

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

'SATYALAYA', No.266
Ward No.1, Palace Road
Sandur - 583 119, Ballari District
Karnataka, India
Tel: +91 8395 260301/ 283173-199
Fax: +91 8395 260473



CORPORATE OFFICE

'SANDUR HOUSE', No.9
Bellary Road, Sadashivanagar
Bengaluru - 560 080
Karnataka, India
Tel: +91 80 4152 0176 - 79 / 4547 3000
Fax: +91 80 4152 0182

Ref No: SMIORE/PLANT/ENV/MR/2023-24/123

05.12.2023

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 environmental monitoring report for the month of November -2023.

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

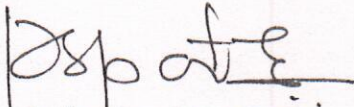
Dear Sir,


With reference to the subject cited above, please find here with Environmental Monitoring reports of M/s The Sandur Manganese & Iron Ores Limited, Vyasankere, Hanumanahalli Post, 583222, Hosapete Taluk, Vijayanagara District., for the Period November -2023 for your kind perusal.

Kindly acknowledge receipt of the same.

Thanking you,

The Sandur Manganese & Iron Ores Limited,


Authorized Signatory


ಅಧಿಕಾರ ವಹಿಸಿದ ನಿರೀಕ್ಷಿಸಿದ, ಕರ್ನಾಟಕ
ಪರಿಸರ ಸಂರಕ್ಷಣೆ ಮತ್ತು ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಇಲಾಖೆ
ಬೆಂಗಳೂರು 7/12/23

Encl: Environmental Monitoring Report November - 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, Vijayanagara District
Tel: +91 8394 244450 / 244335

ENVIRONMENTAL MONITORING REPORT

November, 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)
25/XXV, Club Road, BELLARY-583103,
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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,

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ENVIRONMENTAL LABORATORY



(UNIT OF MINERAL ENGINEERING SERVICES)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory
Recognised by MoEFCC(CPCB) under E(P) Act 1986 & recognition is 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 : 02.12.2023							
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
03.11.2023	N/23/11/2-0043	10	18	58	29	<20	<1
04.11.2023	N/23/11/2-0090	11	16	47	25	<20	<1
06.11.2023	N/23/11/3-0065	9	12	42	26	<20	<1
07.11.2023	N/23/11/3-0105	7	15	39	28	<20	<1
17.11.2023	N/23/11/3-0357	11	14	50	28	<20	<1
18.11.2023	N/23/11/4-0051	9	10	46	27	<20	<1
20.11.2023	N/23/11/5-0047	11	13	52	29	<20	<1
21.11.2023	N/23/11/5-0087	11	10	56	32	<20	<1
27.11.2023	N/23/12/1-0039	10	12	57	28	<20	<1
28.11.2023	N/23/12/1-0072	9	11	43	26	<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
03.11.2023	N/23/11/2-0043	0.21	<0.1	<0.5	<0.5	0.35	22
04.11.2023	N/23/11/2-0090	0.18	<0.1	<0.5	<0.5	0.26	28
06.11.2023	N/23/11/3-0065	0.16	<0.1	<0.5	<0.5	0.24	25
07.11.2023	N/23/11/3-0105	0.19	<0.1	<0.5	<0.5	0.20	23
17.11.2023	N/23/11/3-0357	0.11	<0.1	<0.5	<0.5	0.26	28
18.11.2023	N/23/11/4-0051	0.15	<0.1	<0.5	<0.5	0.23	25
20.11.2023	N/23/11/5-0047	0.18	<0.1	<0.5	<0.5	0.35	28
21.11.2023	N/23/11/5-0087	0.18	<0.1	<0.5	<0.5	0.22	21
27.11.2023	N/23/12/1-0039	0.11	<0.1	<0.5	<0.5	0.25	24
28.11.2023	N/23/12/1-0072	0.13	<0.1	<0.5	<0.5	0.22	28
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							

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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 : 02.12.2023							
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
03.11.2023	N/23/11/2-0044	11	16	63	30	<20	<1
04.11.2023	N/23/11/2-0091	12	18	56	32	<20	<1
06.11.2023	N/23/11/3-0066	8	14	50	26	<20	<1
07.11.2023	N/23/11/3-0106	9	12	43	22	<20	<1
17.11.2023	N/23/11/3-0358	7	11	45	21	<20	<1
18.11.2023	N/23/11/4-0052	12	16	58	31	<20	<1
20.11.2023	N/23/11/5-0048	12	18	60	33	<20	<1
21.11.2023	N/23/11/5-0088	10	12	50	27	<20	<1
27.11.2023	N/23/12/1-0040	9	11	59	33	<20	<1
28.11.2023	N/23/12/1-0073	7	13	53	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
03.11.2023	N/23/11/2-0044	0.19	<0.1	<0.5	<0.5	0.42	26
04.11.2023	N/23/11/2-0091	0.14	<0.1	<0.5	<0.5	0.31	26
06.11.2023	N/23/11/3-0066	0.13	<0.1	<0.5	<0.5	0.22	20
07.11.2023	N/23/11/3-0106	0.15	<0.1	<0.5	<0.5	0.22	27
17.11.2023	N/23/11/3-0358	0.13	<0.1	<0.5	<0.5	0.21	20
18.11.2023	N/23/11/4-0052	0.16	<0.1	<0.5	<0.5	0.25	29
20.11.2023	N/23/11/5-0048	0.24	<0.1	<0.5	<0.5	0.48	30
21.11.2023	N/23/11/5-0088	0.11	<0.1	<0.5	<0.5	0.26	30
27.11.2023	N/23/12/1-0040	0.18	<0.1	<0.5	<0.5	0.20	25
28.11.2023	N/23/12/1-0073	0.11	<0.1	<0.5	<0.5	0.29	29
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

