

No: GSCL/EHS/2024-25/110

Dated: 14.02.2025

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

Sub: Submission of Monthly Environmental Monitoring Reports of the Umtyra Mines.

Dear Sir,

With reference to the above subject, we are herewith submitting monthly environmental monitoring reports for the month of January - 2025.

We request you to acknowledge the receipt.

....

Thanking You,

Yours faithfully.

For Goldstone Cements Limited

Authorized Signatory

Encl: As above



Report No.: ENV/GSCL/24-25/AA-01/02

Date : 07/02/2025

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 <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )
	LIMIT(S) →	---	60	100	80	80
01	Near Umtyra Mines Office	18.01.2025	37.3	64.7	<5.0	<6.0
02	Nearby Pillar 7	18.01.2025	41.6	67.2	<5.0	<6.0
03	Nearby Pillar 31B	18.01.2025	36.8	61.3	<5.0	<6.0
04	Nearby Pillar 20	18.01.2025	38.5	65.1	<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.

Report No.: ENV/GSCL/24-25/N-01/02

Date : 07/02/2025

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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	18.01.2025	60.4	75	51.3	70
2	Near Umtyra Mines unloading Point	18.01.2025	62.8	75	53.5	70
3	Near Umtyra Mines Loading Point	18.01.2025	65.7	75	60.2	70
4	Near Umtyra Mines Haul Road	18.01.2025	66.3	75	63.8	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	13.11.2024	1634	5000

Analysis Protocol: IS 5182

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

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Report No.: ENV/GSCL/24-25/SW-01/03  
Date : 07/02/2025

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-2301/03  
Collected On : 23-01-2025

Sample Source : Mines Nala Upstream  
Received On : 28-01-2025

Sample Type : Surface Water  
Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Limits (IS 10500:2012)
1.	Colour, Hazen Units, Max.	17	5
2.	Odour	Agreeable	Agreeable
3.	Temperature	25.2	--
4.	pH Value	6.76	6.5 - 8.5
5.	Suspended Solids	43	--
6.	Total Dissolved Solids, mg/l, Max.	151	500
7.	Conductivity, $\mu\text{S}/\text{cm}$	254	--
8.	Dissolved Oxygen, mg/l, Min.	6.7	--
9.	Biochemical Oxygen Demand, mg/l, Max.	11.6	--
10.	Chemical Oxygen Demand, mg/l, Max.	46	--
11.	Oil and Grease, mg/l, Max.	<4.0	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2
13.	Total Hardness (as $\text{CaCO}_3$ ), mg/l, Max.	29	200
14.	Calcium (as Ca), mg/l, Max.	16	75
15.	Magnesium (as Mg), mg/l, Max.	<1.0	30
16.	Iron (as Fe), mg/l, Max.	0.071	0.3
17.	Ammonical Nitrogen (as N), mg/l, Max.	5.7	--
18.	Total Kjeldahl Nitrogen (as $\text{NH}_3$ ), mg/l, Max.	39	--
19.	Free Ammonia (as $\text{NH}_3$ ), 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-01/04

Date : 07/02/2025

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/2025/SW-2301/04

Sample Source : Mines Nala Downstream

Sample Type : Surface Water

Collected On : 23-01-2025

Received On : 28-01-2025

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	25.2	--
4.	pH Value	6.74	6.5 - 8.5
5.	Suspended Solids	35	--
6.	Total Dissolved Solids, mg/l, Max.	134	500
7.	Conductivity, $\mu\text{S}/\text{cm}$	232	--
8.	Dissolved Oxygen, mg/l, Min.	6.7	--
9.	Biochemical Oxygen Demand, mg/l, Max.	8.8	--
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 $\text{CaCO}_3$ ), mg/l, Max.	35	200
14.	Calcium (as Ca), mg/l, Max.	17	75
15.	Magnesium (as Mg), mg/l, Max.	<1.0	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 $\text{NH}_3$ ), mg/l, Max.	33.2	--
19.	Free Ammonia (as $\text{NH}_3$ ), mg/l, Max.	<0.01	--

Analysis Protocol: IS 3025

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

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### **DRINKING WATER ANALYSIS RESULTS**

Sample Ref. No. : GSCL/2025/DW-2301/02

Sample Source : Mines Office

Sample Type : Drinking Water

Collected On : 23-01-2025

Received On : 28-01-2025

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	0.07	1	5
5.	Ph	6.88	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	11	75	200
10.	Chloride (as Cl), mg/l, Max	3.6	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	0.03	0.3	No Relaxation
15.	Magnesium (as Mg), mg/l, Max	2	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 <sub>3</sub> ), mg/l, Max	<0.1	45	No Relaxation
19.	Sulfate (as SO <sub>4</sub> ), mg/l, Max	<1.0	200	400
20.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> 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/2025/DW-2301/02

Sample Source : Mines Office

Sample Type : Drinking Water

Collected On : 23-01-2025

Received On : 28-01-2025

Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
21.	Total Alkalinity(as $\text{CaCO}_3$ ) , mg/l, Max	40	200	600
22.	Total Hardness, (as $\text{CaCO}_3$ ), 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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