

ENVIRONMENTAL MONITORING REPORT

Project	REDI IRON ORE MINE
Location	Redi Village Vengurla Taluka, Sindhudurg Dist Maharashtra
Client	MINERALS AND METALS
Office Address	P. O. Redi, Tal Vengurla, Sindhudurga 416517, Maharashtra (India)
Monitoring Month	May -2026

ENVIRONMENTAL LABORATORY **(Unit of Mineral Engineering Services LLP)**

Recognised by MoEF&CC Under E(P) Act 1986

&

Accredited by NABL

#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)

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Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2028

TEST REPORT

Table No. 1

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals							
Name of the Project : Redi Iron Ore Mine							
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)							
Code & Station : A1 - Core zone Within ML Area							
Duration : 24 Hrs							
Issue Date : 04.06.2026							
Sampling & Test Method : IS 5182 & Lab SOP							
Date of Sampling	Report No	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
08.05.2026	N023226052	10	13	44	24	<20	<1
09.05.2026	N005026053	14	18	50	27	<20	<1
11.05.2026	N010226053	11	15	53	29	<20	<1
12.05.2026	N014926053	9	13	46	25	<20	<1
18.05.2026	N010226054	12	16	58	33	<20	<1
19.05.2026	N014426054	10	12	55	30	<20	<1
27.05.2026	N021626055	11	18	44	23	<20	<1
28.05.2026	N024726055	10	14	51	26	<20	<1
NAAQS 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	Report No	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
08.05.2026	N023226052	0.13	<0.1	<0.5	<0.5	0.25	23
09.05.2026	N005026053	0.17	<0.1	<0.5	<0.5	0.31	25
11.05.2026	N010226053	0.21	<0.1	<0.5	<0.5	0.22	20
12.05.2026	N014926053	0.07	<0.1	<0.5	<0.5	0.06	21
18.05.2026	N010226054	0.13	<0.1	<0.5	<0.5	0.15	20
19.05.2026	N014426054	0.11	<0.1	<0.5	<0.5	0.22	23
27.05.2026	N021626055	0.09	<0.1	<0.5	<0.5	0.16	24
28.05.2026	N024726055	0.11	<0.1	<0.5	<0.5	0.24	21
NAAQS 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 of the Client : M/s. Minerals and Metals							
Name of the Project : Redi Iron Ore Mine							
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)							
Code & Station : A2 - Redi village (Within 200m from the ML Area)							
Duration : 24 Hrs							
Issue Date : 04.06.2026							
Sampling & Test Method : IS 5182 & Lab SOP							
Date of Sampling	Report No	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
08.05.2026	N022726052	7	11	47	21	<20	<1
09.05.2026	N004526053	9	10	49	28	<20	<1
11.05.2026	N009926053	12	19	51	27	<20	<1
12.05.2026	N014626053	13	18	36	18	<20	<1
18.05.2026	N009726054	10	12	53	27	<20	<1
19.05.2026	N013926054	13	18	56	32	<20	<1
27.05.2026	N021326055	8	14	50	29	<20	<1
28.05.2026	N024426055	12	16	39	19	<20	<1
NAAQs 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	Report No	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
08.05.2026	N022726052	0.19	<0.1	<0.5	<0.5	0.35	24
09.05.2026	N004526053	0.17	<0.1	<0.5	<0.5	0.46	23
11.05.2026	N009926053	0.25	<0.1	<0.5	<0.5	0.55	28
12.05.2026	N014626053	0.23	<0.1	<0.5	<0.5	0.26	26
18.05.2026	N009726054	0.19	<0.1	<0.5	<0.5	0.41	25
19.05.2026	N013926054	0.22	<0.1	<0.5	<0.5	0.39	20
27.05.2026	N021326055	0.26	<0.1	<0.5	<0.5	0.33	21
28.05.2026	N024426055	0.15	<0.1	<0.5	<0.5	0.31	22
NAAQS 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 of the Client

: M/s. Minerals and Metals

Name of the Project

: Redi Iron Ore Mine

Sample Collected by

: Environmental Laboratory (Unit of Mineral Engineering Services LLP)

