

	STAR CEMENT LIMITED Lumshnong, Meghalaya		Reference No.		SCL/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.: SCL/ENV/AAQM/MONTHLY/2021-22/33			Month: Jan'22		
Location of Sampling: Near Star Club			GPS Coordinate: 25°10'36"N 92°23'16"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)	
04-01-2022	41.23	27.40	11.05	17.32	
08-01-2022	45.61	29.34	9.24	16.98	
10-01-2022	43.27	24.36	8.75	15.54	
14-01-2022	45.36	26.28	9.34	16.49	
19-01-2022	40.29	27.64	11.54	17.25	
22-01-2022	46.28	29.46	8.42	16.82	
27-01-2022	42.39	28.42	9.78	14.98	
29-01-2022	44.51	25.24	10.78	16.73	
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 LIMITED Lumshnong, Meghalaya		Reference No.		SCL/Env/F – 01
			Issue No.		1
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	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.		5
			Date of Rev.		01.12.2020
Reference No.: SCL/ENV/AAQM/MONTHLY/2021-22/34			Month: Jan'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.	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)	
04-01-2022	52.63	32.54	12.54	16.94	
08-01-2022	51.54	34.42	15.24	16.45	
10-01-2022	55.14	31.59	10.67	17.57	
14-01-2022	53.42	35.17	11.70	17.05	
19-01-2022	51.25	33.56	14.64	15.24	
22-01-2022	49.98	34.92	12.20	16.52	
27-01-2022	50.37	31.45	11.98	13.34	
29-01-2022	54.84	35.34	12.45	16.27	
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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			Date of Issue:		24.08.2013
	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.		5
			Date of Rev.		01.12.2020
Reference No.: SCL/ENV/AAQM/MONTHLY/2021-22/35			Month: Jan'22		
Location of Sampling: Near Security Gate - 3			GPS Coordinate: 25°10'27"N 92°23'37"E 944 m		
Sampling Duration:	24 Hrs.	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)	
04-01-2022	50.57	33.54	24.69	27.24	
08-01-2022	54.25	34.17	21.26	26.49	
10-01-2022	55.46	36.14	23.16	27.64	
14-01-2022	52.16	32.46	19.25	28.34	
19-01-2022	55.42	33.90	24.65	25.54	
22-01-2022	53.12	35.45	20.55	26.31	
27-01-2022	54.27	30.29	21.57	27.34	
29-01-2022	53.42	30.49	22.76	25.55	
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 LIMITED Lumshnong, Meghalaya		Reference No.	SCL/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.: Tongseng Village V/2021-22/006			Month: Jan'22	
Location of Sampling: Tongseng Village		GPS Coordinate: 25°10'08"N 92°24'17"E 756 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)
17-01-2022	46.98	26.24	9.24	11.00
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.


