Regd. Office & Works: Lunshnong, PO-Khaliehriat, Distt. – East Jaintia Hills, Meghalaya-793210 Ph: 03655-278215/16/18, Fax: 03655-278217, e-mail: <a href="mailto:lumshnong@starcement.co.in">lumshnong@starcement.co.in</a>

Ref: SCL/EHS/LUM/2021-22/09

Dated: 14/06/2021

To,

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

Subject: Monthly Environmental Monitoring Report.

Ref. No.: MPCB/CON-900-Pt-IV/2020-2021/71, Dated. Shillong, the 18th May, 2020.

Dear Sir,

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

Kindly acknowledge receipt for the same.

With Best Regards

For Star Cement Limited

Authorized Signatory

Enclosed: As mentioned above



Regd. Office & Works: Lumshnong, P.O. - Khaliehnat, Distr-East Jaintia Hills. Nature of Programment of Programm



Lumshnong, Meghalaya

Reference No.	SCL/Env/F - 01
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	4
Date of Rev.	01.12.2020

#### AMBIENT AIR QUALITY MONITORING REPORT

Ref: SCL/Env/AAQM/Monthly/2021-22/009

Location of Sampling : SCL, Lumshnong

Date of Sampling : 01.05.2021 - 02.05.2021

Distance between the Industry and sampling Location : NA
Time duration of sampling : 24 hrs.
Weather : Wet

Total Rain Fall (mm) : No Rain Fall

Ambient Temperature (°C)

 Maximum
 : 30.4 0C

 Minimum
 : 20.2 0C

**Relative Humidity (%)** 

 Maximum
 : 89.5 %

 Minimum
 : 43.3 %

 Wind Direction
 : 12.6

 Wind Speed (km/hr.)
 : W-E

	Air (	Quality Monito			
		Station N			
Pollutants	1	2	3	4	
Tonatants	(Near Star	(Near Pump	(Near Security	(Staff Quarters	National Ambient Air Quality
	Club)	House)	Gate No. 3)	4)	Standards Permissible Limits
	C/025/21-22	C/026/21-22	C/027/21-22	C/028/21-22	for Rural , Ind., Residential Area
	25*10′36″N	25*10'42"N	25*10'27"N	25*10'43"N	
GPS Coordinate	92*23′16″E 928	92*23'32"E 919	92*23′37″E 944	92*23'14"E 946	
	m	m	m	m	
Suspended Particulate					
Matter (Size less than 10	51.2	51.0	49.2	49.7	100
μm) or PM10 μg/m3					
Suspended Particulate					
Matter (Size less than 2.5	30.8	28.7	27.1	29.1	60
μm) or PM2.5 μg/m3					
Sulphur Dioxide SO2	11.4	10.4	9.1	7.1	80
(µg/m3)	11.4	10.4	7.1	7.1	50
Nitrogen Dioxide NO2	11.2	11.2	10.4	10.7	90
(μg/m3)	11.3	11.3	10.4	10.7	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.

Analyzed By

Checked By



Lumshnong, Meghalaya

Reference No.	SCL/Env/F – 01
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	4
Date of Rev	01.12.2020

AMBIENT AIR QUALITY MONITORING REPORT

Ref: SCL/Env/AAQM/Monthly/2021-22/010

Location of Sampling : SCL, Lumshnong

Date of Sampling : 03.05.2021 - 04.05.2021

Distance between the Industry and sampling Location : NA
Time duration of sampling : 24 hrs.
Weather : Dry

Total Rain Fall (mm) : No Rain Fall

Ambient Temperature (°C)

