Ref: SCML-MLA/EHS/LUM/2023-24/35

To,

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

Subject

: Submission of Environmental Monitoring Report for the month of December, 2023.

Reference

: MPCB/ONLINE/RCTO(R-I)/EJHD/2021/2023-2024/30, Dtd: Shillong, the 27th September, 2023.

Dated: 29/01/2024

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 Brishyrnot Limestone Deposit-I (MLA 42.051 Ha) of Star Cement Meghalaya Limited for the month of December, 2023.

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

<u>Copy To</u>: The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-790314.

CIN: U63090ML2005PLC008011



Lumshnong, Meghalaya

Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-12-2023	722.8	70.2	22.7	0.0
02-12-2023	720.2	69.0	22.0	0.0
03-12-2023	719.9	69.8	22.9	0.0
04-12-2023	726.1	68.1	22.7	0.0
05-12-2023	723.4	67.9	22.6	0.0
06-12-2023	729.2	69.2	22.0	0.0
07-12-2023	723.8	68.0	20.0	13.4
08-12-2023	726.5	67.8	19.0	16.0
09-12-2023	728.1	68.0	22.5	0.0
10-12-2023	725.8	69.1	22.9	0.0
11-12-2023	723.8	72.3	23.0	0.0
12-12-2023	723.3	71.4	24.7	0.0
13-12-2023	723.7	75.6	22.8	0.0
14-12-2023	726.5	72.7	22.9	0.0
15-12-2023	726.7	72.9	23.8	0.0
16-12-2023	726.1	70.1	23.4	0.0
17-12-2023	724.5	76.4	20.6	0.0
18-12-2023	722.9	75.6	19.2	0.0
19-12-2023	720.5	68.6	20.9	0.0
20-12-2023	726.1	61.6	20.8	0.0
21-12-2023	726.6	64.6	22.3	0.0
22-12-2023	724.3	69.4	22.6	0.0
23-12-2023	726.5	68.9	22.7	0.0
24-12-2023	728.1	66.8	23.9	0.0
25-12-2023	726.5	69.5	22.7	0.0
26-12-2023	721.3	66.2	21.9	0.0
27-12-2023	728.0	69.1	22.4	0.0
28-12-2023	725.8	70.5	22.9	0.0
29-12-2023	724.6	72.6	19.6	0.0
30-12-2023	725.4	71.4	22.0	0.0
31-12-2023	725.8	70.5	22.9	0.0
			Total	29.4



#### STAR CEMENT MEGHALAYA LIMITED Brishyrnot Limestone Deposit - I (MLA 42.051) Lumshnong, Meghalaya

51)

evision No.

Date of Rev.

 Reference No.
 SCML/Env/F - 01

 Issue No.
 1

 Date of Issue:
 24.08.2013

AMBIENT AIR QUALITY MONITORING REPORT

01.12.2020

Reference No.: SCML/ENV/A	AAQM/MONTHLY/2023-24/09		Month : December			
Location of Sampling: Mines	Entrance Haul Road	<b>GPS Coordinate:</b> 25°10′14.88″N 92°24′52.13″E				
Sampling Duration: 24 Hrs.		24 Hrs.	24 Hrs.	24 Hrs.		
Date of Sampling PM <sub>10</sub> (μg/m²)  27.12.2023 60.64  NAAQS permissible limits for Rural, Industrial, Residential Area		PM <sub>2-5</sub> ( μg/m³)	SO₂ (μg/m³)	NO <sub>2</sub> (μg/m³) 20.65 80 (μg/m³)		
		38.17	15.34			
		60 (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

Pari Singh

Werified By

Checked By



Brishyrnot Limestone Deposit - I (MLA 42.051) Lumshnong, Meghalaya 
 Reference No.
 SCML/Env/F - 01

 Issue No.
 1

 Date of Issue:
 24.08.2013

 Revision No.
 5

 Date of Rev.
 01.12.2020

AMBIENT AIR QUALITY MONITORING REPORT

Reference No.: SCML/ENV/AAQM/MONTHLY/2023-24/09 Month : Decem

Reference No.: SCIVIL/ENV/A	AQIVI/IVIONTHLT/2023-24/09		Month : December			
Location of Sampling: ROC D	Oriling 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 <sub>10</sub> (μg/m³)	PM <sub>2-s</sub> ( μg/m³)	SO₂ (μg/m³)	NO₂ (μg/m³)		
27.12.2023	54.15	34.78	13.94	16.68		
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

Pani Singh

Checked By

Werified By



Brishyrnot Limestone Deposit - I (MLA 42.051) Lumshnong, Meghalaya

SCML/Env/F - 01 Reference No. Issue No. Date of Issue: 24.08.2013 Revision No.