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	STAR CEMENT LIMITED Lumshnong, Meghalaya							Reference No.	SCL/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: SCL/Env/Stack/Monthly/2021-22/52							Month: January'22		
Analysis Result									
A. General Information About Stack									
1	Stack Identification No	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8
2	Stack Connected to	Kiln/Raw Mill	Coal Mill	Cooler	Roller Press	Cement Mill	Packing Plant	Primary Crusher	Secondary Crusher
3	Material of Construction (Stack/Duct)	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel
4	Shape of duct	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Circular
5	Whether duct is provided with permanent platform & ladder	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
B. Physical characteristic of stack									
1	Stack Height from ground level (meter)	45.4	37	30.4	24	30	28	21	17
2	Duct diameter at sampling point (meter)	3	1.2	2.8	1.4	1.5	1.1	1.2	1.0
3	Sampling height point from ground level (meter)	-	-	-	-	-	-	-	-
4	Cross sectional area of Duct/Stack (m ²)	7.07	1.13	6.15	1.54	1.77	0.95	1.13	0.79
C. Pollution Control Device									
1	Details of pollution control device attached to stack	Reverse Air Bag House	Bag Filter	ESP	Bag Filter	Bag Filter	Bag Filter	Bag Filter	Bag Filter
D. Result of Sampling & Analysis of Gaseous Emission									
1	Date of Sampling	03.01.2022	07.01.2022	24.01.2022	21.01.2022	14.01.2022	27.01.2022	18.01.2022	11.01.2022
2	Ambient Temp (°C)	29	27	30	25	25	27	25	25
3	Stack Gas Temp (°C)	115	53	102	35	36	37	30	35
4	Exit Velocity of Gas (m/sec.)	9.59	8.47	6.95	6.97	7.05	21.34	6.53	7.21
5	Flow Rate (Nm ³ / sec.)	46.58	7.66	31.53	9.60	10.69	17.67	6.78	5.13
6	Quantity of Emission (Nm ³ / Hr)	167674.70	27570.94	113501.42	34566.69	38496.00	63606.93	24413.22	18461.84
7	Concentration of PM (mg/Nm ³)	23.03	15.88	18.94	17.22	19.67	15.29	21.46	21.33
8	Concentration of SO ₂ (mg/Nm ³)	758.07	-	-	-	-	-	-	-
9	Concentration of NO _x (mg/Nm ³)	447.26	-	-	-	-	-	-	-
10	Oxygen (O ₂) (%)	9.04	8.45	11.01	8.54	9.57	8.54	9.45	11.05
E. Remarks									
Standard									
PM - 30 mg/Nm ³			SO ₂ - 1000 mg/Nm ³				NO _x - 800 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 LIMITED 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/Env/Fugitive/Monthly/2021-22/010

Month - Jan 2022

Date	Location	Fugitive Emission Results	Limit
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
21.01.2022	Coal Storage Section	1440	2000
21.01.2022	Limestone Storage Section	1580	5000


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	STAR CEMENT 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. - 10	Date of sample collection: - 06.01.2022
	Date of Analysis: 06.01.2022 to 09.01.2022

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	-	7.81	-
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	60.4	-
5	Total Hardness as CaCO ₃	mg/L	147.2	-
6	Suspended Solids	mg/L	80.6	-
7	Total Dissolve Solids	mg/L	261	-
8	Chemical Oxygen Demand	mg/L	268	-
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	147.5	-
10	Oil & Grease	mg/L	8.2	-
11	Temperature	° C	24.5	-
12	Conductivity	μS/cm	420.4	-


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	STAR CEMENT 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. - 10	Date of sample collection: - 06.01.2022
	Date of Analysis: 06.01.2022 to 09.01.2022

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	-	7.30	5.5 to 9.0
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	55.7	-
5	Total Hardness as CaCO ₃	mg/L	143.2	-
6	Suspended Solids	mg/L	8.5	100
7	Total Dissolve Solids	mg/L	254	-
8	Chemical Oxygen Demand	mg/L	42.3	250
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	6.4	30
10	Oil & Grease	mg/L	< 3.0	10
11	Temperature	° C	25.2	Shall not exceed 5.0°C above the receiving water temperature
12	Conductivity	μS/cm	408	-


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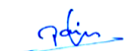
	STAR CEMENT LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. -10

Date of sample collection: - 08.01.2022

Date of Analysis: 08.01.2022 to 11.01.2022

Sr.No.	Parameter	Unit	Nala Up Stream	Nala Down Stream	Standards norms as per IS 2296
1	pH	-	7.85	7.69	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	300
3	Odour	-	Unobjectionable	Unobjectionable	Unobjectionable
4	Chloride	mg/L	143.3	146.1	-
5	Total Hardness as CaCO ₃	mg/L	14.9	14.1	300
6	Suspended Solids	mg/L	87.9	82.4	-
7	Total Dissolve Solids	mg/L	87	82.5	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	26.90	27.67	-
12	Conductivity	μS/cm	330.04	325.42	-


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