 Maximum
 : 27.2 0C

 Minimum
 : 19.2 0C

**Relative Humidity (%)** 

Maximum: 96.2 %Minimum: 57.4 %Wind Direction: NE-SWWind Speed (km/hr.): 7.4

	Air (	Quality Monito			
		Station N	ame & No.		
Pollutants	1	2	3	4	
Tollutarits	(Near Star	(Near Pump	(Near Security	(Staff Quarters	
	Club)	House)	Gate No. 3)	4)	Standards Permissible Limits
	C/029/21-22	C/030/21-22	C/031/21-22	C/032/21-22	for Rural , Ind., Residential Area
	25*10′36″N	25*10'42"N	25*10'27"N	25*10'43"N	
GPS Coordinate	92*23′16″E 928	92*23′32″E 919	92*23′37″E 944	92*23′14″E 946	
	m	m	m	m	
Suspended Particulate					
Matter (Size less than 10	55.2	49.3	52.7	46.9	100
μm) or PM10 μg/m3					
Suspended Particulate					
Matter (Size less than 2.5	31.3	31.5	29.1	28.6	60
μm) or PM2.5 μg/m3					
Sulphur Dioxide SO2	9.5	0.4	0.1	8.2	80
(μg/m3)	7.5	8.4	8.1	0.2	00
Nitrogen Dioxide NO2	10.4	10.7	12.0	12.0	00
(μg/m3)	12.4	10.7	12.8	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.

Analyzed By

Checked By



Lumshnong, Meghalaya

Reference No.	SCL/Env/F – 01
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	4
Date of Rev.	01.12.2020

#### AMBIENT AIR QUALITY MONITORING REPORT

Ref: SCL/Env/AAQM/Monthly/2021-22/011

Location of Sampling : SCL, Lumshnong

Date of Sampling : 10.05.2021 - 11.05.2021

Distance between the Industry and sampling Location : NA
Time duration of sampling : 24 hrs.
Weather : Dry

Total Rain Fall (mm) : No Rain Fall

Ambient Temperature (°C)

 Maximum
 : 28.1 0C

 Minimum
 : 19.1 0C

**Relative Humidity (%)** 

Maximum: 96.5 %Minimum: 66.2 %Wind Direction: NE-SWWind Speed (km/hr.): 3.1

	Air (		oring Analysis Re	esult	
		Station N			
Pollutants	1	2	3	4	
Tollutarits	(Near Star	(Near Pump	(Near Security	(Staff Quarters	
	Club)	House)	Gate No. 3)	4)	Standards Permissible Limits
	C/033/21-22	C/034/21-22	C/035/21-22	C/036/21-22	for Rural , Ind., Residential Area
	25*10'36"N	25*10'42"N	25*10'27"N	25*10'43"N	
GPS Coordinate	92*23′16″E 928	92*23′32″E 919	92*23′37″E 944	92*23′14″E 946	
	m	m	m	m	
Suspended Particulate					
Matter (Size less than 10	50.3	50.2	49.3	51.3	100
μm) or PM10 μg/m3					
Suspended Particulate					
Matter (Size less than 2.5	30.4	26.4	30.3	29.3	60
μm) or PM2.5 μg/m3					
Sulphur Dioxide SO2	8.6	7.9	0.2	7.6	80
(μg/m3)	8.0	1.9	8.3	7.0	00
Nitrogen Dioxide NO2	10.0	10.0	17.4	14.0	00
(μg/m3)	12.3	13.9	17.4	14.3	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.

Analyzed By

Checked By



Lumshnong, Meghalaya

Reference No.	SCL/Env/F – 01
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	4
Date of Rev.	01.12.2020

AMBIENT AIR QUALITY MONITORING REPORT

Ref: SCL/Env/AAQM/Monthly/2021-22/012

Location of Sampling : SCL, Lumshnong

Date of Sampling : 11.05.2021 - 12.05.2021

Distance between the Industry and sampling Location : NA
Time duration of sampling : 24 hrs.
Weather : Dry

Total Rain Fall (mm) : No Rain Fall

Ambient Temperature (°C)

