

# STAR CEMENT LIMITED

Ref: SCL/EHS/LUM/2022-23/07

Dated: 21/05/2022

To,

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

**Subject** : Monthly Environmental Monitoring Report.

**Reference** : 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 M/s Star Cement Limited for the month of **April, 2022.**

This is for your kind information record please.

Thanking you,

Yours faithfully  
*For Star Cement Limited*

  
Surya Prakash Shrimali  
President Works


Enclosed: As mentioned above

- Copy 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-790314.  
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


	<b>STAR CEMENT LIMITED</b> Lumshnong, Meghalaya		Reference No.	SCL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	<b>AMBIENT AIR QUALITY MONITORING REPORT</b>		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCL/ENV/AAQM/MONTHLY/2021-22/36			Month: April'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 <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
No monitoring due to Rainfall				
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m <sup>3</sup> )	60 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )

**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


	<b>STAR CEMENT LIMITED</b> Lumshnong, Meghalaya		Reference No.	SCL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	<b>AMBIENT AIR QUALITY MONITORING REPORT</b>		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCL/ENV/AAQM/MONTHLY/2021-22/37			Month: April'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 <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
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			Issue No.	1
			Date of Issue:	24.08.2013
	<b>AMBIENT AIR QUALITY MONITORING REPORT</b>		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCL/ENV/AAQM/MONTHLY/2021-22/38			Month: April'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.
Date of Sampling	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
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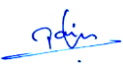


	<b>STAR CEMENT LIMITED</b> Lumshnong, Meghalaya		Reference No.	SCL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	<b>AMBIENT AIR QUALITY MONITORING REPORT</b>		Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: Tongseng Village V/2021-22/009			Month: April'22	
Location of Sampling: Tongseng 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 <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
No monitoring due to Rainfall				
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m <sup>3</sup> )	60 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )	80 (µg/m <sup>3</sup> )

**Remarks:** All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.

  
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 <b>STAR CEMENT</b> Solid Setting	<b>STAR CEMENT LIMITED</b> Lumshnong, Meghalaya						Reference No.	SCL/Env/F-02	
							Issue No.	1	
	<b>STACK EMISSION MONITORING ANALYSIS REPORT</b>						Date of Issue	01.05.2019	
							Revision No.	5	
							Date of Rev.	01.06.2021	
<b>Report No:</b> SCL/ENV/STACK/MONTHLY/2021-22/55									
<b>Month:</b> April'22									
<b>Analysis Result</b>									
<b>A. General Information About Stack</b>									
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>B. Physical characteristic of stack</b>									
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 <sup>2</sup> )	7.07	1.13	6.15	1.54	1.77	0.95	1.13	0.79
<b>C. Pollution Control Device</b>									
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
<b>D. Result of Sampling &amp; Analysis of Gaseous Emission</b>									
1	Date of Sampling	06.04.2022	09.04.2022	09.04.2022	06.04.2022	02.04.2022	02.04.2022	04.04.2022	04.04.2022
2	Ambient Temp (°C)	30	25.5	35	22.5	22	23	21	22.5
3	Stack Gas Temp (°C)	145	75	330	33	33	35	35	33
4	Exit Velocity of Gas (m/sec.)	13.26	12.66	20.05	13.90	14.58	14.20	13.81	12.90
5	Flow Rate (Nm <sup>3</sup> / sec.)	60.74	11.34	58.05	19.11	22.94	12.10	14.01	9.31
6	Quantity of Emission (Nm <sup>3</sup> / Hr)	218671.44	40834.52	208983.65	68792.62	82568.52	43575.25	50433.65	33521.56
7	Concentration of PM (mg/Nm <sup>3</sup> )	14.14	18.21	11.90	18.02	21.79	22.58	23.58	18.92
8	Concentration of SO <sub>2</sub> (mg/Nm <sup>3</sup> )	828.00	-	-	-	-	-	-	-
9	Concentration of NO <sub>x</sub> (mg/Nm <sup>3</sup> )	228.00	-	-	-	-	-	-	-
10	Oxygen (O <sub>2</sub> ) (%)	10.2	7.52	9.64	9.38	10.34	9.54	9.78	10.65
E. Remarks									
<b>Standard</b>									
PM - 30 mg/Nm <sup>3</sup>			SO <sub>2</sub> - 1000 mg/Nm <sup>3</sup>			NO <sub>x</sub> - 800 mg/Nm <sup>3</sup>			
<i>Particulate Matter (PM), Sulphur di-oxide (SO<sub>2</sub>), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP)</i>									
<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">   <b>Analysis by</b> </div> <div style="text-align: center;">   <b>Checked by</b> </div> <div style="text-align: center;">   <b>Authorized Signatory</b> </div> </div>									