Code & Station

: A3 - Gaontala village

Duration

: 24 Hrs

Issue Date

: 04.06.2026

Sampling & Test Method

: IS 5182 & Lab SOP

Date of Sampling	Report No	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
08.05.2026	N022926052	11	15	50	26	<20	<1
09.05.2026	N004726053	13	17	46	23	<20	<1
11.05.2026	N010126053	8	13	38	20	<20	<1
12.05.2026	N014826053	11	17	47	23	<20	<1
18.05.2026	N009926054	8	13	39	20	<20	<1
19.05.2026	N014126054	10	11	50	26	<20	<1
27.05.2026	N021526055	13	15	39	19	<20	<1
28.05.2026	N024626055	11	12	49	23	<20	<1
NAAQs 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	Report No	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
08.05.2026	N022926052	0.13	<0.1	<0.5	<0.5	0.23	20
09.05.2026	N004726053	0.21	<0.1	<0.5	<0.5	0.22	28
11.05.2026	N010126053	0.26	<0.1	<0.5	<0.5	0.28	25
12.05.2026	N014826053	0.22	<0.1	<0.5	<0.5	0.21	23
18.05.2026	N009926054	0.21	<0.1	<0.5	<0.5	0.33	27
19.05.2026	N014126054	0.14	<0.1	<0.5	<0.5	0.24	20
27.05.2026	N021526055	0.19	<0.1	<0.5	<0.5	0.33	21
28.05.2026	N024626055	0.25	<0.1	<0.5	<0.5	0.23	25
NAAQS 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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Table No. 4

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals
Name of the Project : Redi Iron Ore Mine
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Code & Station : A4 - Kanyalwadi village
Duration : 24 Hrs
Issue Date : 04.06.2026
Sampling & Test Method : IS 5182 & Lab SOP

Date of Sampling	Report No	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
06.05.2026	N014626052	9	11	46	26	<20	<1
07.05.2026	N018826052	7	10	56	27	<20	<1
13.05.2026	N019726053	12	16	30	19	<20	<1
14.05.2026	N023726053	15	15	35	21	<20	<1
20.05.2026	N018126054	11	15	54	25	<20	<1
21.05.2026	N022626054	7	15	52	22	<20	<1
25.05.2026	N010026055	9	18	38	17	<20	<1
26.05.2026	N016526055	8	17	40	19	<20	<1
NAAQs 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	Report No	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
06.05.2026	N014626052	0.10	<0.1	<0.5	<0.5	0.24	23
07.05.2026	N018826052	0.27	<0.1	<0.5	<0.5	0.30	28
13.05.2026	N019726053	0.15	<0.1	<0.5	<0.5	0.21	25
14.05.2026	N023726053	0.16	<0.1	<0.5	<0.5	0.25	21
20.05.2026	N018126054	0.13	<0.1	<0.5	<0.5	0.33	22
21.05.2026	N022626054	0.18	<0.1	<0.5	<0.5	0.42	25
25.05.2026	N010026055	0.22	<0.1	<0.5	<0.5	0.35	25
26.05.2026	N016526055	0.15	<0.1	<0.5	<0.5	0.23	22
NAAQS 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 AIR QUALITY

Name of the Client : M/s. Minerals and Metals
Name of the Project : Redi Iron Ore Mine
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Code & Station : A5 - Shiroda village
Duration : 24 Hrs
Issue Date : 04.06.2026
Sampling & Test Method : IS 5182 & Lab SOP

Date of Sampling	Report No	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
08.05.2026	N022826052	9	11	46	24	<20	<1
09.05.2026	N004626053	7	12	35	19	<20	<1
11.05.2026	N010026053	9	11	54	28	<20	<1
12.05.2026	N014726053	11	20	48	25	<20	<1
18.05.2026	N009826054	6	16	31	18	<20	<1
19.05.2026	N014026054	9	12	43	19	<20	<1
27.05.2026	N021426055	11	17	53	27	<20	<1
28.05.2026	N024526055	10	12	48	25	<20	<1
NAAQs 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	Report No	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
08.05.2026	N022826052	0.11	<0.1	<0.5	<0.5	0.25	26
09.05.2026	N004626053	0.28	<0.1	<0.5	<0.5	0.22	25
11.05.2026	N010026053	0.25	<0.1	<0.5	<0.5	0.36	22
12.05.2026	N014726053	0.22	<0.1	<0.5	<0.5	0.38	25
18.05.2026	N009826054	0.23	<0.1	<0.5	<0.5	0.42	22
19.05.2026	N014026054	0.18	<0.1	<0.5	<0.5	0.33	27
27.05.2026	N021426055	0.26	<0.1	<0.5	<0.5	0.28	21
28.05.2026	N024526055	0.17	<0.1	<0.5	<0.5	0.36	23
NAAQS 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. 6