 Maximum
 : 28.0 0C

 Minimum
 : 20.1 0C

**Relative Humidity (%)** 

 Maximum
 : 96.5 %

 Minimum
 : 44.0 %

 Wind Direction
 : E-W

 Wind Speed (km/hr.)
 : 1.2

	Air (	Quality Monito			
		Station N	ame & No.		
Pollutants	1	2	3	4	
Tolluturits	(Near Star	(Near Pump	(Near Security	(Staff Quarters-	
	Club)	House)	Gate No. 3)	4)	Standards Permissible Limits
	C/037/21-22	C/038/21-22	C/039/21-22	C/040/21-22	for Rural , Ind., Residential Area
	25*10'36"N	25*10'42"N	25*10'27"N	25*10'43"N	
GPS Coordinate	92*23′16″E 928	92*23'32"E 919	92*23′37″E 944	92*23'14"E 946	
	m	m	m	m	
Suspended Particulate					
Matter (Size less than 10	49.7	52.8	50.8	53.4	100
μm) or PM10 μg/m3					
Suspended Particulate					
Matter (Size less than 2.5	26.4	28.3	29.4	30.7	60
μm) or PM2.5 μg/m3					
Sulphur Dioxide SO2	7.1	8.2	9.7	9.5	80
(μg/m3)	7.1	0.2	9.1	9.0	60
Nitrogen Dioxide NO2	10.4	11.5	1/ 0	12.0	80
(µg/m3)	10.4	11.5	16.8	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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Checked By



Lumshnong, Meghalaya

Reference No.	SCL/Env/F – 01
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	4
Date of Rev.	01.12.2020

AMBIENT AIR QUALITY MONITORING REPORT

Ref: SCL/Env/AAQM/Monthly/2021-22/013

Location of Sampling : SCL, Lumshnong

Date of Sampling : 28.05.2021 - 29.05.2021

Distance between the Industry and sampling Location : NA
Time duration of sampling : 24 hrs.
Weather : Dry

Total Rain Fall (mm) : No Rain Fall

Ambient Temperature (°C)

 Maximum
 : 30.3 0C

 Minimum
 : 22.4 0C

**Relative Humidity (%)** 

 Maximum
 : 96.2 %

 Minimum
 : 59.1 %

 Wind Direction
 : NE - SW

 Wind Speed (km/hr.)
 : 2.5

	Air (	Quality Monito			
		Station N			
Pollutants	1	2	3	4	
Tonutunts	(Near Star	(Near Pump	(Near Security	(Staff Quarters-	National Ambient Air Quality
	Club)	House)	Gate No. 3)	4)	Standards Permissible Limits
	C/041/21-22	C/042/21-22	C/043/21-22	C/044/21-22	for Rural , Ind., Residential Area
	25*10'36"N	25*10'42"N	25*10'27"N	25*10'43"N	
GPS Coordinate	92*23′16″E 928	92*23′32″E 919	92*23′37″E 944	92*23'14"E 946	
	m	m	m	m	
Suspended Particulate					
Matter (Size less than 10	47.2	54.1	52.4	54.6	100
μm) or PM10 μg/m3					
Suspended Particulate					
Matter (Size less than 2.5	29.5	29.4	28.5	26.4	60
μm) or PM2.5 μg/m3					
Sulphur Dioxide SO2	7.4	8.7	7.3	10.7	80
(μg/m3)	7.4	0.7	7.5	10.7	00
Nitrogen Dioxide NO2	11 5	14.2	15.7	17.0	80
(µg/m3)	11.5	14.3	15.7	17.3	δU

**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.

**Analyzed By** 

Checked By



Lumshnong, Meghalaya

Reference No.	SCL/Env/F – 01
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	4
Date of Rev.	01.12.2020

AMBIENT AIR QUALITY MONITORING REPORT

Ref: SCL/Env/AAQM/Monthly/2021-22/014

Location of Sampling : SCL, Lumshnong

Date of Sampling : 29.05.2021 - 30.05.2021

Distance between the Industry and sampling Location : NA
Time duration of sampling : 24 hrs.
Weather : Dry

Total Rain Fall (mm) : No Rain Fall

Ambient Temperature (°C)

