

STAR CEMENT MEGHALAYA LIMITED

Ref: SCML/EHS/LUM/2024-25/52

Dated: 13/01/2025

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, 2024.

Reference : MPCB/CON-54/2007/2024-2025/89, Dtd: Shillong, the 19th June, 2024.

Dear Sir,

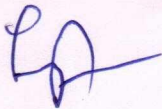
This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission & Water (Ground, Surface, STP & ETP) quality monitoring reports of **Star Cement Meghalaya Limited** (formerly known as *Meghalaya Power Limited - 43 MW*) for the month of **December, 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

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

STAR CEMENT Solid Setting STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya				
Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-12-2024	720.9	72.3	22.6	0.0
02-12-2024	718.3	71.1	21.4	0.0
03-12-2024	718.0	71.9	21.2	0.0
04-12-2024	724.2	70.2	22.1	0.0
05-12-2024	721.5	70.0	21.5	0.0
06-12-2024	727.3	71.3	21.4	0.0
07-12-2024	721.9	70.1	21.5	0.0
08-12-2024	723.7	69.9	21.7	0.0
09-12-2024	725.3	70.1	21.9	0.0
10-12-2024	723.0	71.2	22.3	0.0
11-12-2024	721.0	74.4	22.0	0.0
12-12-2024	720.5	73.5	23.9	0.0
13-12-2024	720.9	73.0	22.0	0.0
14-12-2024	723.7	74.8	22.1	0.0
15-12-2024	723.9	75.0	23.0	0.0
16-12-2024	723.3	72.2	22.6	0.0
17-12-2024	723.2	73.3	19.5	0.0
18-12-2024	721.6	74.6	22.1	0.0
19-12-2024	719.2	70.7	19.8	0.0
20-12-2024	724.8	67.7	19.7	0.0
21-12-2024	725.3	66.7	21.2	0.0
22-12-2024	723.0	71.5	21.5	0.0
23-12-2024	725.2	71.0	21.6	0.0
24-12-2024	726.8	68.9	22.8	0.0
25-12-2024	725.2	71.6	21.9	0.0
26-12-2024	720.0	68.3	21.1	0.0
27-12-2024	726.4	71.2	21.6	0.0
28-12-2024	724.2	72.6	21.0	0.0
29-12-2024	723.0	72.2	20.7	0.0
30-12-2024	721.6	73.2	21.8	0.0
31-12-2024	729.1	70.5	22.1	0.0
			Total	0.0

	STAR CEMENT MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
AMBIENT AIR QUALITY MONITORING REPORT			Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/21			Month : December	
Location of Sampling: Near ADM Office (South)		GPS Coordinate: 25°10'34"N 92°23'46"E 907 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)
02.12.2024	50.55	32.51	15.27	18.55
06.12.2024	49.22	30.48	17.03	19.84
09.12.2024	49.24	35.01	16.41	17.55
13.12.2024	49.29	32.51	19.03	19.56
17.12.2024	48.12	33.69	15.39	17.59
20.12.2024	46.27	29.35	15.07	18.51
23.12.2024	46.94	36.01	16.06	19.34
27.12.2024	45.12	33.51	14.61	18.48
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		 Verified By

	STAR CEMENT MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/21			Month : December	
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/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
02.12.2024	39.60	34.98	16.47	17.82
06.12.2024	40.48	36.98	17.85	19.02
09.12.2024	38.52	38.30	20.19	16.34
13.12.2024	40.49	33.56	18.87	16.96
17.12.2024	41.53	35.57	20.08	17.64
20.12.2024	35.49	31.12	17.77	18.36
23.12.2024	44.48	33.59	15.67	17.64
27.12.2024	41.48	35.02	18.54	16.13
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 MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/21			Month : December	
Location of Sampling: Near Piezometer Well		GPS Coordinate: 25°10'35"N 92°23'53"E 348 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)
02.12.2024	49.47	34.65	13.68	19.81
06.12.2024	48.09	29.23	15.22	18.61
09.12.2024	51.73	31.45	14.87	20.60
13.12.2024	53.23	35.13	16.61	19.47
17.12.2024	52.09	31.65	19.80	20.11
20.12.2024	46.44	33.30	15.54	19.07
23.12.2024	47.09	28.30	17.46	20.50
27.12.2024	43.71	27.29	14.43	20.53
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 MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
GROUND LEVEL AMBIENT AIR QUALITY MONITORING REPORT		Date of Rev.	01.12.2020	
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/21			Month : December	
Location of Sampling: Near ADM Office		GPS Coordinate: 25°10'34"N 92°23'46"E 907 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)
03.12.2024	46.25	26.99	13.25	17.66
07.12.2024	39.25	24.96	12.22	16.63
10.12.2024	44.47	29.49	14.55	18.96
14.12.2024	46.34	26.99	15.71	16.75
18.12.2024	45.17	28.17	16.25	18.48
21.12.2024	38.25	23.98	12.53	16.94
24.12.2024	43.99	24.10	13.82	17.67
28.12.2024	42.17	27.99	15.26	18.00
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 MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
GROUND LEVEL AMBIENT AIR QUALITY MONITORING REPORT			Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/21			Month : December	
Location of Sampling: Behind DM Plant		GPS Coordinate: 25°10'43"N 92°23'50"E 348 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)
03.12.2024	40.50	26.42	17.24	19.42
07.12.2024	40.80	24.39	16.21	18.39
10.12.2024	41.91	28.92	18.54	20.72
14.12.2024	39.96	26.42	19.70	21.88
18.12.2024	38.47	27.60	18.06	20.24
21.12.2024	36.96	23.26	16.52	18.70
24.12.2024	38.48	29.92	12.59	16.23
28.12.2024	35.68	27.42	12.22	14.40
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 MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F-02
			Issue No.	1
			Date of Issue:	01.05.2019
			Revision No.	5
	STACK EMISSION MONITORING ANALYSIS REPORT		Date of Rev.	01.06.2021
Report No: MPL(43MW)/ENV/STACK/MONTHLY/2024-25/21			Month: December	
<u>Analysis Result</u>				
A.	General Information About Stack			
1	Stack Identification No	43 MW		
2	Stack Connected to	Boiler		
3	Material of Construction (Stack/Duct)	RCC		
4	Shape of duct	Circular		
5	Whether duct is provided with permanent platform & ladder	Yes		
B.	Physical characteristic of stack			
1	Stack Height from ground level (meter)	81.0		
2	Duct diameter at sampling point (meter)	2.75		
3	Sampling height point from ground level (meter)	45.5		
4	Cross sectional area of Duct/Stack (m ²)	5.94		
C.	Pollution Control Device			
1	Details of pollution control device attached to stack	ESP		
D.	Result of Sampling & Analysis of Gaseous Emission			
1	Date of Sampling	31-12-2024		
2	Ambient Temp (°C)	25		
3	Stack Gas Temp (°C)	130		
4	Exit Velocity of Gas (m/sec.)	16.0		
5	Flow Rate (Nm ³ / sec.)	65.2		
6	Quantity of Emission (Nm ³ / Hr)	234781.2		
7	Concentration of PM (mg/Nm ³)	26.1		
8	Concentration of SO ₂ (mg/Nm ³)	483		
9	Concentration of NO _x (mg/Nm ³)	237		
10	Oxygen (O ₂) (%)	10.4		
E.	Remarks:			
Standard				
PM - 50 mg/Nm ³		SO ₂ - 600 mg/Nm ³		NO _x - 300 mg/Nm ³
Particulate Matter (PM), Sulphur di-oxide (SO ₂), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP)				
 Analysed by		 Checked by		 Authorized Signatory

