

No: GSCL/EHS/2024-25/95

Dated: 09.11.2024

To,
The Member Secretary,
Meghalaya State Pollution Control Board,
Arden, Lumpyngngad,
Shillong, Meghalaya - 793014

Sub: Submission of Monthly Environmental Monitoring Reports

Dear Sir,

With reference to the above subject, we are herewith submitting monthly environmental monitoring reports of Umtyra Mines for the month of October- 2024.

We request you to acknowledge the receipt.

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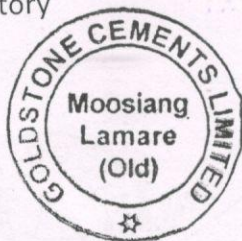
Thanking You,

Yours faithfully.

For Goldstone Cements Limited

Authorized Signatory

Encl: As above



Report No.: ENV/GSCL/24-25/AA-10/02

Date : 07/11/2024

Order No.: FFE/7500005406

Date : 20/06/2024

Report Issued To : **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

AMBIENT AIR QUALITY TEST RESULTS

Sl. No.	LOCATION(S) ↓	Date of Sampling	PM 2.5 ($\mu\text{g}/\text{m}^3$)	PM 10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)
	LIMIT(S) →	---	60	100	80	80
01	Near Umtyra Mines Office	25.10.2024	33.6	60.8	<5.0	<6.0
02	Nearby Pillar 7	25.10.2024	37.8	63.7	<5.0	<6.0
03	Nearby Pillar 31B	25.10.2024	31.9	58.7	<5.0	<6.0
04	Nearby Pillar 20	25.10.2024	32.8	61.3	<5.0	<6.0

Analysis Protocol: IS 5182

Checked By: Mr. Pankaj Baroi, **ENVIROCON**

NOTE:

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Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

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NOISE LEVEL MEASUREMENT RESULTS

Sl. No.	Location(s)	Date Of Measurement	Day time		Night Time	
			Leq (dB-A)	Limit (dB-A)	Leq (dB-A)	Limit (dB-A)
1	Near Umtyra Mines Office	25.10.2024	63.7	75	53.4	70
2	Near Umtyra Mines unloading Point	25.10.2024	65.8	75	56.5	70
3	Near Umtyra Mines Loading Point	25.10.2024	67.1	75	62.4	70
4	Near Umtyra Mines Haul Road	25.10.2024	69.2	75	65.1	70

Note: The results reported above are the instantaneous recorded data of sound level.Checked By: Mr. Pankaj Baroi, **ENVIROCON**

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FUGITIVE EMISSION TEST RESULTS

Sl. No.	Location	Date of Sampling	SPM ($\mu\text{g}/\text{m}^3$)	Limit ($\mu\text{g}/\text{m}^3$)
1.	Near Loading Area Umtyra Mines	25.10.2024	1694	5000

Analysis Protocol: IS 5182



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Report No.: ENV/GSCL/24-25/SW-10/03
Date : 07/11/2024

Order No.: FFE/7500005406
Date : 20/06/2024

Report Issued To : **GOLDSTONE CEMENTS LIMITED**
Village- Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/2024/SW-2510/03
Collected On : 25-10-2024

Sample Source : Mines Nala Upstream
Received On : 28-10-2024

Sample Type : Surface Water
Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Limits (IS 10500:2012)
1.	Colour, Hazen Units, Max.	13	5
2.	Odour	Agreeable	Agreeable
3.	Temperature	24.6	--
4.	pH Value	6.76	6.5 - 8.5
5.	Suspended Solids	43	--
6.	Total Dissolved Solids, mg/l, Max.	146	500
7.	Conductivity, $\mu\text{S}/\text{cm}$	248	--
8.	Dissolved Oxygen, mg/l, Min.	6.8	--
9.	Biochemical Oxygen Demand, mg/l, Max.	11.6	--
10.	Chemical Oxygen Demand, mg/l, Max.	42	--
11.	Oil and Grease, mg/l, Max.	<4.0	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2
13.	Total Hardness (as CaCO_3), mg/l, Max.	8.9	200
14.	Calcium (as Ca), mg/l, Max.	25	75
15.	Magnesium (as Mg), mg/l, Max.	<1	30
16.	Iron (as Fe), mg/l, Max.	0.071	0.3
17.	Ammonical Nitrogen (as N), mg/l, Max.	5.8	--
18.	Total Kjeldahl Nitrogen (as NH_3), mg/l, Max.	36	--
19.	Free Ammonia (as NH_3), mg/l, Max.	<0.01	--

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

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Report No.: ENV/GSCL/24-25/SW-10/04

Date : 07/11/2024

Order No.: FFE/7500005406

Date : 20/06/2024

Report Issued To : **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/2024/SW-2510/04

