

STAR CEMENT LIMITED

Ref: SCL/EHS/LUM/2023-24/45

Dated: 29/01/2024

To,

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

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

Reference : MPCB/ONLINE-RCTE-(R-1)/EJHD/2021/2023-2024/79, Dated Shillong, the 3rd October, 2023.

Dear Sir,

This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality including meteorological data, Fugitive Emission, Noise Level, Surface water monitoring reports of **Star Cement Limited Line – II** 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 Limited Line - II**



Laxmaiah Munjala
Unit Head

Enclosed: a/a

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



STAR CEMENT LIMITED Line II

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 LIMITED LINE II Lumshnong, Meghalaya		Reference No.	SCL/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.: SCL/ENV/AAQM/MONTHLY/2023-24/09			Month : December	
Location of Sampling: Project South Direction		GPS Coordinate: 25°10'26"N 92°23'22"E 931 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)
02.12.2023	51.23	35.72	12.40	15.04
03.12.2023	56.96	36.36	11.15	16.30
06.12.2023	53.26	34.37	13.47	14.00
11.12.2023	51.85	36.55	10.40	14.24
14.12.2023	55.04	35.57	12.53	16.63
16.12.2023	57.17	33.65	11.62	12.30
19.12.2023	57.30	37.56	11.79	13.63
29.12.2023	56.23	38.61	11.02	14.95
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 LIMITED LINE II Lumshnong, Meghalaya		Reference No.	SCL/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.: SCL/ENV/AAQM/MONTHLY/2023-24/09			Month : December	
Location of Sampling: Project North Direction		GPS Coordinate: 25°10'25"N 92°23'20"E 935 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)
02.12.2023	52.34	34.81	13.79	19.35
03.12.2023	58.07	35.45	13.89	16.29
06.12.2023	54.37	33.46	12.10	14.92
11.12.2023	52.96	35.64	11.89	16.92
14.12.2023	56.15	34.66	13.07	18.79
16.12.2023	58.28	32.74	11.92	19.30
19.12.2023	58.41	36.65	11.79	16.38
29.12.2023	57.34	30.43	11.02	14.94
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 LIMITED LINE II Lumshnong, Meghalaya		Reference No.	SCL/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.: SCL/ENV/AAQM/MONTHLY/2023-24/09			Month : December	
Location of Sampling: Approach Road		GPS Coordinate: 25°10'30"N 92°23'21"E 928 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)
02.12.2023	70.01	42.29	13.64	17.20
03.12.2023	64.66	43.17	14.66	15.78
06.12.2023	66.89	43.83	15.12	17.11
11.12.2023	70.88	42.16	14.57	15.73
14.12.2023	68.21	39.99	13.09	17.13
16.12.2023	69.71	42.36	11.41	14.42
19.12.2023	71.46	47.81	13.57	16.18
29.12.2023	67.57	41.03	12.66	15.85
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 LIMITED LINE II Lumshnong, Meghalaya	Document No.	SCL/EHS/Env/F-04
		Date of Issued	01-05-2019
		Revision No.	2
	FUGITIVE EMISSION MONITORING REPORT	Revision Date	01-01-2021
Ref: SCL(II)/ENV/FUGITIVE/MONTHLY/2023-24/09			
Month - December			
Date	Location	Fugitive Emission Results (in $\mu\text{g}/\text{m}^3$)	As per CPCB/BIS Guideline
			Limit (in $\mu\text{g}/\text{m}^3$)
02.12.2023	Coal Storage Section	1185	2000
02.12.2023	Limestone Storage Section	1125	5000
 Analyzed By  Checked by  Verified By			

	STAR CEMENT LIMITED Line II Lumshnong, Meghalaya				Document No.	SCL/EHS/Env/F-03			
					Effective Date	01-05-2019			
					Revision No.	04			
	NOISE LEVEL MONITORING REPORT				Revision Date	01-01-2021			
Ref: SCL/ENV/NOISE/MONTHLY/2023-24/009 Date: 13.12.2023									
Month - December									
S. No.	Location	Measured Values dB(A) Day time (6:00am to 10:00pm)			Norms In dB(A)	Measured Values dB(A) Night time (10:00pm to 6:00am)			Norms in dB(A)
		Min.	Max.	Avg.		Min.	Max.	Avg.	
A	Plant								
1	Kiln	64.2	72.0	68.1	75	60.3	68.1	64.2	70
2	Raw Mill	62.0	71.5	66.8		58.1	67.6	62.9	
3	Coal Mill	65.2	72.6	68.9		61.3	68.7	65.0	
4	Cement Mill	63.9	70.6	67.3		60.0	66.7	63.4	
5	Primary Crusher	65.5	72.1	68.8		61.6	68.2	64.9	
6	Secondary Crusher	64.5	72.8	68.7		60.6	68.9	64.8	
C.	Residential								
1	Line II colony	43.0	44.9	44.0	55	39.1	43.0	41.1	45
 Analyzed by  Checked By  Verified By									

	STAR CEMENT LIMITED LINE II Lumshnong, Meghalaya										Reference No.	SCL/EHS/F-04				
											Issue No.	1				
											Date of Issue:	24.08.2013				
	WATER TESTING REPORT										Revision No.	3				
										Date of Rev.	01.06.2019					
Reference No.: SCL(II)/ENV/WATER/MONTHLY/2023-24/09										Surface Water Analysis Results			Date of sample collection: 20.12.2023			
										Date of Analysis: 20.12.2023 to 23.12.2023						
S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Umso Nalah	Lunar	Lukha	Seshympa	Umbadoh	Tongseng	Lumshnong	Wahiajer	Standards norms as per IS 2296	
			Up Stream	Down Stream	Up Stream	Down Stream	Down Stream				Seasonal Spring / Seasonal Nallah					
1	pH	-	7.7	7.5	7.8	8.1	8.2	6.9	7.1	7.3	Water source not found				7.6	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Yellowish	Colourless	Colourless					Colourless	10
3	Odour	-	Unobjectionable							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 CaCO ₃	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					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 by Checked by Verified by																