

STAR CEMENT MEGHALAYA LIMITED

Regd. Office & Works : Lunshnong, PO-Khaliehriat, Distt.- East Jaintia Hills, Meghalaya-793210
Ph: 03655-278215/16/18, Fax: 03655-278217, e-mail: lumshnong@starcement.co.in

Ref: SCML/EHS/LUM/2021-22/34

Dated: 25/03/2022

To,

The Member Secretary,
Meghalaya State Pollution Control Board
'ARDEN', Lumpyngngad,
Shillong - 793014

Subject: Monthly Environmental Monitoring Report.

Ref. No.: MPCB/TB-115/ 2009/ Pt-II/2021-2022/113, Dated. Shillong, the 7th Feb, 2022.

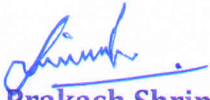
Dear Sir,

Please find enclosed herewith the monthly Environmental monitoring reports of Ambient Air Quality including meteorological, Stack Emission, Fugitive Emission & Water quality (STP, ETP & surface) monitoring reports of M/s **Star Cement Meghalaya Limited** for the month of **February, 2022** for your kind perusal.

This is for your kind information record please.

With Best Regards

For **Star Cement Meghalaya Limited**



 **Surya Prakash Shrimali**
President Works

Enclosed: As mentioned above

- CC to: 1) The Deputy Director General of Forest (Central), Ministry of Environment Forest & Climate Change Govt. of India, Regional Office, Shillong, Meghalaya - 793021.
2) The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-793 014.

STARCEMENT
Solid Setting

Corporate Office : Satyam Tower, 3 Alipore Road, 1st Floor, Unit No. 9B, Kolkata-700027
Ph: +91 33 2448 4169 / 4170 / 4693, Fax: +91 332448 4168, e-mail: kolkata@starcement.co.in
CIN : U63090ML2005PLC008011

	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCML/ENV/AAQM/MONTHLY/2021-22/28		Month: Feb'22		
Location of Sampling: Vishwakarma Colony		GPS Coordinate: 25°10'46"N 92°23'17"E 552 m		
Sampling Duration:	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
02.02.2022	49.20	34.29	11.35	16.54
05.02.2022	49.98	33.00	15.49	15.48
09.02.2022	48.29	31.58	13.57	18.34
12.02.2022	50.38	36.62	14.28	17.00
16.02.2022	50.00	32.54	12.00	14.25
19.02.2022	51.69	31.58	14.25	19.35
23.02.2022	49.57	35.00	13.00	15.65
26.02.2022	50.74	34.90	15.32	17.38
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)

Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.


Analysed by


Checked by


Verified By

	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCML/ENV/AAQM/MONTHLY/2021-22/29		Month: Feb'22		
Location of Sampling: Near Pump House		GPS Coordinate: 25°10'42"N 92°23'32"E 919 m		
Sampling Duration:	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
01.02.2022	51.25	35.17	11.70	17.05
05.02.2022	49.98	33.56	14.64	15.24
08.02.2022	50.37	34.92	12.20	16.52
12.02.2022	54.84	31.45	11.98	13.34
15.02.2022	50.00	30.54	11.25	16.27
19.02.2022	51.75	35.00	13.00	17.00
24.02.2022	52.20	33.41	10.52	13.50
26.02.2022	49.50	32.85	14.00	14.58
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)

Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCML/ENV/AAQM/MONTHLY/2021-22/30			Month: Feb'22	
Location of Sampling: Near STP		GPS Coordinate: 25°10'49"N 92°23'58"E 947 m		
Sampling Duration:	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
03.02.2022	45.39	27.45	18.34	21.38
04.02.2022	51.37	28.47	16.34	25.34
07.02.2022	48.39	29.00	15.35	20.45
10.02.2022	49.48	27.50	18.73	18.64
16.02.2022	48.46	31.52	19.55	22.14
18.02.2022	47.69	28.00	18.00	20.00
21.02.2022	47.50	30.45	17.65	22.57
23.02.2022	44.68	32.40	15.28	19.50
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)

Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya				Reference No.	SCML/Env/F-02
					Issue No.	1
	STACK EMISSION MONITORING ANALYSIS REPORT				Date of Issue	01.05.2019
					Revision No.	5
					Date of Rev.	01.06.2021
Report No: SCML/Env/Stack/Monthly/2021-22/58 Month: February'22						
<u>Analysis Result</u>						
A. General Information About Stack						
1	Stack Identification No	S-1	S-2	S-3	S-4	S-5
2	Stack Connected to	LS Crusher	Add Crusher	Kiln/Raw Mill	Coal Mill	Coller
3	Material of Construction (Stack/Duct)	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel
4	Shape of duct	Circular	Circular	Circular	Circular	Circular
5	Whether duct is provided with permanent platform & ladder	Yes	Yes	Yes	Yes	Yes
B. Physical characteristic of stack						
1	Stack Height from ground level (meter)	24.2	21.0	70.0	59.5	50.0
2	Duct diameter at sampling point (meter)	1.6	1.2	5.8	1.8	4.0
3	Sampling height point from ground level (meter)	-	-	23.15	10.38	-
4	Cross sectional area of Duct/Stack (m ²)	2.01	1.13	26.41	2.54	12.56
C. Pollution Control Device						
1	Details of pollution control device attached to stack	Bag Filter	Bag Filter	Reverse Air Bag House	Bag Filter	ESP
D. Result of Sampling & Analysis of Gaseous Emission						
1	Date of Sampling	07.02.2022	02.02.2022	19.02.2022	10.02.2022	22.02.2022
2	Ambient Temp (°C)	26	26	31	27	35
3	Stack Gas Temp (°C)	33	45	130	80	290
4	Exit Velocity of Gas (m/sec.)	13.76	14.16	13.53	15.67	7.92
5	Flow Rate (Nm ³ / sec.)	25.35	13.91	242.04	31.28	49.27
6	Quantity of Emission (Nm ³ / Hr)	91255.77	50089.66	871351.67	112436.72	177355.27
7	Concentration of PM (mg/Nm ³)	20.63	24.12	22.80	23.91	11.58
8	Concentration of SO ₂ (mg/Nm ³)	-	-	836.13	-	-
9	Concentration of NO _x (mg/Nm ³)	-	-	497.35	-	-
10	Oxygen (O ₂) (%)	9.85	8.45	11.23	9.57	9.97
E. Remarks						
Standard						
PM - 30 mg/Nm ³		SO ₂ - 1000 mg/Nm ³		NO _x - 800 mg/Nm ³		
Particulate Matter (PM), Sulphur di-oxide (SO ₂), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP), Limestone (LS), Additive (Add)						
 Analysis by  Checked by  Authorized Signatory						