Sample Source : Mines Nala Downstream

Sample Type : Surface Water

Collected On : 25-10-2024

Received On : 28-10-2024

Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Limits (IS 10500:2012)
1.	Colour, Hazen Units, Max.	11	5
2.	Odour	Agreeable	Agreeable
3.	Temperature	24.6	--
4.	pH Value	6.71	6.5 - 8.5
5.	Suspended Solids	35	--
6.	Total Dissolved Solids, mg/l, Max.	134	500
7.	Conductivity, $\mu\text{S}/\text{cm}$	234	--
8.	Dissolved Oxygen, mg/l, Min.	6.7	--
9.	Biochemical Oxygen Demand, mg/l, Max.	8.9	--
10.	Chemical Oxygen Demand, mg/l, Max.	56	--
11.	Oil and Grease, mg/l, Max.	<4.0	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2
13.	Total Hardness (as CaCO_3), mg/l, Max.	8.3	200
14.	Calcium (as Ca), mg/l, Max.	12	75
15.	Magnesium (as Mg), mg/l, Max.	<1	30
16.	Iron (as Fe), mg/l, Max.	0.051	0.3
17.	Ammonical Nitrogen (as N), mg/l, Max.	6.1	--
18.	Total Kjeldahl Nitrogen (as NH_3), mg/l, Max.	34.5	--
19.	Free Ammonia (as NH_3), mg/l, Max.	<0.01	--

Analysis Protocol: IS 3025

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Report Issued To : **GOLDSTONE CEMENTS LIMITED**
Village- Musiang Lamare (Old), P. O.:- Khliehriat, Meghalaya- 793200

DRINKING WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/2024/DW-2510/02
Collected On : 25-10-2024

Sample Source : Mines Office
Received On : 28-10-2024

Sample Type : Drinking Water
Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
1.	Colour , Hazen Units, Max	2	5	15
2.	Odour	Odourless	Agreeable	Agreeable
3.	Taste	Acceptable	Agreeable	Agreeable
4.	Turbidity, NTU, Max	0.19	1	5
5.	Ph	6.83	6.5 – 8.5	No Relaxation
6.	Total Dissolved Solids, mg/l, Max	61	500	2000
7.	Aluminium (as Al), mg/l, Max.	<0.001	0.03	0.2
8.	Boron (as B), mg/l, Max.	<0.001	0.5	1.0
9.	Calcium (as Ca), mg/l, Max	13	75	200
10.	Chloride (as Cl), mg/l, Max	3.9	250	1000
11.	Copper (as Cu), mg/l, Max	<0.001	0.05	1.5
12.	Fluorides (as F), mg/l, Max	<0.1	1.0	1.5
13.	Free Residual Chlorine, mg/l, Min	<0.01	0.2	1
14.	Iron (as Fe), mg/l, Max	0.014	0.3	No Relaxation
15.	Magnesium (as Mg), mg/l, Max	4	30	100
16.	Manganese (as Mn), mg/l, Max	<0.001	0.1	0.3
17.	Zinc (as Zn), mg/l, Max	<0.01	5.0	15
18.	Nitrate (as NO ₃), mg/l, Max	<0.1	45	No Relaxation
19.	Sulfate (as SO ₄), mg/l, Max	<1.0	200	400
20.	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max.	<0.001	0.001	0.002
				--Continued--

*Limits as per IS 10500:2012

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

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Village- Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

DRINKING WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/2024/DW-2510/02

Sample Source : Mines Office

Sample Type : Drinking Water

Collected On : 25-10-2024

Received On : 28-10-2024

Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
21.	Total Alkalinity(as CaCO_3) , mg/l, Max	49	200	600
22.	Total Hardness, (as CaCO_3), mg/l, Max	8.1	200	600
23.	Cadmium (as Cd), mg/l, Max.	<0.001	0.003	No Relaxation
24.	Cyanide (as CN), mg/l, Max.	<0.001	0.05	No Relaxation
25.	Lead (as Pb), mg/l, Max.	<0.001	0.01	No Relaxation
26.	Mercury (as Hg), mg/l, Max.	<0.001	0.001	No Relaxation
27.	Selenium (as Se), mg/l, Max.	<0.001	0.01	No Relaxation
28.	Total Chromium, (as Cr), mg/l, Max	<0.001	0.05	No Relaxation
29.	Anionic Detergents (as MBAS), mg/l	<0.001	0.2	1.0
30.	Total Arsenic (as As), mg/l, Max	<0.001	0.01	0.05
31.	Molybdenum (as Mo), mg/l, Max	<0.001	0.07	No Relaxation
32.	Faecal Coliforms/ 100 ml	Absent	Absent	Absent
33.	E. Coli / 100 ml	Absent	Absent	Absent
				--End of Report--

*Limits as per IS 10500:2012

Analysis Protocol: IS 3025

Remarks: Drinking water from the above source is fit for drinking.Checked By: Mr. Pankaj Baroi, **ENVIROCON**

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