

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
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Tel: +91 8395 260301/ 283173-199
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CORPORATE OFFICE

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Ref No: SMIORE/PLANT/ENV/MR/2024-25/2-I

13th May 2024

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 April-2024.

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

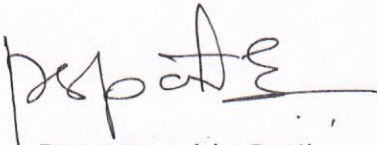
Dear Sir,

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 April -2024 for your kind perusal.

Kindly acknowledge receipt of the same.

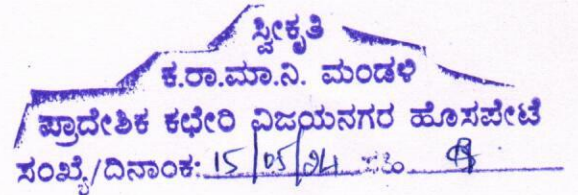
Thanking you,

For The Sandur Manganese & Iron Ores Limited,



Parvatareddy Patil
Senior General Manager-Plant




ಸ್ವೀಕೃತಿ
ಕ.ರಾ.ಮಾ.ನಿ. ಮಂಡಳಿ
ಪ್ರಾದೇಶಿಕ ಕಛೇರಿ ವಿಜಯನಗರ ಹೊಸಪೇಟೆ
ಸಂಖ್ಯೆ/ದಿನಾಂಕ: 15/05/24 ಸಂಖ್ಯೆ 49

Encl: Environmental Monitoring Report April -2024

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

April, 2024

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

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 LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory

Recognised by 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							
Station at & Code : A1, Near Existing AAQMS 01 (SMIORE Schools)							
Duration : 24 Hrs							
Issue date : 01.05.2024							
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
05.04.2024	N/24/04/1-0173	12	14	63	32	<20	<1
06.04.2024	N/24/04/2-0013	11	16	56	33	<20	<1
12.04.2024	N/24/04/2-0252	10	18	54	29	<20	<1
13.04.2024	N/24/04/3-0010	12	14	58	33	<20	<1
15.04.2024	N/24/04/3-00066	12	18	61	30	<20	<1
16.04.2024	N/24/04/3-00110	10	12	45	25	<20	<1
22.04.2024	N/24/04/4-0053	8	10	58	30	<20	<1
23.04.2024	N/24/04/4-0097	11	14	51	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
05.04.2024	N/24/04/1-0173	0.15	<0.1	<0.5	<0.5	0.26	30
06.04.2024	N/24/04/2-0013	0.19	<0.1	<0.5	<0.5	0.24	31
12.04.2024	N/24/04/2-0252	0.25	<0.1	<0.5	<0.5	0.28	20
13.04.2024	N/24/04/3-0010	0.12	<0.1	<0.5	<0.5	0.26	28
15.04.2024	N/24/04/3-00066	0.26	<0.1	<0.5	<0.5	0.28	22
16.04.2024	N/24/04/3-00110	0.13	<0.1	<0.5	<0.5	0.27	24
22.04.2024	N/24/04/4-0053	0.15	<0.1	<0.5	<0.5	0.22	25
23.04.2024	N/24/04/4-0097	0.10	<0.1	<0.5	<0.5	0.20	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
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Dy. T.M. - Chemical

Govt. Analyst / 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							
Station at & Code : A2, Existing Water Reservoir (Near WTP Plant)							
Duration : 24 Hrs							
Issue date : 01.05.2024							
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
05.04.2024	N/24/04/1-0174	8	11	54	32	<20	<1
06.04.2024	N/24/04/2-0014	14	18	63	33	<20	<1
12.04.2024	N/24/04/2-0253	12	16	54	29	<20	<1
13.04.2024	N/24/04/3-0011	10	14	50	27	<20	<1
15.04.2024	N/24/04/3-00067	11	16	60	33	<20	<1
16.04.2024	N/24/04/3-00111	11	13	56	29	<20	<1
22.04.2024	N/24/04/4-0054	11	15	47	27	<20	<1
23.04.2024	N/24/04/4-0098	12	15	59	30	<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
05.04.2024	N/24/04/1-0174	0.24	<0.1	<0.5	<0.5	0.33	25
06.04.2024	N/24/04/2-0014	0.12	<0.1	<0.5	<0.5	0.38	28
12.04.2024	N/24/04/2-0253	0.21	<0.1	<0.5	<0.5	0.31	28
13.04.2024	N/24/04/3-0011	0.28	<0.1	<0.5	<0.5	0.46	26
15.04.2024	N/24/04/3-00067	0.26	<0.1	<0.5	<0.5	0.38	24
16.04.2024	N/24/04/3-00111	0.25	<0.1	<0.5	<0.5	0.27	29
22.04.2024	N/24/04/4-0054	0.27	<0.1	<0.5	<0.5	0.22	27
23.04.2024	N/24/04/4-0098	0.23	<0.1	<0.5	<0.5	0.33	26
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
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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

