

STAR CEMENT LIMITED

Regd. Office & Works: Lumshnong, PO-Khaliehriat, Distt. - East Jaintia Hills, Meghalaya-793210
Ph: 03655-278215/16/18, Fax: 03655-278217, e-mail: lumshnong@starcement.co.in

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

Dated: 14/09/2021

To,

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

Subject: Monthly Environmental Monitoring Report.


Ref. No.: MPCB/CON-900-Pt-IV/2020-2021/76, Dated. Shillong, the 26th March, 2021.

Dear Sir,

Please find enclosed herewith the monthly report of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission, Noise Level monitoring, Water monitoring reports (Surface, ETP, STP) of **Star Cement Limited** for the month of **August, 2021** for your kind perusal.

Thanking you,

Yours faithfully
For **Star Cement Limited**


 Authorized Signatory

Enclosed: As mentioned above

STAR CEMENT
Solid Setting

Regd. Office & Works : Lumshnong, P.O. - Khaliehriat, Dist.- East Jaintia Hills, Meghalaya - 793 210, Ph: 03655-278215/16/18, Fax: 03655-278217, e-mail: lumshnong@starcement.co.in
Works : Gopinath Bordoloi Road, Village - Chamatapathar, District - Kamrup (M), Guwahati - 782 402, Assam, e-mail: gg@starcement.co.in
Guwahati Office : Mayur Garden, 2nd Floor, Opp. Rajiv Bhawan, G.S. Road, Guwahati - 781 005, Assam, Ph: 0361-2462215/16, Fax: 0361 - 2462217, e-mail: guwahati@starcement.co.in
Delhi Office : 281, Deepali, Pitampura, Delhi-110 034, Ph: 011 - 2703 3821/22/27, Fax: 011 - 2703 3824, e-mail: delhi@starcement.co.in
Kolkata Office : 3, Alipore Road, Satyam Tower, 1st Floor, Unit No. 9B, Kolkata - 700 027, Ph: 033-2448 4169/4170, Fax: 033 - 2448 4168, e-mail: kolkata@starcement.co.in
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 : Purander 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
	AMBIENT AIR QUALITY MONITORING REPORT	Date of Issue:	24.08.2013
		Revision No.	4
		Date of Rev.	01.12.2020

Ref: SCL/Env/AAQM/Monthly/2021-22/021

**Note* Monitoring had to be cancelled most of the time due to heavy rains.*

Location of Sampling : SCL, Lumshnong
Date of Sampling : 03.08.2021 - 04.08.2021
Distance between the Industry and sampling Location : NA
Time duration of sampling : 24 hrs.
Weather : Dry
Total Rain Fall (mm) : No Rainfall
Ambient Temperature (°C)
Maximum : 30.3 OC
Minimum : 22.0 OC
Relative Humidity (%)
Maximum : 96.2 %
Minimum : 65.5 %
Wind Direction : 4.3
Wind Speed (km/hr.) : NE-SW


Pollutants	Air Quality Monitoring Analysis Result				National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area
	Station Name & No.				
	1	2	3	4	
	(Near Star Club) C/073/21-22	(Near Pump House) C/074/21-22	(Near Security Gate No. 3) C/075/21-22	(Staff Quarters-4) C/076/21-22	
GPS Coordinate	25°10'36"N 92°23'16"E 928 m	25°10'42"N 92°23'32"E 919 m	25°10'27"N 92°23'37"E 944 m	25°10'43"N 92°23'14"E 946 m	
Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3	46.1	50.1	48.2	54.1	100
Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3	25.8	31.5	21.4	24.9	60
Sulphur Dioxide SO2 (µg/m3)	8.2	8.6	11.3	10.3	80
Nitrogen Dioxide NO2 (µg/m3)	11.3	12.5	13.5	11.2	80

Remarks: The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.


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	STAR CEMENT LIMITED Lumshnong, Meghalaya	Reference No.	SCL/Env/F – 01
		Issue No.	1
	AMBIENT AIR QUALITY MONITORING REPORT	Date of Issue:	24.08.2013
		Revision No.	4
		Date of Rev.	01.12.2020

Ref: SCL/Env/AAQM/Monthly/2021-22/022

Location of Sampling : SCL, Lumshnong
Date of Sampling : 30.08.2021 - 31.08.2021
Distance between the Industry and sampling Location : NA
Time duration of sampling : 24 hrs.
Weather : Dry
Total Rain Fall (mm) : No Rainfall
Ambient Temperature (°C)
Maximum : 29.4 OC
Minimum : 22.0 OC
Relative Humidity (%)
Maximum : 97.3 %
Minimum : 66.5 %
Wind Direction : SE-NW
Wind Speed (km/hr.) : 0.5

