



HCCL/MSPCB/19-20/07

Date: 12<sup>th</sup> Mar 2020

To,  
✓ The Member Secretary,  
Meghalaya State Pollution Control Board  
ARDEN Lumpynggad  
Shillong (Meghalaya) -793014

Subject: Reports on Ambient air quality test results, Stack Emission Test Results & Waste Water Analysis (STP) for the month of Feb 2020

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of Feb 2020 for the following test results:

SI No.	Test Results	Purpose
1	Ambient air quality	-
2	Stack Emission	B.F of Crusher
3	Stack Emission	R.A.B.H
4	Stack Emission	Coal Mill
5	Stack Emission	Cooler E.S.P
6	Stack Emission	Cement Mill
7	Stack Emission	Packing House
8	Waste Water Analysis Result	Treated STP Water

Thanking you,  
For Hills Cement Company Ltd  
HILLS CEMENT CO. LTD.

Authorized Signatory

Copy To: - The Joint Director (S), Ministry of Environment, Forest & Climate Change  
NE Regional Office, Lumbatngen, Shillong 793021 for information

**HILLS CEMENT COMPANY LTD.**

CIN-U26942ML2003 PLC007295, Website - www.tajcement.com

CORPORATE OFFICE : "SHIVAM COMPLEX", Bharatmukh, A.T. Road, Guwahati-781009, Ph. : (0361) 2735552, 2735527, E-mail : hr@hccl.in, info@hccl.in, headoffice@tajcement.com  
REGISTERED OFFICE & WORKS : Village : Mynkree, 116 KM Stone, N.H.-44, Sub Div.: Khliehriat, Dist.: Jaintia Hills, Meghalaya-793200, Ph.: 03655-215864, E-mail : hillsproject@gmail.com



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<u>Sl No.</u>	<u>Test Results</u>	<u>Purpose</u>
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**Authorised Signatory**

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NE Regional Office, Lumbatngen, Shillong 793021 for information**

**HILLS CEMENT COMPANY LTD.**

Report No.: ENV/HCCL/AAQ/FEB/19-20/01

Date : 04/03/2020

W. O. No. : Nil

Date : 11/03/2019

**M/s HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya
**AMBIENT AIR QUALITY TEST RESULTS**

SL. No.	Location(s) ↓	Date of Sampling	PM 2.5 ( $\mu\text{g}/\text{m}^3$ )	PM 10 ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )
	Limit(s) →		60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	In-front of Guest House	21.02.2020	28.4	42.5	BDL	BDL
2.	Near Crusher Area	21.02.2020	33.2	60.8	6.9	BDL
3.	In- Front of Compressor House (Cement Mill)	22.02.2020	26.3	62.2	6.5	BDL
4.	Near Mines	22.02.2020	35.8	72.7	8.7	BDL

Analysis Protocol: IS 5182

BDL: Below Detectable Level



Checked By: Mr. Pankaj Baroi, ENVIROCON

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**Core Services:** Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs  
**Associate Services:** Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.



Report No. : ENV/HCLL/FE/FEB/2019-20/01

Date : 04/03/2020

W. O. No. : Nil

Date : 11/03/2019

**M/s HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya

**PROCESS FUGITIVE EMISSION TEST RESULTS**

Date	Locations	Fugitive Emission Results for SPM ( $\mu\text{g}/\text{m}^3$ )	Limits ( $\mu\text{g}/\text{m}^3$ )
21.02.2020	Coal Storage Section	977	2000
22.02.2020	Lime Stone Storage Section	1288	5000



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Report No.: ENV/HCLL/SE/FEB/19-20/01

Date : 04/03/2020

W. O. No. : Nil

Date : 11/03/2019

**M/s HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya

**STACK EMISSION TEST RESULTS**

01	Stack Emission Test Ref. No.	HCLL/SE/19-20/02-01		
02	Date of Sampling	21.02.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	B. F. of Crusher		
05	Stack Diameter (Meter)	1.0		
06	Flue Gas Temperature (°C)	42		
07	Exit Velocity of Gas (m/sec)	7.3		
08	Flow Rate (Nm <sup>3</sup> /hr)	19529		
09	Type of Fuel Used	NA*		
10	<b>Analysis Results of Flue Gas</b>			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	24.8	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



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Report No.: ENV/HCLL/SE/FEB/19-20/02

