

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/2022-23/14

Dated: 19/08/2022

To,

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

Subject : Submission of Environmental Monitoring Report for the month of July, 2022.

Reference : MPCB/TB-115/2009/Pt-II/2021-2022/113, Dtd: Shillong, the 7th February, 2022.

Dear Sir,

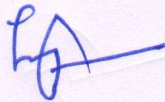
This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission, Waste monitoring (Surface, STP, ETP) reports of **M/s Star Cement Meghalaya Limited** for the month of **July, 2022.**

This is for your kind information, record and kindly acknowledge receipt of the same.

Thanking You,

Yours truly,

For **STAR CEMENT MEGHALAYA LIMITED**



Laxmaiah Munjala
Unit Head

Enclosed: a/a

Copy 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-790314.

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

Date (MM-DD-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Wind Direction (deg)	Wind Speed- (m/s)	Manual Rain (mm)
01-07-2022	956.17	66.64	30.9	158.73	2.02	18.7
02-07-2022	955.98	62.33	31.81	198.14	2.19	7.1
03-07-2022	955.33	74.74	29.01	193.08	2.12	3.2
04-07-2022	954.95	83.77	27.76	247.89	1.19	0.0
05-07-2022	954.7	74.8	28.69	252.86	1.26	0.0
06-07-2022	955.09	84.23	27.16	296.22	0.76	33.6
07-07-2022	955.64	87.48	26.39	280.91	0.89	0.0
08-07-2022	956.35	89.83	25.65	312.97	1.43	0.0
09-07-2022	957.02	91.39	25.53	248.41	0.73	0.0
10-07-2022	957.56	93.46	25.17	232.45	0.85	0.0
11-07-2022	957.8	96.2	24.9	259.03	1.02	9.4
12-07-2022	957.5	94.74	24.63	299.88	0.75	0.0
13-07-2022	957.13	95.17	24.69	308.91	0.68	0.0
14-07-2022	956.9	94.13	24.77	264.29	0.65	0.0
15-07-2022	956.83	94.56	24.56	225.88	0.73	0.0
16-07-2022	956.61	94.11	24.41	278.1	0.79	0.0
17-07-2022	956.81	95.5	24.05	242.48	0.56	12.6
18-07-2022	957.58	94.56	24.28	252.18	0.72	8.6
19-07-2022	958.02	90.75	24.89	290.54	1.2	21.8
20-07-2022	958.17	82.04	26.67	219.62	1.08	10.7
21-07-2022	958.69	76.58	28.04	241.26	1.08	0.0
22-07-2022	955.64	87.48	26.39	280.91	0.89	0.0
23-07-2022	956.35	89.83	25.65	312.97	1.43	0.0
24-07-2022	957.02	91.39	25.53	248.41	0.73	13.2
25-07-2022	957.56	93.46	25.17	232.45	0.85	9.6
26-07-2022	957.8	96.2	24.9	259.03	1.02	0.0
27-07-2022	957.5	94.74	24.63	299.88	0.75	4.2
28-07-2022	957.13	95.17	24.69	308.91	0.68	0.0
29-07-2022	956.9	94.13	24.77	264.29	0.65	0.0
30-07-2022	956.83	94.56	24.56	225.88	0.73	7.4
31-07-2022	955.33	74.74	29.01	193.08	2.12	12.2
					Total rain of this month	172.3

	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/2022-23/10		Month: July'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)	
02.07.2022	43.19	27.38	13.18	14.90	
04.07.2022	45.28	32.42	10.90	12.15	
07.07.2022	44.90	28.34	13.15	17.25	
08.07.2022	46.59	27.38	11.90	13.55	
14.07.2022	44.47	30.80	14.22	15.28	
15.07.2022	47.54	30.70	11.15	16.54	
21.07.2022	47.90	29.05	10.00	14.24	
22.07.2022	45.50	28.30	13.58	14.48	
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


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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/2022-23/11		Month: July'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/m³)	PM _{2.5} (µg/m³)	SO ₂ (µg/m³)	NO ₂ (µg/m³)	
02.07.2022	46.15	30.97	10.60	14.95	
04.07.2022	44.88	29.36	13.54	13.14	
07.07.2022	45.27	30.72	11.10	14.42	
08.07.2022	49.74	27.25	10.88	11.24	
14.07.2022	44.90	26.34	10.15	14.17	
15.07.2022	46.65	30.80	11.90	14.90	
21.07.2022	47.10	29.21	9.42	11.40	
22.07.2022	44.40	28.65	12.90	12.48	
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m³)	60 (µg/m³)	80 (µg/m³)	80 (µg/m³)	

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/2022-23/12		Month: July'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/m³)	PM _{2.5} (µg/m³)	SO ₂ (µg/m³)	NO ₂ (µg/m³)	
02.07.2022	43.29	24.80	16.55	16.54	
04.07.2022	44.38	23.30	15.25	20.04	
07.07.2022	43.36	26.80	13.15	17.90	
08.07.2022	42.59	23.80	15.25	20.47	
14.07.2022	41.90	26.25	15.90	17.40	
15.07.2022	39.58	28.20	13.18	19.44	
21.07.2022	39.90	28.80	13.90	21.58	
22.07.2022	37.59	27.40	16.54	18.58	
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m³)	60 (µg/m³)	80 (µg/m³)	80 (µg/m³)	

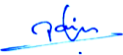
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.


