}$)	29
3	Stack Temperature ($^{\circ}\text{C}$)	115
4	Velocity (m/s)	8.29
5	Stack Height (M)	60
6	Stack Diameter (M)	4.6
7	Cross Sectional Area in meter square (m^2)	16.62647
8	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	346019
9	Sample Condition When Received	Satisfactory
10	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
11	Serial No. of the Equipment	338 DTH 14
12	Calibration done on and due on	Done on 19.11.2022 and Due on 18.11.2024

Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Tolerance Limits Ref - G.S.R. 227(E) dated 31.03.2012	Test Method
1	Particulate Matter	mg/Nm^3	36.80	50	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO_2),	mg/Nm^3	62.20	800	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO_2)	mg/Nm^3	41.60	500	IS: 11255(Part-7) 2017
4	CO	%	0.36	Max1%	flue gas analyser
5	Oxygen (O_2)	%	5.90	--	flue gas analyser

ARSHIYA KOUSAR

Dy. T.M. Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbno@gmail.com. www.envtest.in



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TEST REPORT

Table No. 7

Stack Monitoring Report

Report No. : N010423091

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,					
Location	: Coke Oven Plant				
Stack ID	: Stack Attached to WHRB -02				
Sample Collected by	: Environmental Laboratory Representative				
Date of Collection	: 31.08.2023				
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1				
Date of Sample Receipt	: 01.09.2023				
Lab Code	: N/23/09/1-0104				
Issue date	: 04.09.2023				
STACK DETAILS					
1	Fuel Used	-			
2	Ambient Temperature ($^{\circ}$ C)	29			
3	Stack Temperature ($^{\circ}$ C)	110			
4	Velocity (m/s)	7.57			
5	Stack Height (M)	60			
6	Stack Diameter (M)	4.6			
7	Cross Sectional Area in meter square (m^2)	16.62647			
8	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	319855			
9	Sample Condition When Received	Satisfactory			
10	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1			
11	Serial No. of the Equipment	338 DTH 14			
12	Calibration done on and due on	Done on 19.11.2022 and Due on 18.11.2024			
Pollutional Parameters (Result)					
Sl.No	Parameters	Unit	Results	Tolerance Limits Ref - G.S.R. 227(E) dated 31.03.2012	Test Method
1	Particulate Matter	mg/ Nm^3	27.00	50	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO_2)	mg/ Nm^3	33.60	800	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO_2)	mg/ Nm^3	34.60	500	IS: 11255(Part-7) 2017
4	CO	%	0.29	Max1%	flue gas analyser
5	Oxygen (O_2)	%	6.10	--	flue gas analyser

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TEST REPORT

Table No. 8

Stack Monitoring Report

Report No. : N010523091

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasnakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,	
Location	: Coke Oven Plant
Stack ID	: Stack Attached to Coal Crushing
Sample Collected by	: Environmental Laboratory Representative
Date of Collection	: 31.08.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 01.09.2023
Lab Code	: N/23/09/1-0105
Issue date	: 04.09.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature (°C)	29
3	Stack Temperature (°C)	52
4	Velocity (m/s)	6.93
5	Stack Height (M)	15
6	Stack Diameter (M)	0.8
7	Cross Sectional Area in meter square (m ²)	0.4419
8	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	10448
9	Sample Condition When Received	Satisfactory
10	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
11	Serial No. of the Equipment	338 DTH 14
12	Calibration done on and due on	Done on 19.11.2022 and Due on 18.11.2024

Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Tolerance Limits Ref - G.S.R. 227(E) dated 31.03.2012	Test Method
1	Particulate Matter	mg/Nm ³	28.20	50	IS: 11255(Part-1) 2014

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TEST REPORT

Table No. 9

Stack Monitoring Report

Report No. : N010623091

Name and Address of the Industry :	Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,
Location :	Coke Oven Plant
Stack ID :	Stack Attached to Coke Cutter
Sample Collected by :	Environmental Laboratory Representative
Date of Collection :	31.08.2023
Particulars of Sample Collected :	Emissions from stack collected through stack sample VSS1
Date of Sample Receipt :	01.09.2023
Lab Code :	N/23/09/1-0106
Issue date :	04.09.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature (°C)	29
3	Stack Temperature (°C)	55
4	Velocity (m/s)	6.56
5	Stack Height (M)	15
6	Stack Diameter (M)	0.7
7	Cross Sectional Area in meter square (m ²)	0.3850
8	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	7492
9	Sample Condition When Received	Satisfactory
10	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
11	Serial No. of the Equipment	338 DTH 14
12	Calibration done on and due on	Done on 19.11.2022 and Due on 18.11.2024

Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Tolerance Limits Ref - G.S.R. 227(E) dated 31.03.2012	Test Method
1	Particulate Matter	mg/Nm ³	30.50	50	IS: 11255(Part-1) 2014

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TEST REPORT

Table No. 10

Stack Monitoring Report

Report No. : N010723091

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,	
Location	: Coke Oven Plant
Stack ID	: Stack Attached to Coke Screening & Store
Sample Collected by	: Environmental Laboratory Representative
Date of Collection	: 31.08.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 01.09.2023
Lab Code	: N/23/09/1-0107
Issue date	: 04.09.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature ($^{\circ}\text{C}$)	29
3	Stack Temperature ($^{\circ}\text{C}$)	48
4	Velocity (m/s)	6.25
5	Stack Height (M)	15
6	Stack Diameter (M)	0.7
7	Cross Sectional Area in meter square (m^2)	0.3850
8	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	7301
9	Sample Condition When Received	Satisfactory
10	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
11	Serial No. of the Equipment	338 DTH 14
12	Calibration done on and due on	Done on 19.11.2022 and Due on 18.11.2024

Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Tolerance Limits Ref - G.S.R. 227(E) dated 31.03.2012	Test Method
1	Particulate Matter	mg/Nm^3	28.20	50	IS: 11255(Part-1) 2014

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TEST REPORT

Table No. 11

AMBIENT NOISE LEVEL DATA

Name of the Client	: M/s. Sandur Manganese & Iron Ores Limited						
Name of the Project	: Iron & Steel Plant at Vysanakere village, Hosapete Taluk, District Ballari State Karnataka						
Particulars of sample collected	: Sound Levels						
Sample Collected by	: Mineral Engineering Services						
Date of sample collection	: 07.08.2023						
Date of sample receipt	: 08.08.2023						
Issue Date	: 04.09.2023						
Sampling & Test Method	: IS:9989						
Code No.	Monitoring stations	Day			Night		
		L _{min}	L _{eq}	L _{max}	L _{min}	L _{eq}	L _{max}
Core zone							
N1	Near Existing AAQMS 01 (SMIORE Schools)	43.3	50.2	55.4	35.0	42.3	48.0
N2	Existing Water Reservoir (Near WTP Plant)	40.0	46.8	51.4	34.5	42.0	45.8
Buffer zone							
N3	Galemmanagudi	40.8	53.7	60.1	34.6	41.6	46.5
N4	Vysanakere Village	35.0	46.2	50.3	34.0	43.7	47.0
N5	Hanumanhalli	41.0	50.0	56.7	36.0	41.3	46.8
Permissible Limits of Ambient Noise Levels as per CPCB Guidelines							
Leq. Limit dB(A)							
Day Night							
Industrial areas		75		70			
Commercial area		65		55			
Residential area		55		45			


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TEST REPORT

Table No.12

Name of the Client		: M/s. Sandur Manganese & Iron Ores Limited			
Name of the Project		: Iron & Steel Plant at Vysanakere village, Hosapete Taluk, Ballari District, Karnataka			
Sample Collected by		: Environmental Laboratory Representative			
Particulars of sample collected		: SW1 - Tungabhadra Dam water SW2 - Plant Reservoir			
Date of sample collection		: 05.08.2023			
Date of sample receipt		: 07.08.2023			
Issue Date		: 17.08.2023			
Ref:IS : 2296, 1982 Class C Norms (Stream Water Standards)					
Sl.No.	Lab Code	Results		Limits For Stream Water Standards	Method of Testing
		ED/23/08/2-0023	ED/23/08/2-0024		
Parameters	SW1	SW2			
1	Colour (Hazen Units), Max	20	30	300	IS:3025(Part-4)2021
2	pH	8.29	8.48	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l, Max	5.8	5.6	Min 4	IS:3025(Part-38)1989 RA 2019
4	Oil & Grease, mg/l	<0.1	<0.1	0.1	IS:3025(Part 39)2021
5	Total Dissolved Solids (mg/l), Max	148	280	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	0.93	0.76	50	IS:3025(Part-34)1988 RA 2019
7	Anionic detergents (as MBAS),mg/l, Max	<0.1	<0.1	1.0	IS:3025(Part-68)
8	Copper (as Cu),mg/l, Max	0.017	0.028	1.5	IS:3025(Part-2) 2019
9	Chloride (as Cl),mg/l, Max	25.5	51	600	IS:3025(Part-32) ;1988 RA 2019
10	Fluoride (as F),mg/l, Max	0.14	0.3	1.5	APHA 23rd Edition 4500F
11	Iron (as Fe),mg/l, Max	0.036	0.013	50	IS:3025(P-2) 2019
12	Phenolic compounds (as C ₆ H ₅ OH),mg/l, Max	<0.001	<0.001	0.005	IS:3025(P-43)Sec 1 2022
13	Selenium (as Se), mg/l, Max	<0.005	<0.005	0.05	IS:3025(P-2) 2019
14	Sulphates as SO ₄ (mg/l), Max	16.44	40	400	IS:3025(P-24)Sec 1 2022
15	Zinc (as Zn),mg/l, Max	0.048	0.046	15	IS:3025(P-2) 2019
16	Cadmium (as Cd), mg/l, Max	<0.001	<0.001	0.01	IS:3025(P-2) 2019
17	Cyanides (as CN), mg/l, Max	<0.01	<0.01	0.05	IS:3025(P-27) Sec 1 2021
18	Lead (as Pb) mg/l, Max	<0.005	<0.005	0.1	IS:3025(P-2) 2019
19	Total Arsenic as As (mg/l), Max	<0.002	<0.002	0.2	IS:3025(P-2) 2019
20	Hexavalent Chromium (as Cr ⁺⁶), mg/l, Max	<0.03	<0.03	0.05	IS:3025(P-52) 2014
21	Biochemical Oxygen Demand (as O ₂), mg/l	<3.0	<3.0	3	IS:3025(P-44) 2014
22	Total Coliform (mpn/100ml)	41	58	5000	IS:1622:1981