Station at & Code : A3, Galemmanagudi

Duration : 24 Hrs

Issue date : 01.05.2024

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
05.04.2024	N/24/04/1-0175	11	13	49	27	<20	<1
06.04.2024	N/24/04/2-0015	11	12	55	29	<20	<1
12.04.2024	N/24/04/2-0254	10	14	45	26	<20	<1
13.04.2024	N/24/04/3-0012	9	12	57	30	<20	<1
15.04.2024	N/24/04/3-00068	12	16	49	28	<20	<1
16.04.2024	N/24/04/3-00112	14	18	55	32	<20	<1
22.04.2024	N/24/04/4-0055	13	15	50	28	<20	<1
23.04.2024	N/24/04/4-0099	10	15	47	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
05.04.2024	N/24/04/1-0175	0.22	<0.1	<0.5	<0.5	0.35	26
06.04.2024	N/24/04/2-0015	0.19	<0.1	<0.5	<0.5	0.25	22
12.04.2024	N/24/04/2-0254	0.15	<0.1	<0.5	<0.5	0.32	30
13.04.2024	N/24/04/3-0012	0.11	<0.1	<0.5	<0.5	0.21	29
15.04.2024	N/24/04/3-00068	0.16	<0.1	<0.5	<0.5	0.23	25
16.04.2024	N/24/04/3-00112	0.11	<0.1	<0.5	<0.5	0.25	28
22.04.2024	N/24/04/4-0055	0.21	<0.1	<0.5	<0.5	0.37	26
23.04.2024	N/24/04/4-0099	0.29	<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. 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							
Station at & Code : A4, Near Plant Railway Siding							
Duration : 24 Hrs							
Issue date : 01.05.2024							
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
05.04.2024	N/24/04/1-0176	10	12	63	33	<20	<1
06.04.2024	N/24/04/2-0016	12	14	50	29	<20	<1
12.04.2024	N/24/04/2-0255	11	13	58	30	<20	<1
13.04.2024	N/24/04/3-0013	12	14	54	29	<20	<1
15.04.2024	N/24/04/3-00069	10	15	40	25	<20	<1
16.04.2024	N/24/04/3-00113	9	14	58	30	<20	<1
22.04.2024	N/24/04/4-0056	13	15	50	28	<20	<1
23.04.2024	N/24/04/4-0100	9	12	45	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
05.04.2024	N/24/04/1-0176	0.28	<0.1	<0.5	<0.5	0.42	28
06.04.2024	N/24/04/2-0016	0.22	<0.1	<0.5	<0.5	0.24	25
12.04.2024	N/24/04/2-0255	0.25	<0.1	<0.5	<0.5	0.32	24
13.04.2024	N/24/04/3-0013	0.16	<0.1	<0.5	<0.5	0.28	25
15.04.2024	N/24/04/3-00069	0.11	<0.1	<0.5	<0.5	0.24	24
16.04.2024	N/24/04/3-00113	0.19	<0.1	<0.5	<0.5	0.29	22
22.04.2024	N/24/04/4-0056	0.14	<0.1	<0.5	<0.5	0.25	27
23.04.2024	N/24/04/4-0100	0.16	<0.1	<0.5	<0.5	0.28	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.5