 Maximum
 : 31.4 0C

 Minimum
 : 23.3 0C

**Relative Humidity (%)** 

Maximum: 94.1 %Minimum: 58.0 %Wind Direction: NE-SWWind Speed (km/hr.): 3.4

	Air (	Quality Monito			
		Station N			
Pollutants	1	2	3	4	
Tolluturits	(Near Star	(Near Pump	(Near Security	(Staff Quarters	
	Club)	House)	Gate No. 3)	4)	Standards Permissible Limits
	C/045/21-22	C/046/21-22	C/047/21-22	C/048/21-22	for Rural , Ind., Residential Area
	25*10'36"N	25*10'42"N	25*10'27"N	25*10'43"N	
GPS Coordinate	92*23′16″E 928	92*23′32″E 919	92*23′37″E 944	92*23'14"E 946	
	m	m	m	m	
Suspended Particulate					
Matter (Size less than 10	50.8	53.9	53.7	51.2	100
μm) or PM10 μg/m3					
Suspended Particulate					
Matter (Size less than 2.5	26.8	29.1	29.6	30.5	60
μm) or PM2.5 μg/m3					
Sulphur Dioxide SO2	7.3	7.6	7.8	11.3	80
(μg/m3)	1.3	7.0	7.0	11.3	00
Nitrogen Dioxide NO2	10.2	13.2	13.4	15.1	80
(μg/m3)	10.2	13.2	13.4	13.1	00

**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.

Analyzed By

Checked By



#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 01/05/2021

**Type of Stack**: Primary Crusher (Bag Filter)

**Laboratory Report No.** : S/17/21-22

**Parameters**:

1) Particulate Matter (PM) :20.1 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

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#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 01/05/2021

**Type of Stack** : Secondary Crusher (Bag Filter)

**Laboratory Report No.** : S/18/21-22

**Parameters**:

1) Particulate Matter (PM) : 24.0 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

Checked By



#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 01/05/2021

**Type of Stack** : RABH

**Laboratory Report No.** : S/19/21-22

**Parameters**:

1) Particulate Matter (PM) :16.9 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

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#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 01/05/2021

**Type of Stack** : Coal Mill

**Laboratory Report No.** : S/05/21-22

**Parameters**:

1) Particulate Matter (PM) :24.5 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

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#### **Lumshnong, Meghalaya STACK ANALYSIS REPORT**

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 04/05/2021

**Type of Stack** : Cooler ESP

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

**Parameters**:

1) Particulate Matter (PM) : 18.0 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

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#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 04/05/2021

**Type of Stack** : Cement Mill (Bag Filter)

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

**Parameters**:

1) Particulate Matter (PM) :17.4 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

More Checked By



#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 04/05/2021

**Type of Stack** : Packing Plant (Bag Filter)

**Laboratory Report No.** : S/23/21-22

Parameters:

1) Particulate Matter (PM) :23.7 mg/Nm<sup>3</sup>

**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  $9^{th}$  May, 2016 and G.S.R. 497(E) dated  $10^{th}$  May, 2016.

Analyzed By

Checked By



#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 04/05/2021

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

**Laboratory Report No.** : S/24/21-22

**Parameters**:

1) Particulate Matter (PM) : 16.5 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

Checked By



#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 11/05/2021

**Type of Stack**: Primary Crusher (Bag Filter)

**Laboratory Report No.** : S/25/21-22

**Parameters**:

1) Particulate Matter (PM) :17.7 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

Morrow / Checked By



#### **Lumshnong, Meghalaya STACK ANALYSIS REPORT**

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 11/05/2021

**Type of Stack** : Secondary Crusher (Bag Filter)

**Laboratory Report No.** : S/26/21-22

**Parameters**:

1) Particulate Matter (PM) : 20.8 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

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#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 11/05/2021

**Type of Stack** : RABH

**Laboratory Report No.** : S/27/21-22

**Parameters**:

1) Particulate Matter (PM) :19.6 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

Morrow Checked By



#### **Lumshnong, Meghalaya STACK ANALYSIS REPORT**

Reference No.	SCL/EHS/F - 02
Issue No.	01
Date of Issue:	24.08.2013
Revision No.	04
Date of Rev.	01.06.2019

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 11/05/2021

**Type of Stack** : Coal Mill

**Laboratory Report No.** : S/28/21-22

**Parameters**:

1) Particulate Matter (PM) :17.4 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

Checked By



#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02			
Issue No.	01			
Date of Issue:	24.08.2013			
Revision No.	04			
Date of Rev.	01.06.2019			

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 27/05/2021

**Type of Stack** : Cooler ESP

**Laboratory Report No.** : S/29/21-22

**Parameters**:

1) Particulate Matter (PM) : 21.7 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

Morrow Checked By



#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02			
Issue No.	01			
Date of Issue:	24.08.2013			
Revision No.	04			
Date of Rev.	01.06.2019			

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 27/05/2021

**Type of Stack** : Cement Mill (Bag Filter)

**Laboratory Report No.** : S/30/21-22

**Parameters**:

1) Particulate Matter (PM) :15.9 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

Analyzed By

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#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02			
Issue No.	01			
Date of Issue:	24.08.2013			
Revision No.	04			
Date of Rev.	01.06.2019			

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 27/05/2021

**Type of Stack** : Packing Plant (Bag Filter)

**Laboratory Report No.** : S/31/21-22

Parameters:

1) Particulate Matter (PM) :21.2 mg/Nm<sup>3</sup>

**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  $9^{th}$  May, 2016 and G.S.R. 497(E) dated  $10^{th}$  May, 2016.