01.12.2020

AMBIENT AIR QUALITY MONITORING REPORT

Date of Rev.

Reference No.: SCML/ENV/A	AQM/MONTHLY/2023-24/09		Month : December				
Location of Sampling: Excava	ator 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 <sub>10</sub> (µg/m³)		PM <sub>2-5</sub> ( μg/m³)	SO₂ (μg/m³)	NO₂ (μg/m³)			
27.12.2023 49.57		37.66	14.41	17.88			
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.

Pari Singh

Checked By

Verified By



Lumshnong, Meghalaya

Reference No.	SCML/Env/F – 07 (a)
Issue No.	1
Date of Issue:	01.12.2018
Revision No.	2
Date of Rev.	01.12.2020

**FUGITIVE EMISSION REPORT** 

Ref: SCML/ENV/FUGITIVE/MONTHLY/2023-24/09

Brishyrnot Limestone Deposit - I (MLA 42.051)

**Month - December** 

		Fugitive Emission Results	As per CPCB/BIS Guideline
Date	Location	•	Limit
		(in µg/m³)	(in µg/m³)
27.12.2023	Near Lime Stone loading area	1462	5000

Analyzed By

Checked By

**Verified By** 



# STAR CEMENT MEGHALAYA LIMITED (42.051 Ha)

Lumshnong, Meghalaya

**NOISE LEVEL MONITORING REPORT** 

Document No.	SCML/EHS/Env/F-03
Effective Date	01-05-2019
Revision No.	04
Revision Date	01-01-2021

Ref: SCML(LM)/ENV/NOISE/MONTHLY/2023-24/009

Date:- 27.12.2023

## **Brishyrnot Limestone Deposit - I (MLA 42.051)**

#### Month - December

S. No.	Location	Measured Va	Measured Values dB(A) Day time (6:00am to 10:00pm)				
		Min.	Max.	Avg.			
	Excavator						
	A) Operator Cabin (Door Open)						
	a) At Low engine RPM	58.7	67.5	63.1			
	b) At High engine RPM	63.5	72.3	67.9			
	B) Operator Cabin(Door Close)						
	a) At Low engine RPM	60.8	66.8	63.8			
	b) At High engine RPM	63.5	71.1	67.3			
	C) Periphery of the Engine						
1	a) At 1 mtr. Distance( At low RPM)	61.0	71.7	66.4	75		
	b) At 1 mtr. Distance (At high RPM)	62.2	72.9	67.6			
	c) At 5 mtr. Distance (At low RPM)	56.6	69.8	63.2			
	d) At 5 mtr. Distance (At high RPM)	59.0	70.9	64.9			
	D) Behind the Engine						
	a) At 1 mtr. Distance( At low RPM)	62.6	68.3	65.5			
	b) At 1 mtr. Distance (At high RPM)	69.7	72.3	71.0			
	c) At 5 mtr. Distance (At low RPM)	60.8	63.8	62.3			
	d) At 5 mtr. Distance (At high RPM)	63.5	69.8	66.7			
	Rock Breaker						
	A) Operator Cabin						
	a) At Low engine RPM	64.8	65.5	65.2			
2	b) At High engine RPM	67.1	72.4	69.8	75		
۷	B) Rock Breaker Point (At 5 mtr. Distance)				/5		
	a) Left Side	58.9	67.0	63.0			
	b) Right Side	55.6	68.7	62.2			
	c) Front Side	58.3	70.3	64.3			

