Ref: SCML-MLA/EHS/LUM/2024-25/05

To,

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

Subject

: Submission of Environmental Monitoring Report for the month of April, 2024.

Reference

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

Dated: 24/05/2024

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 April, 2024.

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



STAR CEMENT LIMITED

Lumshnong, Meghalaya

Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-04-2024	720.7	71.6	18.8	91.9
02-04-2024	718.1	70.4	18.1	10.0
03-04-2024	717.8	71.2	19.0	30.4
04-04-2024	724.0	69.5	18.8	62.0
05-04-2024	721.3	69.3	18.7	15.4
06-04-2024	727.1	70.6	18.1	8.0
07-04-2024	721.7	69.4	20.0	0.0
08-04-2024	724.4	69.2	19.0	0.0
09-04-2024	726.0	69.4	18.6	0.0
10-04-2024	723.7	70.5	19.0	0.0
11-04-2024	721.7	73.7	19.1	0.0
12-04-2024	721.2	72.8	20.8	0.0
13-04-2024	721.6	77.0	18.9	0.0
14-04-2024	724.4	74.1	19.0	0.0
15-04-2024	724.6	74.3	19.9	0.0
16-04-2024	724.0	71.5	19.5	0.0
17-04-2024	722.4	77.8	16.7	7.2
18-04-2024	720.8	77.0	15.3	0.0
19-04-2024	718.4	70.0	17.0	18.8
20-04-2024	724.0	63.0	16.9	20.6
21-04-2024	724.5	66.0	18.4	44.2
22-04-2024	722.2	70.8	18.7	20.2
23-04-2024	724.4	70.3	18.8	108.2
24-04-2024	726.0	68.2	20.0	51.0
25-04-2024	724.4	70.9	18.8	24.0
26-04-2024	719.2	67.6	18.0	42.0
27-04-2024	725.9	70.5	18.5	12.6
28-04-2024	723.7	71.9	19.0	18.2
29-04-2024	722.5	74.0	15.7	72.0
30-04-2024	724.4	70.9	18.8	54.6
	<u>'</u>	<u>'</u>	Total	711.3



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

Issue No. 1
Date of Issue: 24.08.2013
Revision No. 5

SCML/Env/F - 01

01.12.2020

AMBIENT AIR QUALITY MONITORING REPORT

.

Reference No.

Date of Rev.

Reference No.: SCML/ENV/A	AAQM/MONTHLY/2024-25/13		Month	: April			
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. NO ₂ (μg/m³) 25.16			
Date of Sampling	PM ₁₀ (μg/m³)	PM ₂₋₅ (μg/m³)	SO₂ (μg/m³)				
18.04.2024	68.82	42.62	17.07				
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

Meshad Ru

Whath Verified By



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

Reference No. SCML/Env/F – 01 24.08.2013 Date of Issue: 01.12.2020 Date of Rev.

Month : April

AMBIENT AIR QUALITY MONITORING REPORT

Reference No.: SCML/ENV/AAQM/MONTHLY/2024-25/13 GPS Coordinate: 25°10′15.92″N 92°24′55.38″E

Location of Sampling: ROC L	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 ₁₀ (μg/m³)	PM _{2-s} (μg/m³)	SO ₂ (μg/m³)	NO₂ (μg/m³)					
18.04.2024	62.33	39.23	15.67	21.19					
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.

CANE Analysed by

Monor

Mrath Verified 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/	AAQM/MONTHLY/2024-25/13		Month : April				
Location of Sampling: Excav	ator Point	GPS Coordinate : 25°10′16.34″N 92°24′54.97″E 745 m					
Sampling Duration: 24 Hrs.		24 Hrs.	24 Hrs.				
Date of Sampling	PM ₁₀ (μg/m³)	PM ₂₋₅ (μg/m³)	SO₂ (μg/m³)	NO₂ (μg/m³)			
18.04.2024	57.75	42.11	16.14	22.39			
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.