Pollutants	Air Quality Monitoring Analysis Result				National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area
	Station Name & No.				
	1	2	3	4	
	(Near Star Club) C/077/21-22	(Near Pump House) C/078/21-22	(Near Security Gate No. 3) C/079/21-22	(Staff Quarters-4) C/080/21-22	
GPS Coordinate	25°10'36"N 92°23'16"E 928 m	25°10'42"N 92°23'32"E 919 m	25°10'27"N 92°23'37"E 944 m	25°10'43"N 92°23'14"E 946 m	
Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3	49.6	53.7	47.6	53.6	100
Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3	27.6	29.4	24.1	26.5	60
Sulphur Dioxide SO2 (µg/m3)	9.4	7.9	10.5	11.4	80
Nitrogen Dioxide NO2 (µg/m3)	12.5	13.4	14.9	12.8	80

Remarks: The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.


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	STAR CEMENT LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F - 02
		Issue No.	01
	STACK ANALYSIS REPORT	Date of Issue:	24.08.2013
		Revision No.	04
		Date of Rev.	01.06.2019

Note Monitoring had to be cancelled most of the time due to heavy rains.

Name of Sampling Location : SCL, Lumshnong

Date of Sampling : 03/08/2021

Type of Stack : Packing Plant (Bag Filter)

Laboratory Report No. : S/42/21-22

Parameters:

1) Particulate Matter (PM) :16.1 mg/Nm³

Remarks: The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9th May, 2016 and G.S.R. 497(E) dated 10th May, 2016.



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	STAR CEMENT LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F - 02
		Issue No.	01
	STACK ANALYSIS REPORT	Date of Issue:	24.08.2013
		Revision No.	04
		Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

Date of Sampling : 08/08/2021

Type of Stack : Roller Press Mill (581 Bag Filter-1)

Laboratory Report No. : S/43/21-22

Parameters:

1) Particulate Matter (PM) :14.7 mg/Nm³

Remarks: The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9th May, 2016 and G.S.R. 497(E) dated 10th May, 2016.



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	STAR CEMENT LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F - 02
		Issue No.	01
	STACK ANALYSIS REPORT	Date of Issue:	24.08.2013
		Revision No.	04
		Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong
Date of Sampling : 30/08/2021
Type of Stack : Cement Mill (Bag Filter)
Laboratory Report No. : S/44/21-22

Parameters:

1) Particulate Matter (PM) : 14.3 mg/Nm³

Remarks: The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9th May, 2016 and G.S.R. 497(E) dated 10th May, 2016.


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	STAR CEMENT LIMITED Lumshnong, Meghalaya	Reference No.	SCL/EHS/F - 02
		Issue No.	01
	STACK ANALYSIS REPORT	Date of Issue:	24.08.2013
		Revision No.	04
		Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

Date of Sampling : 30/08/2021

Type of Stack : Roller Press Mill (581 Bag Filter-1)

Laboratory Report No. : S/45/21-22

Parameters:

1) Particulate Matter (PM) : 16.7 mg/Nm³

Remarks: The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9th May, 2016 and G.S.R. 497(E) dated 10th May, 2016.



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	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/2021-22/005

Month: AUG - 2021




Date	Location	Fugitive Emission Results	Limit
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
16.08.2021	Coal Storage Section	1350	2000
16.08.2021	Limestone Storage Section	1750	5000
16.08.2021	Cement Packing Plant	1830	5000