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals					
Name of the Project : Redi Iron Ore Mine					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station : A6 - Near NIMCO Gate - Tivrewadi, Redi village					
Duration : 24 Hrs					
Issue Date : 04.06.2026					
Sampling & Test Method : IS 5182 & Lab SOP					
Date of Sampling	Report No	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)
06.05.2026	N014726052	14	20	55	30
07.05.2026	N018926052	12	16	50	28
13.05.2026	N019826053	11	14	57	33
14.05.2026	N023826053	9	12	55	30
20.05.2026	N018226054	13	18	52	27
21.05.2026	N022726054	10	12	48	24
25.05.2026	N010126055	14	19	58	32
26.05.2026	N016626055	11	13	49	28
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs

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TEST REPORT

Table No. 7

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals					
Name of the Project : Redi Iron Ore Mine					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station : A7 - Near Primary School - sakalbhatwadi Redi village					
Duration : 24 Hrs					
Issue Date : 04.06.2026					
Sampling & Test Method : IS 5182 & Lab SOP					
Date of Sampling	Report No	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)
06.05.2026	N014826052	7	13	51	28
07.05.2026	N019026052	13	17	55	30
13.05.2026	N019926053	9	11	45	22
14.05.2026	N023926053	10	13	53	29
20.05.2026	N018326054	12	16	40	24
21.05.2026	N022826054	10	14	56	31
25.05.2026	N010226055	9	11	50	27
26.05.2026	N016726055	9	10	44	25
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs

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Table No. 8

Fugitive Emission

Name of the Client	: M/s. Minerals and Metals						
Name of the Project	: Redi Iron Ore Mine						
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)						
Duration	: 08 Hrs						
Issue Date	: 04.06.2026						
Code & Station	Date of sample	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ (µg/m ³)	SPM (µg/m ³)	Carbon Monoxide* (CO), mg/m ³
FA1- Unloading Point	08.05.2026	N023326052	11	14	133	222	0.35
	18.05.2026	N010326054	9	12	145	242	0.28
FA2 - Haulage Road	09.05.2026	N005126053	13	18	155	258	0.33
	19.05.2026	N014526054	15	22	163	281	0.25
FA3 - Loading Area	08.05.2026	N023426052	9	15	132	228	0.44
	18.05.2026	N010426054	7	11	125	208	0.22
Within in Mining Area Pollutant			SO ₂	NO ₂	RPM (PM ₁₀)	SPM (PM)	CO
Concentration in Ambient Air			120	120	250	500	4
Time Weighted Average			24 Hrs	24 Hrs	24 Hrs	24 Hrs	1 Hr
Note : * Parameters monitored for period of 1 hr							

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Note : This report is subject to the terms and conditions mentioned overleaf.



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Table No. 9

STATISTICAL AIR QUALITY DATA

Name of the Client : M/s. Minerals and Metals												
Name of the Project : Redi Iron Ore Mine												
Month : May, 2026												
Code & Station	A1 - Core zone Within ML Area				A2 - Redi village (Within 200m from the ML Area)				A3 - Gaontala village			
	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}
Min.	9	12	44	23	7	10	36	18	8	11	38	19
10%	10	13	44	24	8	11	38	19	8	12	39	20
25%	10	13	46	25	9	12	45	21	10	13	39	20
50%	11	15	51	27	11	15	50	27	11	14	47	23
75%	11	17	54	29	12	18	52	28	12	16	49	24
98%	14	18	58	33	13	19	56	32	13	17	50	26
Max.	14	18	58	33	13	19	56	32	13	17	50	26
Avg.	11	15	50	27	11	15	48	25	11	14	45	23
SD	2	2	5	3	2	3	7	5	2	2	5	3
No. of obs	8				8				8			
Code & Station	A4 - Kanyalwadi village				A5 - Shiroda village							
	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}				
Min.	7	10	30	17	6	11	31	18				
10%	7	11	34	18	7	11	34	19				
25%	8	14	37	19	9	12	41	19				
50%	9	15	43	22	9	12	47	25				
75%	11	16	53	25	10	16	49	26				
98%	15	18	56	27	11	20	54	28				
Max.	15	18	56	27	11	20	54	28				
Avg.	10	15	44	22	9	14	45	23				
SD	3	3	10	4	2	3	8	4				
No. of obs	8				8							

