

	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCML/ENV/AAQM/MONTHLY/2021-22/29			Month: March'22	
Location of Sampling: Vishwakarma Colony			GPS Coordinate: 25°10'46"N 92°23'17"E 552 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)
02.03.2022	48.29	31.58	14.28	17.00
05.03.2022	50.38	36.62	12.00	14.25
09.03.2022	50.00	32.54	14.25	19.35
12.03.2022	51.69	31.58	13.00	15.65
16.03.2022	49.57	35.00	15.32	17.38
18.03.2022	52.64	34.90	12.25	18.64
19.03.2022	53.00	33.25	11.10	16.34
23.03.2022	50.60	32.50	14.68	16.58
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 Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCML/ENV/AAQM/MONTHLY/2021-22/30			Month: March'22	
Location of Sampling: Near Pump House		GPS Coordinate: 25°10'42"N 92°23'32"E 919 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)
01.03.2022	51.25	35.17	11.70	17.05
03.03.2022	49.98	33.56	14.64	15.24
08.03.2022	50.37	34.92	12.20	16.52
10.03.2022	54.84	31.45	11.98	13.34
11.03.2022	50.00	30.54	11.25	16.27
15.03.2022	51.75	35.00	13.00	17.00
17.03.2022	52.20	33.41	10.52	13.50
22.03.2022	49.50	32.85	14.00	14.58
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.


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya		Reference No.	SCML/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCML/ENV/AAQM/MONTHLY/2021-22/31				Month: March'22
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)
02.03.2022	48.39	29.00	17.65	18.64
05.03.2022	49.48	27.50	16.35	22.14
09.03.2022	48.46	31.00	14.25	20.00
12.03.2022	47.69	28.00	16.35	22.57
16.03.2022	47.00	30.45	17.00	19.50
18.03.2022	44.68	32.40	14.28	21.54
19.03.2022	45.00	33.00	15.00	23.68
23.03.2022	42.69	31.60	17.64	20.68
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.


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya				Reference No.	SCML/Env/F-02
					Issue No.	1
	STACK EMISSION MONITORING ANALYSIS REPORT				Date of Issue	01.05.2019
					Revision No.	5
					Date of Rev.	01.06.2021

Report No: SCML/ENV/STACK/MONTHLY/2021-22/59 Month: March'22

Analysis Result

A. General Information About Stack						
1	Stack Identification No	S-1	S-2	S-3	S-4	S-5
2	Stack Connected to	LS Crusher	Add Crusher	Kiln/Raw Mill	Coal Mill	Coller
3	Material of Construction (Stack/Duct)	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel
4	Shape of duct	Circular	Circular	Circular	Circular	Circular
5	Whether duct is provided with permanent platform & ladder	Yes	Yes	Yes	Yes	Yes
B. Physical characteristic of stack						
1	Stack Height from ground level (meter)	24.2	21.0	70.0	59.5	50.0
2	Duct diameter at sampling point (meter)	1.6	1.2	5.8	1.8	4.0
3	Sampling height point from ground level (meter)	-	-	23.15	10.38	-
4	Cross sectional area of Duct/Stack (m ²)	2.01	1.13	26.41	2.54	12.56
C. Pollution Control Device						
1	Details of pollution control device attached to stack	Bag Filter	Bag Filter	Reverse Air Bag House	Bag Filter	ESP
D. Result of Sampling & Analysis of Gaseous Emission						
1	Date of Sampling	19.03.2022	22.03.2022	07.03.2022	02.03.2022	10.03.2022
2	Ambient Temp (°C)	27	27	39	28	39
3	Stack Gas Temp (°C)	35	49	190	75	310
4	Exit Velocity of Gas (m/sec.)	13.49	13.47	14.72	15.23	13.26
5	Flow Rate (Nm ³ / sec.)	24.69	13.07	229.17	30.84	79.66
6	Quantity of Emission (Nm ³ / Hr)	88887.93	47062.48	825021.34	110851.24	286784.74
7	Concentration of PM (mg/Nm ³)	21.18	22.81	24.08	24.26	12.28
8	Concentration of SO ₂ (mg/Nm ³)	-	-	611.94	-	-
9	Concentration of NOx (mg/Nm ³)	-	-	479.08	-	-
10	Oxygen (O ₂) (%)	9.24	8.02	11.20	9.87	9.14
E. Remarks						
Standard						
PM - 30 mg/Nm ³		SO ₂ - 1000 mg/Nm ³		NOx - 800 mg/Nm ³		
Particulate Matter (PM), Sulphur di-oxide (SO ₂), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP), Limestone (LS), Additive (Add)						
 Analysis by  Checked by  Authorized Signatory						

