

STAR CEMENT MEGHALAYA LIMITED

Ref: SCML-MLA/EHS/LUM/2022-23/08

Dated: 23/01/2023

To,

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

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

Reference : MPCB/ONLINE/CTO(R-I)/EJHD/2021/2022-2023/14, Dtd: Shillong, the 30th Aug, 2022.

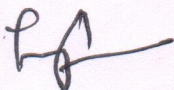
Dear Sir,

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, Fugitive Emission, Surface water monitoring reports of **M/s Star Cement Meghalaya Limited** over a **Mining Lease Area of 42.051 Ha** for the month of **December, 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.


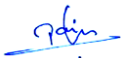








STAR CEMENT MEGHALAYA LIMITED





Lumshnong, Meghalaya


Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Wind Direction (deg)	Wind Speed- (m/s)	Manual Rain (mm)
01-12-2022	761.7	95	19.0	319	0	0
02-12-2022	761.5	95.6	19.4	253	0	0
03-12-2022	761.4	95.6	20.0	255	0	0
04-12-2022	761.4	95.5	18.7	250	0	0
05-12-2022	761.9	95.5	23.4	251	0	0
06-12-2022	762.5	95.5	20.8	250	0	0
07-12-2022	763	95.1	21.4	261	0	0
08-12-2022	763.7	81.2	17.2	123	0	0
09-12-2022	764	63.2	21.4	212	0	0
10-12-2022	763.9	59.5	22.2	207	0	0
11-12-2022	763.2	64.2	23.3	180	0.3	0
12-12-2022	762.5	64.5	23.1	212	2	0
13-12-2022	762	63.1	24.1	207	1.8	0
14-12-2022	761.5	61.2	24.1	223	1.9	0
15-12-2022	761.5	65.3	23.1	249	0.5	0
16-12-2022	761.5	67.2	23.0	213	0	0
17-12-2022	761.7	83.2	19.0	359	0	0
18-12-2022	761.9	88.1	17.1	258	0	0
19-12-2022	762.2	91.1	16.3	253	0	0
20-12-2022	762.4	93.4	15.0	250	0	0
21-12-2022	762.4	93.2	15.4	357	0	0
22-12-2022	762.4	94.3	19.7	252	0	0
23-12-2022	762.5	94.0	14.3	274	0	0
24-12-2022	762.4	95.0	14.3	123	0	0
25-12-2022	763.2	95.5	22.2	60	1.07	0
26-12-2022	762.5	95.5	23.3	90	0.72	0
27-12-2022	762	95.5	23.1	180	1.28	7.7
28-12-2022	761.5	95.1	24.1	212	0	0
29-12-2022	761.5	81.2	20.0	207	0	0
30-12-2022	761.5	83.2	18.7	253	0	0
31-12-2022	761.7	88.1	18.6	250	0	0
					Total rain of this month	7.7


	STAR CEMENT MEGHALAYA LIMITED (MLA 42.051 Ha) 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/2022-23/01			Month: December'22	
Location of Sampling: Mines Entrance Haul Road		GPS Coordinate: 25°10'14.88"N 92°24'52.13"E		
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)
07.12.2022	44.43	23.19	10.83	15.70
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.				
 Analysed by		 Checked By		 Verified By


	STAR CEMENT MEGHALAYA LIMITED (MLA 42.051 Ha) Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 01
			Issue No.	1
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Issue:	24.08.2013
			Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCML/ENV/AAQM/MONTHLY/2022-23/01			Month: December'22	
Location of Sampling: ROC Drilling Point		GPS Coordinate: 25°10'15.92"N 92°24'55.38"E		
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)
07.12.2022	46.28	21.58	9.44	13.04
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
<p>Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.</p>				
 Analysed by		 Checked By		 Verified By


	STAR CEMENT MEGHALAYA LIMITED (MLA 42.051 Ha) Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 01
			Issue No.	1
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Issue:	24.08.2013
			Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCML/ENV/AAQM/MONTHLY/2022-23/01			Month: December'22	
Location of Sampling: Excavator Point		GPS Coordinate: 25°10'16.34"N 92°24'54.97"E 745 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)
07.12.2022	41.89	17.12	11.13	12.23
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m³)	60 (µg/m³)	80 (µg/m³)	80 (µg/m³)
<p>Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.</p>				
 Analysed by		 Checked By		 Verified By





	STAR CEMENT MEGHALAYA LIMITED (42.051Ha) Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 07 (a)
			Issue No.	1
			Date of Issue:	01.12.2018
	FUGITIVE EMISSION REPORT		Revision No.	2
Date of Rev.			01.12.2020	
Ref: SCML/ENV/FUGITIVE/MONTHLY/2022-23/001				
(42.051 Ha)				
Month - December 2022				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)	
24.12.2022	Near Lime Stone loading area	1715	5000	
<div style="display: flex; justify-content: space-around; align-items: flex-end; margin-top: 100px;"> <div style="text-align: center;">  Analyzed By </div> <div style="text-align: center;">  Checked By </div> <div style="text-align: center;">  Verified By </div> </div>				