"END OF REPORT"

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TEST REPORT

Table No.13

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,					
Sample Collected by : Environmental Laboratory Representative					
Particulars of sample collected : SW3 - Guest house near Nala outlet					
Date of sample collection : 05.08.2023					
Date of sample receipt : 12.08.2023					
Issue Date : 17.08.2023					
Ref:IS : 2296, 1982 Class C Norms (Stream Water Standards)					
Sl.No.	Lab Code	Parameters	ED/23/08/2-0132	Limits For Stream Water Standards	Method of Testing
			Results		
			SW3		
1		Colour (Hazen Units), Max	10	300	IS:3025(Part-4)2021
2		pH	7.38	6.5 to 8.5	IS:3025(Part-11)2022
3		Dissolved Oxygen (as O ₂), mg/l, Max	5.6	Min 4	IS:3025(Part-38)1989RA 2019
4		Oil & Grease, mg/l	<0.1	0.1	IS:3025(Part 39)2021
5		Total Dissolved Solids (mg/l), Max	60	1500	IS:3025(Part-16)2023
6		Nitrates (as NO ₃),mg/l, Max	10.0	50	IS:3025(Part-34)1988 RA 2019
7		Anionic detergents (as MBAS),mg/l, Max	<0.1	1.0	IS:3025(Part-68)
8		Copper (as Cu),mg/l, Max	0.019	1.5	IS:3025(Part-2) 2019
9		Chloride (as Cl),mg/l, Max	14	600	IS:3025(Part-32) ;1988RA2019
10		Fluoride (as F),mg/l, Max	0.18	1.5	APHA 23rd Edition 4500F
11		Iron (as Fe),mg/l, Max	0.041	50	IS:3025(P-2) 2019
12		Phenolic compounds (as C ₆ H ₅ OH),mg/l, Max	<0.001	0.005	IS:3025(P-43)Sec 1 2022
13		Selenium (as Se), mg/l, Max	<0.005	0.05	IS:3025(P-2) 2019
14		Sulphates as SO ₄ (mg/l), Max	30	400	IS:3025(P-24)Sec 1 2022
15		Zinc (as Zn),mg/l, Max	0.044	15	IS:3025(P-2) 2019
16		Cadmium (as Cd), mg/l, Max	<0.001	0.01	IS:3025(P-2) 2019
17		Cyanides (as CN), mg/l, Max	<0.01	0.05	IS:3025(P-27) Sec 1 2021
18		Lead (as Pb) mg/l, Max	<0.005	0.1	IS:3025(P-2) 2019
19		Total Arsenic as As (mg/l), Max	<0.002	0.2	IS:3025(P-2) 2019
20		Hexavalent Chromium(as Cr ⁺⁶), mg/l, Max	<0.03	0.05	IS:3025(P-52) 2014
21		Biochemical Oxygen Demand (as O ₂), mg/l	<3.0	3	IS:3025(P-44) 2014
22		Total Coliform (mpn/100ml)	75	5000	IS:1622:1981

"END OF REPORT"

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