	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya				Document No.		SCML/EHS/Env/F-03				
					Effective Date		01-05-2019				
	NOISE LEVEL MONITORING REPORT				Revision No.		04				
					Revision Date		01-01-2021				
Ref: SCL(LM)/ENV/NOISE/MONTHLY/2021-22/007										Date: 19.03.2022	
Month: March - 2022											
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				75				70		
1	Kiln	65.2	72.3	68.8		63.5	69.7	66.6			
2	Vertical Raw Mill	66.4	72.9	69.6		61.8	67.8	64.8			
3	Raw Mill WF	62.3	73.9	68.1		63.5	68.5	66.0			
4	Coal Mill	65.7	72.6	69.2		61.5	67.6	64.6			
5	Limestone Crusher(Dump Hopper)	65.3	72.4	68.9		64.5	68.7	66.6			
6	Additive Crusher	65.6	73.9	69.7		59.5	69.4	64.5			
B.											
1	CCR	62.5	63.5	63.0		57.4	65.4	61.4			
2	Meeting Room	63.5	68.2	65.9		62.4	58.3	60.4			
3	VP'S Room	58.2	62.4	60.3		51.8	60.2	56.0			
4	Inst. Shift Room	58.7	69.4	64.1		54.9	57.9	56.4			
5	Electrical Office	64.8	70.6	67.7		50.2	62.4	56.3			
6	QC Department	60.2	65.9	63.1		54.6	58.0	56.3			
	a)Chemical Lab	64.5	65.8	65.2		52.6	56.6	54.6			
	b)Physical Lab	63.5	70.5	67.0		52.4	62.5	57.5			
	c)XRF Lab	65.0	68.2	66.6		50.0	55.8	52.9			
	d) Sample Preparation Room	62.4	65.0	63.7	52.6	58.6	55.6				
C.	Residential				55				45		
1	450 Quater's	48.3	52.6	50.5		40.6	42.6	41.6			
2	Worker's Colony	45.9	48.3	47.1		38.9	40.6	39.8			


Analyzed by


Checked By


Verified By:

	STAR CEMENT MEGHALAYA LIMITED	Document No.	SCML/EHS/Env/F-04
		Date of Issued	01-05-2019
		Revision No.	2
	FUGITIVE EMISSION MONITORING REPORT	Revision Date	01-01-2021

Ref: SCML/ENV/FUGITIVE/MONTHLY/2021-22/012

Month - March' 2022

Date	Location	Fugitive Emission Results	Limit
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
11.03.2022	Coal Storage Section	1432	2000
11.03.2022	Limestone Storage Section	1460	5000
11.03.2022	Clinker Loading Section	1682	2000


 Analyzed By


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCML/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 12	Date of sample collection: - 11.03.2022 Date of Analysis: 11.03.2022 to 14.03.2022
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Sr.No.	Parameter	Unit	STP Inlet	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	-	7.20	-
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	60.4	-
5	Total Hardness as CaCO ₃	mg/L	145.8	-
6	Suspended Solids	mg/L	80.3	-
7	Total Dissolve Solids	mg/L	250	-
8	Chemical Oxygen Demand	mg/L	290	-
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	170.5	-
10	Oil & Grease	mg/L	8.9	-
11	Temperature	° C	24.5	-
12	Conductivity	μS/cm	440.0	-


Analysis By


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCML/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 12

Date of sample collection: - 11.03.2022

Date of Analysis: 11.03.2022 to 14.03.2022

Sr.No.	Parameter	Unit	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	-	7.40	5.5 to 9.0
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	50.6	-
5	Total Hardness as CaCO ₃	mg/L	140.7	-
6	Suspended Solids	mg/L	9.4	100
7	Total Dissolve Solids	mg/L	290	-
8	Chemical Oxygen Demand	mg/L	35.5	250
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	7.2	30
10	Oil & Grease	mg/L	< 3.0	10
11	Temperature	° C	24.5	Shall not exceed 5.0°C above the receiving water temperature
12	Conductivity	µS/cm	472	-


Analysis By


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 07

Date of sample collection: - 04.03.2022

Date of Analysis: 04.03.2022 to 07.03.2022

Sr.No.	Parameter	Unit	ETP Inlet	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	-
2	Suspended Solids	mg/L	75	-
3	Total Dissolve Solids	mg/L	770	-
4	Chemical Oxygen Demand	mg/L	385.0	-
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	85.3	-
6	Oil & Grease	mg/L	109.6	-
7	Dissolved Oxygen	mg/L	2.8	-
8	Temperature	° C	24.9	-


Analysis By


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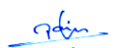

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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 12

Date of sample collection: - 04.03.2022
Date of Analysis: 04.03.2022 to 07.03.2022

Sr.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	-	7.9	5.5 to 9.0
2	Suspended Solids	mg/L	17	100
3	Total Dissolve Solids	mg/L	620	-
4	Chemical Oxygen Demand	mg/L	28.4	250
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	3.7	30
6	Oil & Grease	mg/L	< 3.0	10
7	Dissolved Oxygen	mg/L	6.6	-
8	Temperature	° C	24.9	Shall not exceed 5.0°C above the receiving water temperature


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	STAR CEMENT MEGHALAYA LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. -12

Date of sample collection: - 04.03.2022

Date of Analysis: 04.03.2022 to 07.03.2022

Sr.No.	Parameter	Unit	Nala Up Stream	Nala Down Stream	Standards norms as per IS 2296
1	pH	-	7.35	7.2	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	300
3	Odour	-	Unobjectionable	Unobjectionable	Unobjectionable
4	Chloride	mg/L	140.0	143.5	-
5	Total Hardness as CaCO ₃	mg/L	15.1	13.8	300
6	Suspended Solids	mg/L	83.6	80.1	-
7	Total Dissolve Solids	mg/L	85	83.1	500
8	Chemical Oxygen Demand	mg/L	ND	ND	-
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	2.0
10	Oil & Grease	mg/L	ND	ND	-
11	Temperature	° C	24.9	24.9	-
12	Conductivity	μS/cm	330.20	325.4	-



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