	STAR CEMENT MEGHALAYA LIMITED (42.051 Ha) Lumshnong, Meghalaya		Document No.		SCML/EHS/Env/F-03	
			Effective Date		01-05-2019	
			Revision No.		04	
	NOISE LEVEL MONITORING REPORT		Revision Date		01-01-2021	
Ref: SCML(LM)/ENV/NOISE/MONTHLY/2022-23/001					Date:- 07.12.2022	
<p align="center"><u>Limestone Mine - 42.051</u></p> <p align="center"><u>Month - December 2022</u></p>						
S. No.	Location	Measured Values dB(A) Day time (6:00am to 10:00pm)			Norms in dB(A)	
		Min.	Max.	Avg.		
1	Excavator					
	A) Operator Cabin (Door Open)					
	a) At Low engine RPM	57.2	66.0	61.6	75	
	b) At High engine RPM	62.0	70.8	66.4		
	B) Operator Cabin(Door Close)					
	a) At Low engine RPM	59.3	65.3	62.3		
	b) At High engine RPM	62.0	69.6	65.8		
	C) Periphery of the Engine					
	a) At 1 mtr. Distance(At low RPM)	59.5	70.2	64.9		
	b) At 1 mtr. Distance (At high RPM)	60.7	71.4	66.1		
	c) At 5 mtr. Distance (At low RPM)	55.1	68.3	61.7		
	d) At 5 mtr. Distance (At high RPM)	57.5	69.4	63.4		
	D) Behind the Engine					
	a) At 1 mtr. Distance(At low RPM)	61.1	66.8	64.0		
	b) At 1 mtr. Distance (At high RPM)	68.2	70.8	69.5		
	c) At 5 mtr. Distance (At low RPM)	59.3	62.3	60.8		
d) At 5 mtr. Distance (At high RPM)	62.0	68.3	65.2			
2	Rock Breaker					
	A) Operator Cabin					
	a) At Low engine RPM	63.3	64.0	63.7	75	
	b) At High engine RPM	65.6	70.9	68.3		
	B) Rock Breaker Point (At 5 mtr. Distance)					
	a) Left Side	57.4	65.5	61.5		
	b) Right Side	54.1	67.2	60.7		
	c) Front Side	56.8	68.8	62.8		


 Measured By


 Checked By


 Verified By

	STAR CEMENT MEGHALAYA LIMITED (42.051 Ha) Lumshnong, Meghalaya		Document No.		SCML/EHS/Env/F-03
			Effective Date		01-05-2019
			Revision No.		04
	NOISE LEVEL MONITORING REPORT			Revision Date	
Ref: SCML(LM)/ENV/NOISE/MONTHLY/2022-23/001 Date:- 07.12.2022					
<u>Limestone Mine - 42.051</u> <u>Month - December 2022</u>					
S. No.	Location	Measured Values dB(A) Day time (6:00am to 10:00pm)			Norms In dB(A)
		Min.	Max.	Avg.	
3	Drill Machine				75
	A) Compressor				
	a) At 1 mtr. Distance	66.3	72.8	69.6	
	b) At 5 mtr. Distance	62.2	71.4	66.8	
	B) Drilling Point (At 5 mtr. Distance)				
	a) Left Side	63.3	71.4	67.3	
	b) Right Side	62.3	72.3	67.3	
	c) Front Side	61.3	71.4	66.4	
4	Dozer				75
	A) Operator Cabin				
	a) At Low engine RPM	57.7	63.3	60.5	
	b) At High engine RPM	63.9	71.6	67.8	
	B) Periphery of the Engine				
	a) At 1 mtr. Distance (At low RPM)	59.6	67.4	63.5	
	b) At 1 mtr. Distance (At high RPM)	63.6	70.8	67.2	
	c) At 5 mtr. Distance (At low RPM)	53.8	60.1	57.0	
	d) At 5 mtr. Distance (At high RPM)	60.3	68.3	64.3	
	c) Behind the Engine				
	a) At 1 mtr. Distance (At low RPM)	55.9	62.3	59.1	
	b) At 1 mtr. Distance (At high RPM)	59.6	66.4	63.0	
	c) At 5 mtr. Distance (At low RPM)	53.5	58.4	56.0	
	d) At 5 mtr. Distance (At high RPM)	57.0	60.4	58.7	
5	Dumper				
	A) Empty Dumper				
	a) Open Window	64.8	70.8	67.8	
	b) Close Window	58.8	64.3	61.6	
	B) Loaded Dumper				
	a) Open Window	66.0	71.3	68.7	
	b) Close Window	61.3	65.6	63.5	
<div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div>  Analyzed by </div> <div>  Checked by </div> <div>  Verified By </div> </div>					



STAR CEMENT MEGHALAYA LIMITED

Lumshnong, Meghalaya
(42.051 Ha)

Surface Water Analysis Results

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

Reference No.: SCML/ENV/WATER/MONTHLY/2022-23/01

Month: December-2022

Date of sample collection: - 12.12.2022

Date of Analysis: 12.12.2022 to 15.12.2022

S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Umso	Seshysmpa	Lumshnong	Umbadoh	Tongseng	Wahiajer	Standards norms as per IS 2296	
			Up Stream	Down Stream	Up Stream	Down Stream	Down Stream		Seasonal Spring / Seasonal Nallah					
1	pH	-	7.5	7.4	7.3	7.5	7.8	7.1	7.7	7.8	Water Source not found		6.5 - 8.5	
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless			10	
3	Odour	-	Unobjectionable										Unobjectionable	
4	Chloride	mg/L	42.0	42.9	38.0	38.8	40.0	23.5	21.7	25.4			250	
5	Total Hardness as CaCO ₃	mg/L	67.8	70.4	74.1	74.8	78.9	42.6	68.7	38.1			300	
6	Suspended Solids	mg/L	9.0	8.7	4.7	6.4	4.2	6.0	6.0	4.4			-	
7	Total Dissolve Solids	mg/L	235	237	182	183	195	95.0	157.4	73.4			500	
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	ND	ND	ND	ND	ND	ND			2.0	
9	Oil & Grease	mg/L	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			-	
11	Conductivity	µS/cm	359	361	280	284	297	140	220	115			-	
12	Flow	L / Min	338.8	395.6	72.3	135.5	212.5	57954.5	-	-			-	

Analyzed by

Checked by

Verified by