

STAR CEMENT MEGHALAYA LIMITED

Ref: SCML/EHS/LUM/2024-25/28

Dated: 22/08/2024

To,

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

Subject : Submission of Environmental Monitoring Report for the month of July, 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 **July, 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

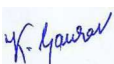
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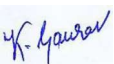
Copy To: The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-790314.

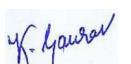


STAR CEMENT MEGHALAYA LIMITED
(Thermal Power Plant)
Lumshnong, Meghalaya

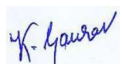
Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-07-2024	719.2	72.1	18.8	202.6
02-07-2024	716.6	70.9	18.1	59.0
03-07-2024	716.3	71.7	19.0	2.0
04-07-2024	722.5	70.0	18.8	22.0
05-07-2024	719.8	69.8	18.7	19.1
06-07-2024	725.6	71.1	18.1	4.8
07-07-2024	720.2	69.9	20.0	0.0
08-07-2024	722.9	69.7	19.0	0.0
09-07-2024	724.5	69.9	18.6	22.8
10-07-2024	722.2	71.0	19.0	50.2
11-07-2024	720.2	74.2	19.1	41.9
12-07-2024	719.7	73.3	20.8	20.8
13-07-2024	720.1	77.5	18.9	0.0
14-07-2024	722.9	74.6	19.0	0.0
15-07-2024	723.1	74.8	19.9	0.0
16-07-2024	722.5	72.0	19.5	4.2
17-07-2024	720.9	78.3	16.7	0.0
18-07-2024	719.3	77.5	15.3	0.0
19-07-2024	716.9	70.5	17.0	2.6
20-07-2024	722.5	63.5	16.9	33.0
21-07-2024	723.0	66.5	18.4	7.5
22-07-2024	720.7	71.3	18.7	16.3
23-07-2024	722.9	70.8	18.8	0.0
24-07-2024	724.5	68.7	20.0	9.6
25-07-2024	722.9	71.4	18.8	0.0
26-07-2024	717.7	68.1	18.0	0.0
27-07-2024	724.4	71.0	18.5	0.0
28-07-2024	722.2	72.4	19.0	0.0
29-07-2024	721.0	74.5	15.7	23.4
30-07-2024	721.0	74.5	15.7	0.0
31-07-2024	722.9	71.4	18.8	21.2
			Total	563.0

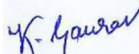
	STAR CEMENT MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
			Revision No.	5
AMBIENT AIR QUALITY MONITORING REPORT		Date of Rev.	01.12.2020	
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/16			Month : July	
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)
01.07.2024	56.14	36.61	16.59	18.34
09.07.2024	58.50	34.58	17.89	20.08
20.07.2024	54.36	39.11	17.27	19.23
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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/2024-25/16			Month : July	
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)
01.07.2024	37.51	31.57	16.49	21.75
09.07.2024	39.51	30.54	17.69	25.25
20.07.2024	40.83	32.87	15.01	17.88
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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/2024-25/16			Month : July	
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/m³)	PM _{2.5} (µg/m³)	SO ₂ (µg/m³)	NO ₂ (µg/m³)
01.07.2024	58.87	43.05	15.83	21.06
09.07.2024	57.49	37.63	17.37	19.86
20.07.2024	61.13	39.85	17.02	21.85
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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 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/2024-25/16			Month : July	
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)
08.07.2024	50.54	32.17	14.02	17.40
11.07.2024	52.30	30.14	12.99	16.37
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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/2024-25/16			Month : July	
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)
08.07.2024	46.30	34.38	16.49	19.48
11.07.2024	46.60	32.35	15.46	18.45
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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