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	STAR CEMENT LIMITED				Document No.		MPL/EHS/Env/F-03		
					Effective Date		01-05-2019		
	Lumshnong, Meghalaya				Revision No.		04		
					Revision Date		01-01-2021		
NOISE LEVEL MONITORING REPORT									
Ref: SCL(LM)/Env/Noise/Monthly/2021-22/005					Date: : 03.08.2021				
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								
1	Kiln	62.8	71.5	67.2	75	62.1	70.1	66.1	70
2	Raw Mill	62.4	72.4	67.4		59.8	71.6	65.7	
3	Raw Mill WF	64.7	70.6	67.7		62.5	67.5	65.0	
4	Coal Mill	64.8	71.3	68.1		63.4	66.9	65.2	
5	Cement Mill	68.5	71.4	70.0		61.5	71.6	66.6	
6	Cement Mill WF	64.2	70.6	67.4		62.8	67.9	65.4	
7	Primary Crusher (Dump Hopper)	65.2	73.5	69.4		63.5	65.4	64.5	
8	Primary Crusher (Near BC-1)	64.7	73.4	69.1		64.9	71.3	68.1	
9	Secondary Crusher	63.8	72.4	68.1		68.2	68.4	68.3	
B.	DG House								
1	Control Room	61.2	72.3	66.8	75	56.9	61.3	59.1	70
2	Office	61.8	71.5	66.7		55.4	71.5	63.5	
C.	Offices								
1	CCR	55.8	62.4	59.1	75	52.4	63.1	57.8	70
2	Meeting Room	55.4	58.6	57.0		53.4	56.4	54.9	
3	VP'S Room	48.1	56.8	52.5		47.9	56.4	52.2	
4	Inst. Shift Room	50.4	63.8	57.1		50.2	64.8	57.5	
5	Drawing Office	52.8	62.9	57.9		51.4	65.3	58.4	
6	QC Department								
	a) Chemical Lab	62.8	65.7	64.3		61.6	64.7	63.2	
	b) Physical Lab	64.8	67.4	66.1		62.4	56.9	59.7	
	c) Shift Lab	57.8	64.2	61.0		55.9	62.8	59.4	
	d) Sample Preparation Room	58.9	62.8	60.9	53.4	63.9	58.7		
D.	Residential								
1	Bachelor Hostel	46.5	52.4	49.5	55	42.3	44.1	43.2	45
2	HOD'S Quater's	46.8	54.1	50.5		43.6	43.2	43.4	
3	650 Quater's	46.8	55.8	51.3		43.8	45.7	44.8	
4	250 Quater's	44.7	57.4	51.1		41.9	46.8	44.4	
5	Hut	46.3	54.1	50.2		42.5	44.8	43.7	
E.	Dispensary	42.5	53.4	48.0		40.9	46.5	43.7	
									
Measured By:					Verified By:				

	STAR CEMENT LIMITED Lumshnong, Meghalaya		Reference No.	SCL/EHS/F - 04
			Issue No.	01
			Date of Issue:	24.08.2013
	WATER TESTING REPORT		Revision No.	03
			Date of Rev.	01.06.2019

Report No. – 05				
Date of Sample Collection: 26.08.2021 Analysis Date: 16.08.2021 to 20.08.2021				
S. 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	-	7.2	5.5 to 9.0
2	Suspended Solids	mg/lit	21.5	100
3	Total Dissolve Solids	mg/lit	331.7	-
4	Chemical Oxygen Demand	mg/lit	62.6	250
5	Biochemical Oxygen Demand (For 3 days at 27deg. C)	mg/lit	22.1	30
6	Oil & Grease	mg/lit	<3	10
7	Dissolved Oxygen	mg/lit	6.9	-


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Lumshnong, Meghalaya

WATER TESTING REPORT

Reference No.	SCL/EHS/F - 04
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	03
Date of Rev.	01.06.2019

Report No. – 05

Date of Sample Collection: 16.08.2021

Analysis Date: 16.08.2021 – 20.08.2021

S.N o.	Parameter	Unit	Plant Nala Inlet	Plant Nala Outlet	STP Inlet Water	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.	Indian Standard Specification for Drinking Water IS : 10500 -2012 Acceptable Limit (Max.)	Indian Standard Specification for Drinking Water IS : 10500 -2012 Permissible Limit (Max.)
1	pH	-	6.4	7.2	6.9	7.1	5.5 to 9.0	6.5 to 8.5	No relaxation
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	5	15
3	Odour	-	Odourless	Odourless	Odourless	Odourless	Odourless	Agreeable	Agreeable
4	Chloride	mg/lit	5.9	6.1	43.7	62.4	250	250	1000
5	Total Hardness as CaCO ₃	mg/lit	154.2	191.2	157.4	142.6	-	200	600
6	Suspended Solids	mg/lit	14.7	20.3	16.8	17.3	100	-	-
7	Total Dissolve Solids	mg/lit	211.4	241.1	213.4	156.4	-	500	2000
8	Chemical Oxygen Demand	mg/lit	42.1	53.8	194.2	134.2	250	-	-
9	Biochemical Oxygen Demand (For 3 days at 27deg. C)	mg/lit	15.2	17.6	35.1	26.8	30	-	-
10	Oil & Grease	mg/lit	Nil	Nil	4.7	<3	10	-	-
11	Temperature	°C	26.1	26.2	29.5	27.8	Shall not exceed 5°C above the receiving water temperature above the receiving water temp	-	-
12	Conductivity	(μS/cm)	219.4	241.5	195.8	194.2	-	-	-


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