Date : 04/03/2020

W. O. No. : Nil

Date : 11/03/2019

**M/s HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya
**STACK EMISSION TEST RESULTS**

01	Stack Emission Test Ref. No.	HCCL/SE/19-20/02-02		
02	Date of Sampling	21.02.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	R.A.B.H.		
05	Stack Diameter (Meter)	3.0		
06	Flue Gas Temperature (°C)	188		
07	Exit Velocity of Gas (m/sec)	21.5		
08	Flow Rate (Nm <sup>3</sup> /hr)	353708		
09	Type of Fuel Used	NA*		
10	<b>Analysis Results of Flue Gas</b>			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter (as PM)	25.2	mg/Nm <sup>3</sup>	30
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	630.2	mg/Nm <sup>3</sup>	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	391.0	mg/Nm <sup>3</sup>	800

\*NA: Not Applicable



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**Report No.: ENV/HCLL/SE/FEB/19-20/03**
**Date : 04/03/2020**
**W. O. No. : Nil**
**Date : 11/03/2019**
**M/s HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya
**STACK EMISSION TEST RESULTS**

01	Stack Emission Test Ref. No.	HCCL/SE/19-20/02-03		
02	Date of Sampling	21.02.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	62		
07	Exit Velocity of Gas (m/sec)	17.8		
08	Flow Rate (Nm <sup>3</sup> /hr)	64477		
09	Type of Fuel Used	Coal		
10	<b>Analysis Results of Flue Gas</b>			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	24.2	mg/Nm <sup>3</sup>	30
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	775.15	mg/Nm <sup>3</sup>	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	453.75	mg/Nm <sup>3</sup>	800


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Report No.: ENV/HCLL/SE/FEB/19-20/04

Date : 04/03/2020

W. O. No. : Nil

Date : 11/03/2019

**M/s HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist: Jaintia Hills

Meghalaya

**STACK EMISSION TEST RESULTS**

01	Stack Emission Test Ref. No.	HCCL/SE/19-20/02-04		
02	Date of Sampling	22.02.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Cooler E.S.P.		
05	Stack Diameter (Meter)	2.8		
06	Flue Gas Temperature (°C)	220		
07	Exit Velocity of Gas (m/sec)	17.5		
08	Flow Rate (Nm <sup>3</sup> /hr)	234516		
09	Type of Fuel Used	NA*		
10	<b>Analysis Results of Flue Gas</b>			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	22.9	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



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Report No.: ENV/HCLL/SE/FEB/19-20/05

Date : 04/03/2020

W. O. No. : Nil

Date : 11/03/2019

**M/s HILLS CEMENT COMPANY LIMITED**

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Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya

**STACK EMISSION TEST RESULTS**

01	Stack Emission Test Ref. No.	HCLL/SE/19-20/02-05		
02	Date of Sampling	22.02.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Cement Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	66		
07	Exit Velocity of Gas (m/sec)	16.3		
08	Flow Rate (Nm <sup>3</sup> /hr)	58347		
09	Type of Fuel Used	NA*		
10	<b>Analysis Results of Flue Gas</b>			
<b>Sl. No.</b>	<b>Parameter(s)</b>	<b>Result(s)</b>	<b>Unit(s)</b>	<b>Limit(s)</b>
i.	PM- Particulate Matter	23.5	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



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Report No.: ENV/HCLL/SE/FEB/19-20/06

Date : 04/03/2020

W. O. No. : Nil

Date : 11/03/2019

**M/s HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya

**STACK EMISSION TEST RESULTS**

01	Stack Emission Test Ref. No.	HCCL/SE/19-20/02-06		
02	Date of Sampling	22.02.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Packing House		
05	Stack Diameter (Meter)	0.8		
06	Flue Gas Temperature (°C)	35		
07	Exit Velocity of Gas (m/sec)	13.4		
08	Flow Rate (Nm <sup>3</sup> /hr)	23464		
09	Type of Fuel Used	NA*		
10	<b>Analysis Results of Flue Gas</b>			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	23.2	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



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Report No.: ENV/HCCCL/SW/FEB/19-20/01

Date : 04/03/2020

W. O. No. : Nil

Date : 26/09/2019

**M/s HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya

**WASTE WATER ANALYSIS RESULTS**

Sample Type : STP Treated Water

Sample Source : STP Outlet

Collected By : Jointly by Envirocon & Client

Collected On : 22.02.2020

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limit (CPCB Norms)
1.	pH	--	6.5	5.5 - 9.0
2.	Temperature	°C	19.6	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	13.8	100
4.	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	21	30
5.	Chemical Oxygen Demand	mg/l	78	250
6.	Oil & Grease	mg/l	0.16	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	5.4	50
9.	Total Kjeldahl Nitrogen (as NH <sub>3</sub> )	mg/l	15.8	100
10.	Free Ammonia (as NH <sub>3</sub> )	mg/l	<0.01	5.0

Analysis Protocol: IS 3025

ND: Not Detected



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