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TEST REPORT

Table No. 10

Name of the Client	: M/s. Minerals and Metals
Name of the Project	: Redi Iron Ore Mine
Location	: Redi village , Vengurla taluka, Sindhudurg dist,Maharashtra
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of Sample	: Surface Water
Sample Location	: W1 - Pit water
Date of sample collection	: 14.05.2026
Date of sample receipt	: 15.05.2026
Report No	: M003626053
Issue Date	: 04.06.2026
Ref	: Environmental (P) Rules, 1986 SCHEDULE VI

Sl. No.	Parameters	W1 Results	Standards For Effluent Discharge of Environmental Pollutants	Method of Testing
1	Colour (Hazen Units), & Odour	5	--	IS:3025 (part-4)
2	Suspended Solids (mg/l), Max	25	100	IS 3025 (P-17) 2022
3	Particle size of suspended solids	Pass through 850 micron	Shall Pass through 850 micron	APHA 23rd edition
4	pH	7.10	5.5 to 9.0	IS 3025 (P-11) 2022
5	Temperature ° C	25	Shall not exceed 5° C above the receiving water temp	IS 3025 (Part 9) 2023
6	Oil & Grrase (mg/l), Max	<4.0	10	IS 3025 (P-39) 2021
7	Total Residual Chlorine (mg/l), Max	<0.1	1.0	IS 3025 (P-26) 2021
8	Ammonical Nitrogen (mg/l), Max	<0.1	50	IS 3025 (P-34 Sec 1) 2023
9	Total Kjeldahl Nitrogen (mg/l), Max	<0.1	100	IS 3025 (P-34 Sec 1) 2023
10	Free Ammonia as NH ₃ (mg/l), Max	<0.01	5.0	IS 3025 (P-34 Sec 1) 2023
11	BOD [3 days at 27°C] (mg/l), Max	<3.0	30	IS 3025 (Part 44) 2023
12	COD (mg/l), Max	24	250	IS 3025 (Part 58) 2023
13	Arsenic as As (mg/l), Max	<0.05	0.2	APHA 24th Ed.Method No.3030K
14	Mercury as Hg (mg/l), Max	<0.001	0.01	APHA 24th Ed.Method No.3030K
15	Lead as Pb (mg/l), Max	<0.05	0.1	APHA 24th Ed.Method No.3030K
16	Cadmium as Cd (mg/l), Max	<0.01	2.0	APHA 24th Ed.Method No.3030K
17	Hexavalent Chromium as Cr ⁺⁶ (mg/l), Max	<0.03	0.1	IS 3025 (P-52) 2014
18	Total Chromium as Cr(mg/l), Max	<0.01	2.0	APHA 24th Ed.Method No.3030K
19	Copper as Cu (mg/l), Max	<0.05	3.0	APHA 24th Ed.Method No.3030K
20	Zinc as Zn (mg/l), Max	<0.05	5.0	APHA 24th Ed.Method No.3030K
21	Selenium as Se (mg/l), Max	<0.05	0.05	APHA 24th Ed.Method No.3030K
22	Nickel as Ni (mg/l), Max	<0.05	3.0	APHA 24th Ed.Method No.3030K
23	Cyanide as CN (mg/l), Max	<0.01	0.2	IS 3025 (P-27) Sec 1 2021
24	Fluoride as F (mg/l), Max	<0.1	2.0	APHA 24th Edition 4500F
25	Dissolved Phosphates as PO ₄ (mg/l), Max	<0.1	5.0	IS 3025 (P-31) Sec 1 2022
26	Sulphide as S (mg/l), Max	<0.01	2.0	IS 3025 (P-29) 2022
27	Phenolic Compounds as C ₆ H ₅ OH (mg/l), Max	<0.001	1.0	IS 3025 (P-43) Sec 1 2022
28	Manganese as Mn (mg/l), Max	<0.01	2	APHA 24th Ed.Method No.3030K
29	Iron as Fe (mg/l), Max	<0.05	3	APHA 24th Ed.Method No.3030K
30	Vanadium as V (mg/l), Max	<0.01	0.2	APHA 24th Ed.Method No.3030K
31	Nitrate Nitrogen (mg/l), Max	3.8	10	IS 3025 (P-34) 1988 RA 2019