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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 : 02.12.2023							
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
03.11.2023	N/23/11/2-0045	9	11	50	22	<20	<1
04.11.2023	N/23/11/2-0092	11	17	54	28	<20	<1
06.11.2023	N/23/11/3-0067	9	12	47	22	<20	<1
07.11.2023	N/23/11/3-0107	7	18	49	25	<20	<1
17.11.2023	N/23/11/3-0359	6	9	53	27	<20	<1
18.11.2023	N/23/11/4-0053	11	14	54	28	<20	<1
20.11.2023	N/23/11/5-0049	10	14	38	21	<20	<1
21.11.2023	N/23/11/5-0089	10	15	40	24	<20	<1
27.11.2023	N/23/12/1-0041	9	12	54	29	<20	<1
28.11.2023	N/23/12/1-0074	7	10	51	26	<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
03.11.2023	N/23/11/2-0045	0.18	<0.1	<0.5	<0.5	0.36	28
04.11.2023	N/23/11/2-0092	0.11	<0.1	<0.5	<0.5	0.21	22
06.11.2023	N/23/11/3-0067	0.17	<0.1	<0.5	<0.5	0.26	25
07.11.2023	N/23/11/3-0107	0.11	<0.1	<0.5	<0.5	0.31	26
17.11.2023	N/23/11/3-0359	0.16	<0.1	<0.5	<0.5	<0.2	<20
18.11.2023	N/23/11/4-0053	0.11	<0.1	<0.5	<0.5	0.22	28
20.11.2023	N/23/11/5-0049	0.16	<0.1	<0.5	<0.5	0.25	26
21.11.2023	N/23/11/5-0089	0.16	<0.1	<0.5	<0.5	0.25	27
27.11.2023	N/23/12/1-0041	0.13	<0.1	<0.5	<0.5	0.22	26
28.11.2023	N/23/12/1-0074	0.19	<0.1	<0.5	<0.5	0.24	28
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

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TEST REPORT

Table No. 4

AMBIENT AIR QUALITY

Name and Address of the Industry : M/s. 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 : 02.12.2023							
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
03.11.2023	N/23/11/2-0046	12	18	55	28	<20	<1
04.11.2023	N/23/11/2-0093	9	11	50	22	<20	<1
06.11.2023	N/23/11/3-0068	6	11	43	16	<20	<1
07.11.2023	N/23/11/3-0108	9	19	36	20	<20	<1
17.11.2023	N/23/11/3-0360	8	11	47	24	<20	<1
18.11.2023	N/23/11/4-0054	11	13	57	32	<20	<1
20.11.2023	N/23/11/5-0050	10	12	47	26	<20	<1
21.11.2023	N/23/11/5-0090	8	9	54	23	<20	<1
27.11.2023	N/23/12/1-0042	11	16	51	28	<20	<1
28.11.2023	N/23/12/1-0075	9	11	46	29	<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
03.11.2023	N/23/11/2-0046	0.16	<0.1	<0.5	<0.5	0.33	25
04.11.2023	N/23/11/2-0093	0.13	<0.1	<0.5	<0.5	0.29	23
06.11.2023	N/23/11/3-0068	0.11	<0.1	<0.5	<0.5	0.26	22
07.11.2023	N/23/11/3-0108	0.13	<0.1	<0.5	<0.5	0.25	24
17.11.2023	N/23/11/3-0360	0.11	<0.1	<0.5	<0.5	0.22	24
18.11.2023	N/23/11/4-0054	0.18	<0.1	<0.5	<0.5	0.22	22
20.11.2023	N/23/11/5-0050	0.21	<0.1	<0.5	<0.5	0.41	28
21.11.2023	N/23/11/5-0090	0.22	<0.1	<0.5	<0.5	0.21	26
27.11.2023	N/23/12/1-0042	0.17	<0.1	<0.5	<0.5	0.20	22
28.11.2023	N/23/12/1-0075	0.15	<0.1	<0.5	<0.5	0.29	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