	STAR CEMENT MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Document No.	MPL/EHS/Env/F-04
			Date of Issued	01-05-2019
			Revision No.	2
	FUGITIVE EMISSION MONITORING REPORT		Revision Date	01-01-2021
Ref: MPL(43MW)/ENV/FUGITIVE/MONTHLY/2024-25/21				
Month - December				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)		(in $\mu\text{g}/\text{m}^3$)
12.12.2024	Coal Storage Section	1560	2000	
 Analyzed By  Checked By  Verified By				

	STAR CEMENT MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya					Document No.		MPL/EHS/Env/F-03	
						Date of Issued		01-05-2019	
						Revision No.		04	
	NOISE LEVEL MONITORING REPORT					Revision Date		01-01-2021	
Ref: MPL(43MW)/ENV/NOISE/MONTHLY/2024-25/21						Date:		04.12.2024	
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	Turbine House Ground Floor	59.5	68.1	63.8	75	55.7	59.6	57.7	70
2	Turbine House 9 Mt.	56.3	66.1	61.2		51.8	60.8	56.3	
3	RO – MCC	62.2	69.1	65.7		55.9	63.0	59.5	
4	Boiler Ground Floor	59.4	64.5	62.0		52.5	58.4	55.5	
5	CHP – MCC	57.7	64.2	61.0		48.1	49.6	48.9	
6	Office Area	54.1	63.3	58.7		48.1	59.1	53.6	
 Analyzed by  Checked By  Verified By									

	STAR CEMENT MEGHALAYA LIMITED THERMAL POWER PLANT Lumshnong, Meghalaya				Reference No.	MPL/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.: MPL/ENV/WATER/MONTHLY/2024-25/21					Date of sample collection: 05.12.2024 Date of Analysis: 05.12.2024 to 10.12.2024	
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	-	7.6	7.3	5.5 to 9.0	
2	Colour	Hazen	Yellowish	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	83.2	72.2	-	
5	Total Hardness (as CaCO ₃)	mg/L	60.2	55.4	-	
6	Suspended Solids	mg/L	86	52.2	100	
7	Total Dissolve Solids	mg/L	344	326	-	
8	Chemical Oxygen Demand	mg/L	212	52	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	56	18	30	
10	Oil & Grease	mg/L	5.9	< 3.0	10	
11	Temperature	° C	21	19	Shall not exceed 5.0°C above the receiving water temperature	
12	Conductivity	µS/cm	536	498	-	
Shailendra Kumar Analysed By K. Gaurav Checked By  Verified By						

	STAR CEMENT MEGHALAYA LIMITED THERMAL POWER PLANT Lumshnong, Meghalaya			Reference No.	MPL/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.: MPL/ENV/WATER/MONTHLY/2024-25/21				Date of sample collection: 05.12.2024 Date of Analysis: 05.12.2024 to 10.12.2024	
Sl.No.	Parameter	Unit	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	-	7.1	5.5 to 9.0	
2	Suspended Solids	mg/L	42	100	
3	Total Dissolve Solids	mg/L	330	-	
4	Chemical Oxygen Demand	mg/L	63	250	
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	24	30	
6	Oil & Grease	mg/L	< 3.0	10	
7	Temperature	° C	19	Shall not exceed 5.0°C above the receiving water temperature	
 Analysed By  Checked By  Verified By					