Stack Monitoring Report

Report No. N025624042

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	: ARC Furnace area				
Stack ID	: Stack Attached to Furnace - 3				
Sample Collected by	: Environmental Laboratory				
Date of Collection	: 12.04.2024				
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1				
Date of Sample Receipt	: 13.04.2024				
Lab Code	: N/24/04/2-0256				
Issue date	: 01.05.2024				
STACK DETAILS					
1	Fuel Used	-			
2	Ambient Temperature ($^{\circ}\text{C}$)	36			
3	Stack Temperature ($^{\circ}\text{C}$)	132			
4	Velocity (m/s)	8.12			
5	Stack Height (M)	35			
6	Stack Diameter (M)	2.5			
7	Cross Sectional Area in meter square (m^2)	95814			
8	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	96653			
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	40.21	150	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO_2)	mg/Nm^3	26.21	--	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO_2)	mg/Nm^3	35.00	--	IS: 11255(Part-7) 2017
4	CO	%	41.00	--	flue gas analyser
5	Oxygen (O_2)	%	18.11	--	flue gas analyser

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TEST REPORT

Table No. 6

Stack Monitoring Report

Report No. N025724042

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
Date of Collection	: 12.04.2024
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 13.04.2024
Lab Code	: N/24/04/2-0257
Issue date	: 01.05.2024

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature ($^{\circ}\text{C}$)	36
3	Stack Temperature ($^{\circ}\text{C}$)	266
4	Velocity (m/s)	9.65
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)	289722
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	38.21	50	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO_2)	mg/Nm^3	64.22	800	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO_2)	mg/Nm^3	67.32	500	IS: 11255(Part-7) 2017
4	CO	%	0.63	Max1%	flue gas analyser
5	Oxygen (O_2)	%	9.42	--	flue gas analyser

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TEST REPORT

Table No. 7

Stack Monitoring Report

Report No. N025824042

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
Date of Collection	: 12.04.2024
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 13.04.2024
Lab Code	: N/24/04/2-0258
Issue date	: 01.05.2024

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature ($^{\circ}\text{C}$)	36
3	Stack Temperature ($^{\circ}\text{C}$)	240
4	Velocity (m/s)	8.23
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)	278500.0
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	33.85	50	IS: 11255(Part-1) 2014
2	Sulphur Dioxide (SO_2).	mg/Nm^3	66.23	800	IS: 11255(Part-2) 2014
3	Nitrogen Dioxide (NO_2)	mg/Nm^3	80.23	500	IS: 11255(Part-7) 2017
4	CO	%	0.48	Max1%	flue gas analyser
5	Oxygen (O_2)	%	7.21	--	flue gas analyser

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TEST REPORT

Table No. 8

Stack Monitoring Report

Report No. N00142043

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 Coal Crushing				
Sample Collected by	: Environmental Laboratory				
Date of Collection	: 13.04.2024				
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1				
Date of Sample Receipt	: 15.04.2024				
Lab Code	: N/24/04/3-0014				
Issue date	: 01.05.2024				
STACK DETAILS					
1	Fuel Used	-			
2	Ambient Temperature ($^{\circ}\text{C}$)	36			
3	Stack Temperature ($^{\circ}\text{C}$)	72			
4	Velocity (m/s)	7.03			
5	Stack Height (M)	15			
6	Stack Diameter (M)	0.7			
7	Cross Sectional Area in meter square (m^2)	0.4419			
8	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	9981			
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	36.21	50	IS: 11255(Part-1) 2014

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TEST REPORT

Stack Monitoring Report

Table No. 9

Report No. N00152043

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
Date of Collection	: 13.04.2024
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 15.04.2024
Lab Code	: N/24/04/3-0015
Issue date	: 01.05.2024

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature ($^{\circ}\text{C}$)	36
3	Stack Temperature ($^{\circ}\text{C}$)	75
4	Velocity (m/s)	6.69
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)	7209
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	36.54	50	IS: 11255(Part-1) 2014

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TEST REPORT

Stack Monitoring Report

Table No. 10

Report No. N024924034

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
Date of Collection	: 13.04.2024
Particulars of Sample Collected	: Emissions from stack collected through stack sample VSS1
Date of Sample Receipt	: 15.04.2024
Lab Code	: N/24/04/3-0016
Issue date	: 01.05.2024

STACK DETAILS

1	Fuel Used	-
2	Ambient Temperature ($^{\circ}\text{C}$)	36
3	Stack Temperature ($^{\circ}\text{C}$)	79
4	Velocity (m/s)	6.27
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)	6680
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	40.21	50	IS: 11255(Part-1) 2014