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#### Lumshnong, Meghalaya STACK ANALYSIS REPORT

Reference No.	SCL/EHS/F - 02			
Issue No.	01			
Date of Issue:	24.08.2013			
Revision No.	04			
Date of Rev.	01.06.2019			

Name of Sampling Location : SCL, Lumshnong

**Date of Sampling** : 27/05/2021

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

**Laboratory Report No.** : S/32/21-22

**Parameters**:

1) Particulate Matter (PM) : 16.0 mg/Nm<sup>3</sup>

**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 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

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Lumshnong, Meghalaya

Document No. SCL/EHS/Env/F-04

Date of Issued 01-05-19

Revision No. 2

Revision Date 01-01-21

FUJITIVE EMISSION MONITORING REPORT

Ref: SCL/Env/Fugitive/Monthly/2021-22/002

Month: May - 2021

Date	Location	Fugitive Emission Results	Limit
		(in µg/m³)	(in μg/m³)
05.05.2021	Coal Storage Section	1318	2000
05.05.2021	Limestone Storage Section	1933	5000
05.05.2021	Cement Packing Plant	2108	5000

Analyzed By



Document No. MPL/EHS/Env/F-03

Effective Date 01-05-19

Revision No. 04

Lumshnong, Meghalaya NOISE LEVEL MONITORING REPORT

Revision Date 01-01-21

Month: : 04.05.2021

Ref: SCL(LM)/Env/Noise/Monthly/2021-22/002

Ref: SCL(LM)/Env/Noise/Monthly/2021-22/002							Montn:	: 04.05.20	721	
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	
		Min. Max. Av		Avg.	ш ав(А)	Min.	Max.	Avg.	Avg. in dB(A)	
A	Plant									
1	Kiln	65.7	74.8	70.3		61.5	71.4	66.5		
2	Raw Mill	61.4	75.9	68.7		56.3	71.2	63.8		
3	Raw Mill WF	67.3	73.7	70.5		62.8	68.4	65.6		
4	Coal Mill	65.8	71.2	68.5		60.9	67.9	64.4		
5	Cement Mill	67.8	74.8	71.3	75	62.4	70.4	66.4	70	
6	Cement Mill WF	65.4	72.1	68.8		61.3	70.2	65.8		
7	Primary Crusher (Dump Hopper)	68.1	70.9	69.5		63.4	68.4	65.9		
8	Primary Crusher (Near BC-1)	67.2	73.1	70.2		63.4	69.2	66.3		
9	Secondary Crusher	66.9	73.9	70.4		62.1	70.8	66.5		
B.	DG House				•			•		
1	Control Room	64.8	73.5	69.2	75	59.4	69.8	64.6	70	
2	Office	61.3	74.7	68.0	75	56.8	71.2	64.0	70	
C.	Offices									
1	CCR	58.4	63.8	61.1		54.8	62.4	58.6		
2	Meeting Room	54.9	58.4	56.7		51.3	57.3	54.3		
3	VP'S Room	50.3	56.7	53.5		48.2	55.9	52.1		
4	Inst. Shift Room	54.9	68.1	61.5		51.6	67.1	59.4		
5	Drawing Office	53.7	63.9	58.8	75	53.4	64.7	59.1	70	
6	QC Department				75	1		•	70	
	a) Chemical Lab	66.3	69.1	67.7		64.2	65.8	65.0		
	b) Physical Lab	67.3	70.2	68.8		65.7	68.7	67.2		
	c) Shift Lab	59.2	65.3	62.3		58.3	63.4	60.9		
	d) Sample Preparation Room	60.8	64.7	62.8		57.5	62.5	60.0		
D.	Residential				•			•		
1	Bachelor Hostel	49.4	51.2	50.3		41.8	43.4	42.6		
2	HOD'S Quater's	47.1	56.8	52.0		42.1	45.1	43.6		
3	650 Quater's	46.8	58.4	52.6		42.1	45.8	44.0	45	
4	250 Quater's	41.3	56.1	48.7	55	40.3	48.7	44.5	45	
5	Hut	42.1	57.4	49.8		41.7	46.1	43.9		
E.	Dispensery	41.6	53.7	47.7	<b>†</b>	42.7	47.1	44.9		