""END OF REPORT""

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Note : This report is subject to the terms and conditions mentioned overleaf.



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TEST REPORT

Table No. 11

Name of the Client		: M/s. Minerals and Metals	
Name of the Project		: Redi Iron Ore Mine	
Location		: Redi village, Vengurla taluka, Sindhudurg dist, Maharashtra State.	
Particulars of sample collected		: W2 - Pit Discharge water, W3 - Runoff water from dump	
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services LLP)	
Date of sample collection		: 14.05.2026	
Date of sample receipt		: 15.05.2026	
Issue Date		: 04.06.2026	
Ref		: Environmental (P) Rules, 1986 SCHEDULE VI	
Report No		M003726053	-
Sample code		W2	W3
Sl. No.	Parameters	Results	Standards For Effluent Discharge of Environmental Pollutants
1	Colour (Hazen Units), & Odour	5	--
2	Suspended Solids (mg/l), Max	24	100
3	Particle size of suspended solids	Pass through 850 micron	Shall Pass through 850 micron
4	pH	6.88	5.5 to 9.0
5	Temperature °C	25	Shall not exceed 5° C above the receiving water
6	Oil & Grasse (mg/l), Max	<4.0	10
7	Total Residual Chlorine (mg/l), Max	<0.1	1.0
8	Ammonical Nitrogen (mg/l), Max	<0.1	50
9	Total Kjeldahl Nitrogen (mg/l), Max	<0.1	100
10	Free Ammonia as NH ₃ (mg/l), Max	<0.01	5.0
11	BOD [3 days at 27°C] (mg/l), Max	<3.0	30
12	COD (mg/l), Max	23	250
13	Arsenic as As (mg/l), Max	<0.05	0.2
14	Mercury as Hg (mg/l), Max	<0.001	0.01
15	Lead as Pb (mg/l), Max	<0.05	0.1
16	Cadmium as Cd (mg/l), Max	<0.01	2.0
17	Hexavalent Chromium as Cr ⁺⁶ (mg/l), Max	<0.03	0.1
18	Total Chromium as Cr (mg/l), Max	<0.01	2.0
19	Copper as Cu (mg/l), Max	<0.05	3.0
20	Zinc as Zn (mg/l), Max	<0.05	5.0
21	Selenium as Se (mg/l), Max	<0.05	0.05
22	Nickel as Ni (mg/l), Max	<0.05	3.0
23	Cyanide as CN (mg/l), Max	<0.01	0.2
24	Fluoride as F (mg/l), Max	<0.1	2.0
25	Dissolved Phosphates as PO ₄ (mg/l), Max	<0.1	5.0
26	Sulphide as S (mg/l), Max	<0.01	2.0
27	Phenolic Compounds as C ₆ H ₅ OH (mg/l), Max	<0.001	1.0
28	Manganese as Mn (mg/l), Max	<0.01	2
29	Iron as Fe (mg/l), Max	<0.05	3
30	Vanadium as V (mg/l), Max	<0.01	0.2
31	Nitrate Nitrogen (mg/l), Max	4.2	10

""END OF REPORT""

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TEST REPORT

Table No.12

Name of the Client	: M/s. Minerals and Metals
Name of the Project	: Redi Iron Ore Mine
Location	: Redi village, Vengurla taluka, Sindhudurg dist, Maharashtra State.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of Sample	: Surface Water
Sample Location	: SW1 - Kanyal tank water, SW2 - Nallah water Near Kanyalwadi SW3- Near Hanuman temple Kanyalwadi village
Date of sample collection	: 14.05.2026
Date of sample receipt	: 15.05.2026
Issue Date	: 04.06.2026
Ref : IS : 2296 Water Quality Standards	