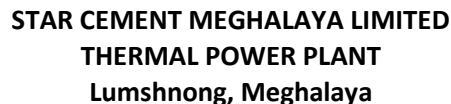
	STAR CEMENT MEGHALAYA LIMITED THERMAL POWER PLANT (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F-02
			Issue No.	1
			Date of Issue:	01.05.2019
			Revision No.	5
STACK EMISSION MONITORING ANALYSIS REPORT		Date of Rev.	01.06.2021	
Report No: MPL(43MW)/ENV/STACK/MONTHLY/2024-25/16			Month: July	
<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			11.07.2024
2	Ambient Temp (°C)			30
3	Stack Gas Temp (°C)			129
4	Exit Velocity of Gas (m/sec.)			16.0
5	Flow Rate (Nm ³ / sec.)			65.4
6	Quantity of Emission (Nm ³ / Hr)			235369.5
7	Concentration of PM (mg/Nm ³)			28.5
8	Concentration of SO ₂ (mg/Nm ³)			470
9	Concentration of NO _x (mg/Nm ³)			259
10	Oxygen (O ₂) (%)			11.4
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)				
 Analysis 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/2024-25/16				
Month - July				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)		(in $\mu\text{g}/\text{m}^3$)
20.07.2024	Coal Storage Section	1422	2000	
 Analyzed By  Checked By  Verified By				

STAR CEMENT MEGHALAYA LIMITED
THERMAL POWER PLANT (43MW)
Lumshnong, Meghalaya

	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/2024-25/16					Date of sample collection: 26.07.2024	
					Date of Analysis: 26.07.2024 to 30.07.2024	
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	-	7.4	7.3	5.5 to 9.0	
2	Colour	Hazen	Yellowish	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	84.3	72.1	-	
5	Total Hardness as CaCO ₃	mg/L	58.4	58.0	-	
6	Suspended Solids	mg/L	82	44.6	100	
7	Total Dissolve Solids	mg/L	316	317	-	
8	Chemical Oxygen Demand	mg/L	226	50	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	82	15	30	
10	Oil & Grease	mg/L	5.8	< 3.0	10	
11	Temperature	° C	28	30	Shall not exceed 5.0°C above the receiving water temperature	
12	Conductivity	µS/cm	528	515	-	
 Analysis By  Checked By  Verified By						

	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/2024-25/16					
Date of sample collection: 26.07.2024 Date of Analysis: 26.07.2024 to 30.07.2024					
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	-	7.3	5.5 to 9.0	
2	Suspended Solids	mg/L	41	100	
3	Total Dissolve Solids	mg/L	409	-	
4	Chemical Oxygen Demand	mg/L	46	250	
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	17	30	
6	Oil & Grease	mg/L	<3.0	10	
Analysis By Checked By Verified By					



WATER TESTING REPORT

Reference No.

MPL/EHS/F-04

Issue No.

1

Date of Issue:

24.08.2013

Revision No.

3

	Date of Rev.
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01.06.2019

Reference No.: MPL/ENV/WATER/MONTHLY/2024-25/16

Surface Water Analysis Results

Date of sample collection: 26.07.2024

Date of Analysis: 26.07.2024 to 30.07.2024

S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Umso Nalah	Seshympa	Lunar	Lukha	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	-	7.6	7.7	7.2	7.3	7.8	-	-	-	7.6	7.7	7.8	7.7	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Yellowish	Colourless	Yellowish	Yellowish	Yellowish	Yellowish	10
3	Odour	-	Unobjectionable												
4	Chloride	mg/L	28.4	32.2	33.4	30.4	33.5	-	-	-	23.5	24.8	26.4	25.9	250
5	Total Hardness as CaCO ₃	mg/L	56.5	65.4	77.7	76.5	72.1	-	-	-	61.5	46.5	47.6	42.1	300
6	Suspended Solids	mg/L	39.5	58.8	44.0	51.3	62.4	-	-	-	47.6	38.0	35.7	31.3	-
7	Total Dissolve Solids	mg/L	204.5	214.0	226.5	387.4	356.5	-	-	-	85.2	70.2	66.4	215.3	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	27.0	27.0	27.0	27.0	27.0	-	-	-	27.0	27.0	27.0	27.0	-
11	Conductivity	µS/cm	180.5	210.5	315.3	440.0	351.2	-	-	-	148.6	124.6	110.3	452.4	-
12	Flow	L / Min	1434.8	1586.1	267.2	481.8	2764.0	-	-	-	1770.5	1202.5	1577.2	1379.2	

[Signature]

Analyzed by

Ч. Гауэр

Checked by

Math

Verified by