

STAR CEMENT LIMITED

Ref: SCL/EHS/LUM/2021-22/45

Dated: 25/03/2022

To,

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

Subject: Monthly Environmental Monitoring Report.

Ref. No.: MPCB/CON-900-Pt-IV/2021-2022/76, Dated. Shillong, the 11th Feb, 2022.

Dear Sir,

Please find enclosed herewith the monthly Environmental monitoring reports of Ambient Air Quality for plant and ESZ including meteorological data, Stack Emission, Fugitive Emission, Waste Water (STP) quality reports of **Star Cement Limited** for the month of **February, 2022** for your kind perusal.

Thanking you,

Yours faithfully
For **Star Cement Limited**


Surya Prakash Shrimali
President Works

Enclosed: As mentioned above

- CC to: 1) The Deputy Director General of Forest (Central), Ministry of Environment Forest & Climate Change Govt. of India, Regional Office, Shillong, Meghalaya - 793021.
- 2) The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-793 014.
- 3) The Member Secretary, State Environment Impact Assessment Authority (SEIAA), 'Silviculture Building' Lower Lachumiere, Shillong - 793001, Meghalaya

STARCEMENT
Solid Setting

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Durgapur Office : C/o - Ma Chandi Durga Cements Ltd., Bamunara Industrial Area, P.O. - Bamunara, P.S. - Kanksha, Dist. Burdwan, West Bengal - 713 212
Siliguri Office : Village - Kartowa, P.O. - Mohanvita, District - Jalpaiguri, West Bengal - 735 135 / Top Plaza, 3rd Floor, Near City Plaza, Sevoke Road, Siliguri - 734 001, Ph: 0353 - 2643611/12

Bankura Office : Purandar Pur, District - Bankura, West Bengal - 722 155
AN ISO 9001, ISO 14001 & OHSAS 18001 CERTIFIED COMPANY
CIN NO. U26942ML2001PLC006663

	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/2021-22/34			Month: Feb'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.	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)	
01.02.2022	43.00	25.64	8.42	16.82	
05.02.2022	44.85	27.50	9.78	14.98	
08.02.2022	40.65	23.25	11.20	16.73	
12.02.2022	47.50	25.64	10.24	15.35	
15.02.2022	43.90	24.50	9.35	16.75	
19.02.2022	43.54	27.34	9.50	14.25	
24.02.2022	45.28	26.45	11.27	15.75	
26.02.2022	43.17	26.15	9.45	14.56	
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


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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.: SCL/ENV/AAQM/MONTHLY/2021-22/35			Month: Feb'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)	
01.02.2022	51.25	35.17	11.70	17.05	
05.02.2022	49.98	33.56	14.64	15.24	
08.02.2022	50.37	34.92	12.20	16.52	
12.02.2022	54.84	31.45	11.98	13.34	
15.02.2022	50.00	30.54	11.25	16.27	
19.02.2022	51.75	35.00	13.00	17.00	
24.02.2022	52.20	33.41	10.52	13.50	
26.02.2022	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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	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.		5
			Date of Rev.		01.12.2020
Reference No.: SCL/ENV/AAQM/MONTHLY/2021-22/36			Month: Feb'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)	
01.02.2022	70.40	40.54	23.16	27.64	
05.02.2022	72.68	42.60	19.00	28.34	
08.02.2022	74.80	44.80	24.65	25.54	
12.02.2022	69.45	40.00	20.55	26.31	
15.02.2022	71.68	46.34	21.57	27.34	
19.02.2022	75.67	44.67	22.03	25.32	
24.02.2022	73.00	42.50	23.48	24.25	
26.02.2022	74.50	44.87	20.00	23.50	
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/2021-22/007			Month: Feb'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)	
07.02.2022		40.57	21.52	10.00	12.40	
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.


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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/2021-22/53						Month: February'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	04.02.2022	08.02.2022	11.02.2022	01.02.2022	17.02.2022	23.02.2022	15.02.2022	21.02.2022
2	Ambient Temp (°C)	30	26	37	23	29	24	26	27
3	Stack Gas Temp (°C)	135	75	312	37	34	35	32	33
4	Exit Velocity of Gas (m/sec.)	13.14	13.92	17.59	14.18	13.83	14.53	14.60	12.85
5	Flow Rate (Nm ³ / sec.)	62.31	12.64	52.51	19.25	21.88	12.47	14.96	9.28
6	Quantity of Emission (Nm ³ / Hr)	224310.09	45489.43	189028.20	69286.84	78768.80	44903.17	53846.82	33396.64
7	Concentration of PM (mg/Nm ³)	13.97	16.00	12.66	17.96	22.48	23.33	21.34	19.90
8	Concentration of SO ₂ (mg/Nm ³)	794.00	-	-	-	-	-	-	-
9	Concentration of NO _x (mg/Nm ³)	228.00	-	-	-	-	-	-	-
10	Oxygen (O ₂) (%)	9.45	8.73	10.34	9.25	10.54	8.94	10.74	11.85
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/2021-22/011

Month - Feb' 2022

Date	Location	Fugitive Emission Results	Limit
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
18.02.2022	Coal Storage Section	1470	2000
18.02.2022	Limestone Storage Section	1625	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. - 11	Date of sample collection: - 11.02.2022
	Date of Analysis: 11.02.2022 to 14.02.2022

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	-	7.90	-
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	62.5	-
5	Total Hardness as CaCO ₃	mg/L	149.6	-
6	Suspended Solids	mg/L	83.4	-
7	Total Dissolve Solids	mg/L	256	-
8	Chemical Oxygen Demand	mg/L	277	-
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	156.5	-
10	Oil & Grease	mg/L	9.4	-
11	Temperature	° C	24.9	-
12	Conductivity	μS/cm	435.7	-


Analysis By


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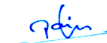
	STAR CEMENT LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. - 11

Date of sample collection: - 11.02.2022

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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	-	7.26	5.5 to 9.0
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	53.7	-
5	Total Hardness as CaCO ₃	mg/L	141.7	-
6	Suspended Solids	mg/L	8.1	100
7	Total Dissolve Solids	mg/L	275	-
8	Chemical Oxygen Demand	mg/L	34.5	250
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	7.9	30
10	Oil & Grease	mg/L	< 3.0	10
11	Temperature	° C	25.6	Shall not exceed 5.0°C above the receiving water temperature
12	Conductivity	μS/cm	420	-


Analysis By


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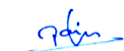
	STAR CEMENT LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F-04
		Issue No.	1
	WATER TESTING REPORT	Date of Issue:	24.08.2013
		Revision No.	3
		Date of Rev.	01.06.2019

Report No. -11

Date of sample collection: - 18.02.2022

Date of Analysis: 18.02.2022 to 21.02.2022

Sr.No.	Parameter	Unit	Nala Up Stream	Nala Down Stream	Standards norms as per IS 2296
1	pH	-	7.80	7.72	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	300
3	Odour	-	Unobjectionable	Unobjectionable	Unobjectionable
4	Chloride	mg/L	141.8	144.9	-
5	Total Hardness as CaCO ₃	mg/L	14.2	13.8	300
6	Suspended Solids	mg/L	85.4	80.6	-
7	Total Dissolve Solids	mg/L	84	82.9	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	25.60	26.4	-
12	Conductivity	μS/cm	335.40	330.5	-


Analysis By


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