CANE

Analysed by

Musty

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/2024-25/13

Brishyrnot Limestone Deposit - I (MLA 42.051)

Month - April

		Fugitive Emission Results	As per CPCB/BIS Guideline		
Date	Location		Limit		
		(in µg/m³)	(in µg/m³)		
18.04.2024	Near Lime Stone loading area	1534	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/2024-25/013

Date:-

18.04.2024

Brishyrnot Limestone Deposit - I (MLA 42.051)

Month - April

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)				75		
	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

Checked By

Whath

Verified By



STAR CEMENT MEGHALAYA LIMITED (42.051 Ha) Lumshnong, Meghalaya

NOISE LEVEL MONITORING REPORT

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

Ref: SCML(LM)/ENV/NOISE/MONTHLY/2024-25/013

Date:- 18.04.2024

Brishyrnot Limestone Deposit - I (MLA 42.051)

Month - April

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	65.2	71.7	68.5			
3	b) At 5 mtr. Distance	61.1	70.3	65.7	75		
3	B) Drilling Point (At 5 mtr. Distance)				75		
	a) Left Side	62.2	70.3	66.2			
	b) Right Side	61.2	71.2	66.2			
	c) Front Side	60.2	70.3	65.3			
	Dozer		•				
	A) Operator Cabin						
	a) At Low engine RPM	56.6	62.2	59.4			
	b) At High engine RPM	62.8	70.5	66.7			
	B) Periphery of the Engine		•				
	a) At 1 mtr. Distance(At low RPM)	58.5	66.3	62.4			
4	b) At 1 mtr. Distance (At high RPM)	62.5	69.7	66.1			
4	c) At 5 mtr. Distance (At low RPM)	52.7	59.0	55.9			
	d) At 5 mtr. Distance (At high RPM)	59.2	67.2	63.2			
	c) Behind the Engine		•				
	a) At 1 mtr. Distance(At low RPM)	54.8	61.2	58.0	75		
	b) At 1 mtr. Distance (At high RPM)	58.5	65.3	61.9			
	c) At 5 mtr. Distance (At low RPM)	52.4	57.3	54.9			
	d) At 5 mtr. Distance (At high RPM)	55.9	59.3	57.6			
	Dumper						
	A) Empty Dumper						
	a) Open Window	63.7	69.7	66.7			
5	b) Close Window	57.7	63.2	60.5			
	B) Loaded Dumper	İ					
	a) Open Window	64.9	70.2	67.6			
	b) Close Window	60.2	64.5	62.4			

Analyzed by

Verified By

Checked by



Reference No.: SCML/ENV/WATER/MONTHLY/2024-25/13

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: 09.04.2024

Date of Analysis: 09.04.2024 to 12.04.2024

													Date	of Analysis: 09.04.2	024 to 12.04.2024
S.No.	Parameter	Unit	Umtyrnį	gai Nallah	Umuth	a Nallah	Umso Nalah	Seshympa	Lunar	Lukha	Umbadoh	Tongseng	Lumshnong	7.5 6.5 - 8.5 Colourless 10 Unobjectionable Unobjectionable 24.7 250 45.9 300 1.9 - 205.9 500 ND 2.0 ND -	
5.NO.	raiametei	Ont	Up Stream	Down Stream	Up Stream	Down Stream	Down Stream	Sesnympa	Lunar	Lukna		Seasonal Spring / Seasonal Nallah			as per IS 2296
1	рН	-	7.6	8.3	7.6	8.0	8.5	7.4	7.1	7.3	7.7	7.2	7.6	7.5	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Yellowish	Colourless	Colourless	Colourless	Colourless	Colourless	10
3	Odour	-			Unobjed	ctionable								Unobjectionable	Unobjectionable
4	Chloride	mg/L	25.7	30.4	28.7	27.8	32.2	25.9	42.9	18.0	29.5	28.6	33.0	24.7	250
5	Total Hardness as CaCO₃	mg/L	53.9	69.3	77.6	85.5	89.1	50.8	121.8	22.5	78.4	86.3	89.9	45.9	300
6	Suspended Solids	mg/L	2.0	3.5	2.1	4.5	10.0	1.0	17.0	2.1	3.0	5.4	10.9	1.9	-
7	Total Dissolve Solids	mg/L	259.0	191.0	269.1	322.0	311.7	141.0	219.4	64.8	270.0	322.9	312.6	205.9	500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	ND	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	ND	ND	ND	-
10	Temperature	°C	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.9	25.9	25.9	25.0	-
11	Conductivity	μS/cm	440.2	320.2	425.6	510.9	526.9	212.2	353.1	104.2	426.5	511.8	527.8	329.4	-
12	Flow	L / Min	6317.7	15045.0	5687.4	6800.0	13336.0	428136.2	172169.2	125706.8	-	-	432.4	-	-
								•					•	_ ··	•

Analyzed by

Memory

What

Verified by