Measured By

Rani. Strogh

Checked By

Verified By

Mrath



## STAR CEMENT MEGHALAYA LIMITED (42.051 Ha) Lumshnong, Meghalaya

**NOISE LEVEL MONITORING REPORT** 

Document No. SCML/EHS/Env/F-03

Effective Date 01-05-2019

Revision No. 04

Revision Date 01-01-2021

Ref: SCML(LM)/ENV/NOISE/MONTHLY/2023-24/009

Date:- 27.12.2023

## Brishyrnot Limestone Deposit - I (MLA 42.051)

#### Month - December

S. No.	Location	Measured Va	Measured Values dB(A) Day time (6:00am to 10:00pm)					
		Min.	Max.	Avg.				
	Drill Machine							
	A) Compressor							
	a) At 1 mtr. Distance	68.4	74.9	71.7				
3	b) At 5 mtr. Distance	64.3	73.5	68.9	75			
3	B) Drilling Point (At 5 mtr. Distance)				/5			
	a) Left Side	65.4	73.5	69.4				
	b) Right Side	64.4	74.4	69.4				
	c) Front Side	63.4	73.5	68.5				
	Dozer		•					
	A) Operator Cabin							
	a) At Low engine RPM	59.8	65.4	62.6				
	b) At High engine RPM	66.0	73.7	69.9				
	B) Periphery of the Engine		•					
	a) At 1 mtr. Distance( At low RPM)	61.7	69.5	65.6				
4	b) At 1 mtr. Distance (At high RPM)	65.7	72.9	69.3				
4	c) At 5 mtr. Distance (At low RPM)	55.9	62.2	59.1				
	d) At 5 mtr. Distance (At high RPM)	62.4	70.4	66.4				
	c) Behind the Engine		•					
	a) At 1 mtr. Distance( At low RPM)	58.0	64.4	61.2	75			
	b) At 1 mtr. Distance (At high RPM)	61.7	68.5	65.1				
	c) At 5 mtr. Distance (At low RPM)	55.6	60.5	58.1				
	d) At 5 mtr. Distance (At high RPM)	59.1	62.5	60.8				
	Dumper		•					
	A) Empty Dumper							
	a) Open Window	66.9	72.9	69.9				
5	b) Close Window	60.9	66.4	63.7				
	B) Loaded Dumper							
	a) Open Window	68.1	73.4	70.8				
	b) Close Window	63.4	67.7	65.6				

Analyzed by

Rani Single

Checked by

Mrath.

Verified By



Reference No.: SCML/ENV/WATER/MONTHLY/2023-24/09

#### **STAR CEMENT MEGHALAYA LIMITED**

Lumshnong, Meghalaya

Brishyrnot Limestone Deposit - I (MLA 42.051)

**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

Date of sample collection: 20.12.2023

Date of Analysis: 20.12.2023 to 23.12.2023

S.No.	Parameter	Unit	Umtyrng	gai Nallah	Umuth	a Nallah	Umso Nalah	Lunar	Lukha	Seshympa	Umbadoh Tongseng Lumshnong	Wahiajer	Standards norms		
3.140.	- unumere	J	Up Stream	Down Stream	Up Stream	Down Stream	Down Stream	Lunui	Lakita	Sestiyinpu	Seasonal Spring / Seasonal Nallah		/ Seasonal Nallah		as per IS 2296
1	рН	-	7.7	7.5	7.8	8.1	8.2	6.9	7.1	7.3	Water source	7.6	6.5 - 8.5		
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Yellowish	Colourless	Colourless		Colourless	10		
3	Odour	-				Unobje	ctionable					Unobjectionable	Unobjectionable		
4	Chloride	mg/L	24.8	29.2	27.5	27.9	30.1	45.2	20.0	24.8		]		24.8	250
5	Total Hardness as CaCO₃	mg/L	52.8	68.0	76.0	84.0	88.0	125.0	24.0	49.2		47.2	300		
6	Suspended Solids	mg/L	1.0	1.5	2.1	8.96	10.0	23.0	3.9	1.4		2.0	-		
7	Total Dissolve Solids	mg/L	254.0	188.0	266.7	326.0	342.2	224.1	69.2	135.9		not found	240.0	500	
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	ND	ND	ND	ND	ND	ND				ND	2.0
9	Oil & Grease	mg/L	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	-		
11	Conductivity	μS/cm	447.0	329.0	433.2	526.5	547.4	353.4	107.2	218.6			424.0	-	
12	Flow	L / Min	2528.8	3026.0	367.9	1119.6	3060.0	10683.7	6247.5	132005.0				-	-

Analyzed h

Ravi Singh

Checked by

Whath.

Verified by