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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/2022-23/04					Month: July'22	
Analysis Result						
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	Cooler
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	01.07.2022	01.07.2022	08.07.2022	08.07.2022	08.07.2022
2	Ambient Temp (°C)	27	25	37	25	33
3	Stack Gas Temp (°C)	42	44	220	61	270
4	Exit Velocity of Gas (m/sec.)	14.50	12.93	8.29	14.44	7.84
5	Flow Rate (Nm ³ / sec.)	25.77	12.75	123.57	30.74	51.17
6	Quantity of Emission (Nm ³ / Hr)	92778.68	45894.19	444836.50	110648.31	184204.57
7	Concentration of PM (mg/Nm ³)	21.71	20.89	13.19	26.46	13.78
8	Concentration of SO ₂ (mg/Nm ³)	-	-	734.6	-	-
9	Concentration of NO _x (mg/Nm ³)	-	-	372.5	-	-
10	Oxygen (O ₂) (%)	9.86	9.24	9.87	10.48	9.74
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 MEGHALAYA LIMITED Lumshnong, Meghalaya		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/2022-23/004 Month - July 2022				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
		(in $\mu\text{g}/\text{m}^3$)	Limit (in $\mu\text{g}/\text{m}^3$)	
25.07.2022	Coal Storage Section	1278	2000	
25.07.2022	Limestone Storage Section	1345	5000	
25.07.2022	Clinker Loading Section	1498	2000	
 Analyzed By  Checked By  Verified By				

	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	

Reference No.: SCML/ENV/WATER/MONTHLY/2022-23/04

Date of sample collection: - 15.07.2022
Date of Analysis: 15.07.2022 to 18.07.2022

Sl.No.	Parameter	Unit	STP Inlet	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	-	7.2	7.90	5.5 to 9.0
2	Colour	Hazen	Colourless	Colourless	-
3	Odour	-	Odourless	Odourless	-
4	Chloride	mg/L	60.5	42.6	-
5	Total Hardness as CaCO ₃	mg/L	145.2	122.8	-
6	Suspended Solids	mg/L	70.0	3.2	100
7	Total Dissolve Solids	mg/L	269	280	-
8	Chemical Oxygen Demand	mg/L	172	25.0	250
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	60.0	7.0	30
10	Oil & Grease	mg/L	7.2	< 3.0	10
11	Temperature	° C	25.0	25.0	Shall not exceed 5.0°C above the receiving water temperature
12	Conductivity	µS/cm	450.0	512	-


 Analysis By


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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	

Reference No.: SCL/ENV/WATER/MONTHLY/2022-23/04

Date of sample collection: - 15.07.2022
Date of Analysis: 15.07.2022 to 18.07.2022

Sl.No.	Parameter	Unit	ETP Inlet	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	-	6.5	6.9	5.5 to 9.0
2	Suspended Solids	mg/L	85	10	100
3	Total Dissolve Solids	mg/L	226	178	-
4	Chemical Oxygen Demand	mg/L	344	24.0	250
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	80.0	5.0	30
6	Oil & Grease	mg/L	101	< 3.0	10
7	Dissolved Oxygen	mg/L	4.1	5.0	-
8	Temperature	° C	25.0	25	Shall not exceed 5.0°C above the receiving water temperature


Analysis By


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STAR CEMENT MEGHALAYA LIMITED
Lumshnong, Meghalaya

Reference No.	SCML/EHS/F-04
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	3
Date of Rev.	01.06.2019

WATER TESTING REPORT

Reference No.: SCML/ENV/WATER/MONTHLY/2022-23/04

Surface Water Analysis Results

Date of sample collection: - 18.07.2022

Month: July-2022

Date of Analysis: 18.07.2022 to 21.07.2022

S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Lunar River	Lukha River	Lumshnong	Umbadoh	Tongseng	Wahiajer	Standards norms as per IS 2296
			Up Stream	Down Stream	Up Stream	Down Stream			Seasonal Spring / Seasonal Nallah				
1	pH	-	6.60	6.68	6.59	6.63	6.6	6.64	6.8	6.8	6.8	6.7	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Slightly Yellowish	Colourless	Colourless	Colourless	Colourless	Colourless	10
3	Odour	-	Unobjectionable										Unobjectionable
4	Chloride	mg/L	143.7	145.8	141.0	143.3	42.8	9.2	67.9	47.9	49.8	45.7	250
5	Total Hardness as CaCO ₃	mg/L	22.5	25.9	25.0	23.0	132.5	17.0	19.0	14.0	20.0	11.0	300
6	Suspended Solids	mg/L	77.0	79.0	26.0	24.0	56.0	5.0	3.3	8.0	2.0	19.0	-
7	Total Dissolve Solids	mg/L	180	183	172	175	213.0	56.0	139.0	133.0	120.0	129.0	500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	2.0
9	Oil & Grease	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
10	Temperature	° C	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	-
11	Conductivity	μS/cm	320.70	326.5	310.70	315.5	210.8	110.8	207.6	215.0	208.0	215.0	-
12	Flow	L / Min	5780.14	11859.85	1112.34	2425.72	311543.48	234807.32	805.741	-	-	-	-


Analyzed by


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