Measured By:

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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. - 02

**Date of Sample Collection:** 06.05.2021

**Analysis Date:** 06.05.2021 to 09.05.2021

Sl. No	Parameter	Unit	Drinking Water (RO Plant)	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	рН	Hazen	7.7	6.5 to 8.5	No relaxation	
2	Colour	mg/lit	Colourless	5	15	
3	Odour	mg/lit	Agreeable	Agreeable	Agreeable	
4	Total Hardness as CaCO3 mg/lit		61.7 200		600	
5	Calcium as Ca	mg/lit	17.2	75	200	
6	Magnesium as Mg	mg/lit	5.8	30	100	
7	<b>Total Dissolve Solids</b>	mg/lit	152.7	500	2000	
8	Chloride	mg/lit	14.8	250	1000	
9	Total Residual Chlorine	mg/lit	BDL	0.2	1	
10	Turbidity	NTU	0.04	1	5	
11	Iron	mg/lit	BDL	0.3	No Relaxation	
12	Dissolved Oxygen	mg/lit	3.7	-	-	

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Lumshnong, Meghalaya

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

#### WATER TESTING REPORT

Report No. – 02									
Порого				Date of Sample Collection: 06.05.2021					
S. No.	Parameter	Unit	ETP Outlet	Analysis Date: 06.05.2021 to 09.05.2021  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	рН	-	7.6	5.5 to 9.0					
2	Suspended Solids	mg/lit	21.8	100					
3	Total Dissolve Solids	mg/lit	329.4	-					
4	Cemical Oxegan Demand	mg/lit	51.7	250					
5	Biochemical Oxegan Demand ( For 3 days at 27deg. C)	mg/lit	22.0	30					
6	Oil& Grease	mg/lit	<3	10					
7	Dissolved Oxygen	mg/lit	5.8	-					

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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. – 02 Date of Sample Collection: 06.05.2021
Analysis Date: 06.05.2021 – 09.05.2021

S.N o.	Parameter	Unit	Plant Nala Inlet	Plant Nala Out Let	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		6.7	7.2	6.8	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	Total Residual Chlorine	mg/lit	NIL	NIL	NIL	NIL	1	0.2	1
5	Chloride	mg/lit	6.7	5.5	46.2	67.8	250	250	1000
6	Total Hardness as CaCO3	mg/lit	144.2	156.4	183.7	157.2	-	200	600
7	Calcium as Ca	mg/lit	27.3	32.1	86.2	24.3	-	75	200
8	Magnesium as Mg	mg/lit	17.4	21.4	19.5	18.2	-	30	100
9	Suspended Solids	mg/lit	51.7	46.8	83.5	16.7	100	-	-
10	Total Dissolve Solids	mg/lit	145.7	204.8	361.2	407.8	-	500	2000
11	Cemical Oxegan Demand	mg/lit	127.3	281.5	361.4	432.8	250	-	-
12	Biochemical Oxegan Demand ( For 3 days at 27deg. C)	mg/lit	36.8	30.5	428.4	72.4	30	-	-
13	Oil & Grease	mg/lit	NIL	<3	4.2	<3	10	-	-
15	Temperature	deg. C	31.7	38.9	31.4	32.5	Shall not be exceed 50 Deg. C the	-	-
16	Ammonical Nitrogen (as N)	mg/lit	-	-	-	-	50	-	-
17	Total kjeldahl Nitrogen (asN)	mg/lit	-	-	-	-	100	-	-
18	Free Ammonia (asNH3)	mg/lit	-	-	-	-	5	-	-
19	Conductivity		145	174	163	147	-	-	-

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