 STAR CEMENT Solid Setting	STAR CEMENT MEGHALAYA LIMITED	Document No.	SCML/EHS/Env/F-04
		Date of Issued	01-05-2019
		Revision No.	2
	FUGITIVE EMISSION MONITORING REPORT	Revision Date	01-01-2021

Ref: SCML/Env/Fugitive/Monthly/2021-22/011

Month - Feb 2022

Date	Location	Fugitive Emission Results	Limit
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
11.02.2022	Coal Storage Section	1397	2000
11.02.2022	Limestone Storage Section	1450	5000
11.02.2022	Clinker Loading Section	1605	2000


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCML/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 11	Date of sample collection: - 11.02.2022
	Date of Analysis: 11.02.2022 to 14.02.2022

Sr.No.	Parameter	Unit	STP Inlet	Standard Norms For Discharge of Environment Pollution (Notification Date: - 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014- 2015/34 - dated Shillong, the 3rd Sep,2014
1	pH	-	7.90	-
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	62.5	-
5	Total Hardness as CaCO ₃	mg/L	149.6	-
6	Suspended Solids	mg/L	83.4	-
7	Total Dissolve Solids	mg/L	256	-
8	Chemical Oxygen Demand	mg/L	277	-
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	156.5	-
10	Oil & Grease	mg/L	9.4	-
11	Temperature	° C	24.9	-
12	Conductivity	μS/cm	435.7	-


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		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 11

Date of sample collection: - 11.02.2022

Date of Analysis: 11.02.2022 to 14.02.2022

Sr.No.	Parameter	Unit	STP Outlet	Standard Norms For Discharge of Environment Pollution (Notification Date: - 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014- 2015/34 - dated Shillong, the 3rd Sep,2014
1	pH	-	7.26	5.5 to 9.0
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	53.7	-
5	Total Hardness as CaCO ₃	mg/L	141.7	-
6	Suspended Solids	mg/L	8.1	100
7	Total Dissolve Solids	mg/L	275	-
8	Chemical Oxygen Demand	mg/L	34.5	250
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	7.9	30
10	Oil & Grease	mg/L	< 3.0	10
11	Temperature	° C	25.6	Shall not exceed 5.0°C above the receiving water temperature
12	Conductivity	µS/cm	420	-


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 06

Date of sample collection: - 16.02.2022
Date of Analysis: 16.02.2022 to 19.02.2022

Sr.No.	Parameter	Unit	ETP Inlet	Standard Norms For Discharge of Environment Pollution (Notification Date: - 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014- 2015/34 - dated Shillong, the 3rd Sep,2014
1	pH	-	7.7	-
2	Suspended Solids	mg/L	79	-
3	Total Dissolve Solids	mg/L	790	-
4	Chemical Oxygen Demand	mg/L	340.0	-
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	80.5	-
6	Oil & Grease	mg/L	115.0	-
7	Dissolved Oxygen	mg/L	2.5	-
8	Temperature	° C	24.2	-


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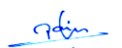

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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 11

Date of sample collection: - 16.02.2022
Date of Analysis: 16.02.2022 to 19.02.2022

Sr.No.	Parameter	Unit	ETP Outlet	Standard Norms For Discharge of Environment Pollution (Notification Date: - 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014- 2015/34 - dated Shillong, the 3rd Sep,2014
1	pH	-	7.4	5.5 to 9.0
2	Suspended Solids	mg/L	19	100
3	Total Dissolve Solids	mg/L	630	-
4	Chemical Oxygen Demand	mg/L	29.6	250
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	3.9	30
6	Oil & Grease	mg/L	< 3.0	10
7	Dissolved Oxygen	mg/L	6.5	-
8	Temperature	° C	25.2	Shall not exceed 5.0°C above the receiving water temperature


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. -11

Date of sample collection: - 18.02.2022

Date of Analysis: 18.02.2022 to 21.02.2022

Sr.No.	Parameter	Unit	Nala Up Stream	Nala Down Stream	Standards norms as per IS 2296
1	pH	-	7.80	7.72	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	300
3	Odour	-	Unobjectionable	Unobjectionable	Unobjectionable
4	Chloride	mg/L	141.8	144.9	-
5	Total Hardness as CaCO ₃	mg/L	14.2	13.8	300
6	Suspended Solids	mg/L	85.4	80.6	-
7	Total Dissolve Solids	mg/L	84	82.9	500
8	Chemical Oxygen Demand	mg/L	ND	ND	-
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	2.0
10	Oil & Grease	mg/L	ND	ND	-
11	Temperature	° C	25.60	26.4	-
12	Conductivity	μS/cm	335.40	330.5	-



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