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TEST REPORT

Table No. 5

AMBIENT NOISE LEVEL DATA

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vysanakere, Hanumanahalli Village, Hospet Taluk, Ballari Dist ,							
Particulars of Sample Collected		: Ambient Noise Level collected through Sound Level Meter (HTC SL-1352 Data Logger)					
Sample Collected by		: Mineral Engineering Services					
Date of sample collection		: 21.11.2023					
Date of sample receipt		: 22.11.2023					
Issue Date		: 02.12.2023					
Sampling & Test Method		: IS:9989					
Code No.	Monitoring stations	Day			Night		
		(06.00 Am to 10.00 Pm)			(10.00 Pm to 06.00 Am)		
		L _{min}	L _{eq}	L _{max}	L _{min}	L _{eq}	L _{max}
Core zone							
N1	Near Existing AAQMS 01 (SMIORE Schools)	42.8	54.5	63.0	34.0	42.0	46.0
N2	Existing Water Reservoir (Near WTP Plant)	41.0	50.0	58.3	37.3	43.7	45.3
Buffer zone							
N3	Galemmanagudi	39.5	50.0	56.7	34.6	42.2	46.5
N4	Vysanakere Village	38.0	50.1	55.8	34.0	44.3	48.3
N5	Hanumanhalli	36.5	50.0	55.0	35.3	42.6	48.0
<u>Permissible Limits of Ambient Noise Levels as per CPCB Guidelines</u>							
		Leq. Limit dB(A)					
		Day		Night			
Industrial areas		75		70			
Commercial area		65		55			
Residential area		55		45			

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TEST REPORT Stack Monitoring Report

Table No. 6

Report No. : N005523114

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd.	
Name	(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	: 18.11.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 20.11.2023
Lab Code	: N/23/11/4-0055
Issue date	: 02.12.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature ($^{\circ}\text{C}$)	30
3	Stack Temperature ($^{\circ}\text{C}$)	118
4	Velocity (m/s)	8.45
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)	103348
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	36.00	150	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO_2),	mg/Nm^3	20.32	--	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO_2)	mg/Nm^3	36.21	--	IS: 11255(Part-7) 2017
4	CO	%	0.26	--	flue gas analyser
4	Oxygen (O_2)	%	17.00	--	flue gas analyser

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TEST REPORT Stack Monitoring Report

Table No.7

Report No. : N005623114

Name and Address of the Industry : M/s. 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	: 18.11.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 20.11.2023
Lab Code	: N/23/11/4-0056
Issue date	: 02.12.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature (°C)	30
3	Stack Temperature (°C)	132
4	Velocity (m/s)	9.86
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)	290890
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	34.84	50	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO ₂),	mg/Nm ³	50.65	800	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO ₂)	mg/Nm ³	69.24	500	IS: 11255(Part-7) 2017
4	CO	%	0.66	Max1%	flue gas analyser
5	Oxygen (O ₂)	%	20.12	--	flue gas analyser

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TEST REPORT Stack Monitoring Report

Table No. 8

Report No. : N005123115

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	: 20.11.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 25.11.2023
Lab Code	: N/23/11/5-0051
Issue date	: 02.12.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature (°C)	29
3	Stack Temperature (°C)	130
4	Velocity (m/s)	8.91
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)	286909.0
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	33.82	50	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO ₂),	mg/Nm ³	48.70	800	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO ₂)	mg/Nm ³	52.30	500	IS: 11255(Part-7) 2017
4	CO	%	0.51	Max1%	flue gas analyser
5	Oxygen (O ₂)	%	6.22	--	flue gas analyser

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TEST REPORT Stack Monitoring Report

Table No. 9

Report No. : N005223115

Name and Address of the Industry : M/s. 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	: 20.11.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 25.11.2023
Lab Code	: N/23/11/5-0052
Issue date	: 02.12.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature (°C)	29
3	Stack Temperature (°C)	60
4	Velocity (m/s)	7.09
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)	10428
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	28.78	50	IS: 11255(Part-1) 2014

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TEST REPORT Stack Monitoring Report

Table No. 10

Report No. : N009123115

Name and Address of the Industry : M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant), Vyasankere, 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	: 21.11.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 25.11.2023
Lab Code	: N/23/11/5-0091
Issue date	: 02.12.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature ($^{\circ}\text{C}$)	30
3	Stack Temperature ($^{\circ}\text{C}$)	55
4	Velocity (m/s)	6.84
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)	7816
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	37.66	50	IS: 11255(Part-1) 2014

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TEST REPORT Stack Monitoring Report

Table No. 11

Report No. : N009223115

Name and Address of the Industry : M/s. 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	: 21.11.2023
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 25.11.2023
Lab Code	: N/23/11/5-0092
Issue date	: 02.12.2023

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature (°C)	30
3	Stack Temperature (°C)	57
4	Velocity (m/s)	6.42
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)	7292
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	30.12	50	IS: 11255(Part-1) 2014

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