Sl. No.	Report No	M004026053	M004126053	M004226053	Limits	Method of Testing
	Sample Code	SW1	SW2	SW3		
	Parameters	Results				
1	Colour (Hazen Units)	5	5	5	300	IS 3025 (Part 4) 2021
2	pH	7.88	7.64	7.18	6.5 to 8.5	IS 3025 (Part 11) 2022
3	Dissolved Oxygen (as O ₂), mg/l	5.80	5.50	5.80	Min 4	IS 3025 (Part 38):1989 RA 2019
4	Biochemical Oxygen Demand (as O ₂), mg/l	<3	<3	<3	Max 3	IS 3025 (Part 44) 2023
5	Total Coliform (MPN/100ml)	96	110	118	5000	IS 15185 2016 RA 2021
6	Total Dissolved Solids, (mg/l)	200	408	244	1500	IS 3025 (Part 16) 2023
7	Chloride (as Cl),mg/l	80.0	180.0	100.0	600	IS 3025 (Part 32) :1988 RA 2019
8	Sulphates as SO ₄ (mg/l)	30.0	60.0	45.0	400	APHA (24th Edition):4110B
9	Nitrates (as NO ₃),mg/l	2.00	5.00	2.70	50	IS 3025 (Part 34-Sec1) 2023
10	Fluoride (as F),mg/l	<0.1	<0.1	<0.1	1.5	IS 3025 (Part 60-Sec1) 2023
11	Copper (as Cu),mg/l	<0.0005	<0.0005	<0.0005	1.5	IS 3025 (Part 65) 2022
12	Iron (as Fe),mg/l	<0.005	<0.005	<0.005	50	IS 3025 (Part 65) 2022
13	Zinc (as Zn),mg/l	<0.005	<0.005	<0.005	15	IS 3025 (Part 65) 2022
14	Total Arsenic (as As), (mg/l)	<0.0005	<0.0005	<0.0005	0.2	IS 3025 (Part 65) 2022
15	Lead (as Pb), mg/l	<0.0005	<0.0005	<0.0005	0.1	IS 3025 (Part 65) 2022
16	Cadmium (as Cd), mg/l,	<0.0005	<0.0005	<0.0005	0.01	IS 3025 (Part 65) 2022
17	Hexavalent Chromium (as Cr ⁺⁶),mg/l,	<0.03	<0.03	<0.03	0.05	IS 3025 (Part 52):2019 RA 2023
18	Selenium (as Se), mg/l	<0.0005	<0.0005	<0.0005	0.05	IS 3025 (Part 65) 2022
19	Cyanide (as CN), mg/l,	<0.01	<0.01	<0.01	0.05	IS 3025 (Part 27/Sec1) 2021
20	Phenolic compounds (as C ₆ H ₅ OH),mg/l	<0.001	<0.001	<0.001	0.005	IS 3025 (Part 43/Sec1) 2022
21	Anionic detergents (as MBAS),mg/l	<0.1	<0.1	<0.1	1.0	IS 3025 (Part 68) 2023

Note : Class-C: Drinking water with conventional treatment followed by disinfection.

"END OF REPORT"


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TEST REPORT

Table No. 13

Name of the Client		: M/s. Minerals and Metals		
Name of the Project		: Redi Iron Ore Mine		
Sample Location		: STP1 - Sewage Treatment Plant		
Date of sample collection		: 14.05.2026		
Date of sample receipt		: 15.05.2026		
Report no		: M004326053		
Issue Date		: 04.06.2026		
Ref		:Schedule -1 Sl.No-2 of CTO		
Sample code		STP1		
Sl. No.	Parameters	Results	Standards	Method of Testing
1	pH	7.12	-	IS 3025 (P-11) 2022
2	Biochemical Oxygen Demand BOD ₅ 27 ⁰ C, mg/l	23	<30	IS 3025 (Part 44) 2023
3	Total Suspended Solids, at 105 ⁰ C, mg/l	25	<50	IS 3025 (P-17) 2022
4	Chemical Oxygen Demand (COD) (mg/l)	52	<100	IS 3025 (Part 58) 2023

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