 <b>STARCEMENT</b> Solid Setting	<b>STAR CEMENT LIMITED</b> Lumshnong, Meghalaya	Document No.	SCL/EHS/Env/F-04
		Date of Issued	5/1/2019
		Revision No.	2
	<b>FUGITIVE EMISSION MONITORING REPORT</b>	Revision Date	1/1/2021


Ref: SCL/ENV/FUGITIVE/MONTHLY/2021-22/013

Month - April' 2022

Date	Location	Fugitive Emission Results	Limit
		(in $\mu\text{g}/\text{m}^3$ )	(in $\mu\text{g}/\text{m}^3$ )
07.04.2022	Coal Storage Section	1201	2000
07.04.2022	Limestone Storage Section	1467	5000

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

Report No. - 13

Date of sample collection: - 13.04.2022

Date of Analysis: 13.04.2022 to 16.04.2022

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	-	7.10	-
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	63.5	-
5	Total Hardness as CaCO <sub>3</sub>	mg/L	142.7	-
6	Suspended Solids	mg/L	78.9	-
7	Total Dissolve Solids	mg/L	230	-
8	Chemical Oxygen Demand	mg/L	176	-
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	90.0	-
10	Oil & Grease	mg/L	7.5	-
11	Temperature	° C	24.0	-
12	Conductivity	μS/cm	455.0	-

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

Report No. - 13

Date of sample collection: - 13.04.2022


Date of Analysis: 13.04.2022 to 16.04.2022

Sr.No.	Parameter	Unit	STP Outlet	<b>Standard Norms For Discharge of Environment Pollution</b> <b>(Notification Date: - 19th May 1993) &amp; Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014- 2015/34 - dated Shillong, the 3rd Sep,2014</b>
1	pH	-	7.50	5.5 to 9.0
2	Colour	Hazen	Colourless	-
3	Odour	-	Odourless	-
4	Chloride	mg/L	49.5	-
5	Total Hardness as CaCO <sub>3</sub>	mg/L	138.6	-
6	Suspended Solids	mg/L	7.8	100
7	Total Dissolve Solids	mg/L	312	-
8	Chemical Oxygen Demand	mg/L	28.6	250
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	4.9	30
10	Oil & Grease	mg/L	< 3.0	10
11	Temperature	° C	24.0	Shall not exceed 5.0°C above the receiving water temperature
12	Conductivity	µS/cm	462	-

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

Report No. -13

Date of sample collection: - 05.04.2022  
Date of Analysis: 05.04.2022 to 08.04.2022

Sr.No.	Parameter	Unit	Nala Up Stream	Nala Down Stream	Standards norms as per IS 2296
1	pH	-	7.40	7.30	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	300
3	Odour	-	Unobjectionable	Unobjectionable	Unobjectionable
4	Chloride	mg/L	141.5	144.5	-
5	Total Hardness as CaCO <sub>3</sub>	mg/L	15.7	12.6	300
6	Suspended Solids	mg/L	82.0	80.9	-
7	Total Dissolve Solids	mg/L	86	82.4	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	25.0	25.0	-
12	Conductivity	μS/cm	332.05	322.6	-

  
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