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TEST REPORT

Table No. 11

AMBIENT NOISE LEVEL DATA

Report No : M002240403

Name and Address of the Industry : Ms. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant),

Vyasanakere, 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 : Environmental Laboratory

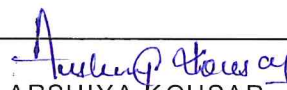
Date of sample collection : 15.04.2024

Date of sample receipt : 16.04.2024

Issue Date : 01.05.2024

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)	42.3	53.2	63.0	35.2	43.3	49.2
N2	Existing Water Reservoir (Near WTP Plant)	44.0	56.2	65.8	34.8	46.2	51.1
Buffer zone							
N3	Galemmanagudi	36.8	52.6	59.0	34.8	43.0	47.6
N4	Vysanakere Village	39.4	53.7	61.0	35.3	43.2	50.1
N5	Hanumanhalli	38.6	52.8	62.6	36.3	44.0	49.8
<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

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				
Particulars of sample		: Soil Samples				
Particulars of sample collected		: S1- Near Main Gate North, S2 - Near Raw Material East S3 - Near Railway Siding South, S4 - Dispatch Gate West				
Sample Collected by		: Environmental Laboratory				
Date of sample collection		: 15.04.2024				
Date of sample receipt		: 16.04.2024				
Issue Date		: 01.05.2024				
Sampling & Test Method		: IS:9989 & Lab SOP				
Lab Code		ED/24/04/3-0060	ED/24/04/3-0061	ED/24/04/3-0062	ED/24/04/3-0063	
SL.	Sample Code		S1	S2	S3	S4
	PARAMETERS	Units	Results			
1	Colour	--	Red soil	Red soil	Red soil	Red soil
2	Textural class	--	LOAM	CLAY LOAM	CLAY LOAM	LOAM
3	Size Distribution					
	Sand	%	42.63	40.26	35.96	34.25
	Clay	%	22.28	31.62	28.63	26.63
	Silt	%	35.09	28.12	35.41	38.12
4	Moisture Content	%	1.09	2.46	4.18	1.92
5	Bulk Density	gm/cc	1.53	1.43	1.43	1.51
6	Water holding capacity	%	30.33	35.18	30.33	31.85
7	pH	--	5.61	5.96	6.09	6.05
8	EC	m.mohs/cm	0.189	0.236	0.096	0.230
Chemical Properties						
9	Organic Carbon	%	1.33	1.48	0.61	0.57
10	Nitrogen as N	Kg/Ha	146	190	236	175
11	Phosphorous as P	Kg/Ha	14.8	19.25	16.96	15.63
12	Potassium as K ₂ O	Kg/Ha	241.0	252.0	218.6	187.9
13	Sodium as Na	mg/Kg	130	160	80	107
14	Chloride as Cl	mg/Kg	258	280	244	218
15	Sulphate as SO ₄	mg/Kg	27	25	27	37

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TEST REPORT

ED001624043

Name of the Client : M/s. Sandur Manganese & Iron Ores Limited
Name of the Project : Iron & Steel Plant at Vyasanakere village,
Hosapete Taluk, Ballari District, Karnataka
Particulars of sample collected : 50 KLD STP Water
Date of sample collection : 15.04.2024
Lab Code : ED/24/04/3-0016
Issue Date : 30.04.2024

Sl. No.	Parameters	units	Results	Sewage Effluent Discharge Standards	Method of Testing
1	pH	-	8.11	5.5 to 9.0	IS 3025 (P-11)2017
3	Total Suspended Solids, at 105°C	mg/l	<5.0	<50	IS 3025 (P-16)1984 RA 2017
2	Biochemical Oxygen Demand BOD ₅ 27°C	mg/l	12	<30	IS 3025 (P-44) 1993 RA 2019
3	Chemical Oxygen Demand (COD)	mg/l	31.8	<150	IS 3025 (P-58) 2006 RA 2017
4	Total Kjeldahl Nitrogen,	mg/l	3.36	-	IS 3025 (Part-34)
5	Fecal coliform	MPN/100ml	<1.8	<1000	APHA 23rd Edition

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