



0/L

HCCL/MSPCB/19-20/01

Date: 12<sup>th</sup> Oct 2019

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

**Subject:** Reports on Ambient air quality test results, Stack Emission Test Results & Waste Water Analysis for the month of Sept 2019

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of **Sept 2019** for the following test results:

Sl 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 ETP Water

Thanking you,

For Hills Cement Company Ltd  
**HILLS CEMENT CO. LTD.**

Authorised Signatory  
Authorised Signatory

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

**HILLS CEMENT COMPANY LTD.**

CIN-U26942ML2003 PLC007295, Website - [www.tajcement.com](http://www.tajcement.com)

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

HCCL/MSPCB/19-20/01

Date: 12<sup>th</sup> Oct 2019

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 for the month of Sept 2019


Dear Sir,

Please find enclosed herewith to this letter the reports for the month of **Sept 2019** for the following test results:

<u>Sl No.</u>	<u>Test Results</u>	<u>Purpose</u>
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	<b>Packing House</b>
8	Waste Water Analysis Result	<b>Treated ETP Water</b>

Thanking you,

For Hills Cement Company Ltd  
**HILLS CEMENT CO. LTD.**

  
Authorized Signatory  
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", Bharalumukh, 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, 116KM Stone, NH-44, Sub Div. : Khliehriat, Dist. : Jaintia Hills, Meghalaya-793200, Ph : 03655-215864, E-mail : hillsproject@gmail.com

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

Date : 03/10/2019

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 (µg/m <sup>3</sup> )	PM 10 (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )
	Limit(s) →		60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	In-front of Guest House	25.09.2019	20.8	38.4	BDL	BDL
2.	Near Crusher Area	26.09.2019	33.6	64.8	8.3	5.3
3.	In- Front of Compressor House (Cement Mill)	26.09.2019	28.4	58.7	8.9	5.1
4.	Near Mines	25.09.2019	38.9	75.6	5.3	BDL

Analysis Protocol: IS 5182

BDL: Below Detectable Level



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

- NOTE:**
1. Results reported are valid at the time of and under the prevailing conditions of measurement.
  2. Results refer only to the particular parameters tested.
  3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi - 786171, Assam.

**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/SE/SEPT/19-20/01

Date : 03/10/2019

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/19-20/09-01		
02	Date of Sampling	25.09.2019		
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)	28		
07	Exit Velocity of Gas (m/sec)	4.5		
08	Flow Rate (Nm <sup>3</sup> /hr)	12474		
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	17.4	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

- NOTE:**
1. Results reported are valid at the time of and under the prevailing conditions of measurement.
  2. Results refer only to the particular parameters tested.
  3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

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

Date : 03/10/2019

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/19-20/09-02		
02	Date of Sampling	25.09.2019		
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)	185		
07	Exit Velocity of Gas (m/sec)	14.1		
08	Flow Rate (Nm <sup>3</sup> /hr)	233486		
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.	Particulate Matter (as PM)	19.8	mg/Nm <sup>3</sup>	30
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	658.5	mg/Nm <sup>3</sup>	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	390.6	mg/Nm <sup>3</sup>	800

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

**NOTE:**

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

**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/HCCL/SE/SEPT/19-20/03**
**W. O. No. : Nil**
**Date : 03/10/2019**
**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/19-20/09-03		
02	Date of Sampling	25.09.2019		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	59		
07	Exit Velocity of Gas (m/sec)	12.8		
08	Flow Rate (Nm <sup>3</sup> /hr)	46784		
09	Type of Fuel Used	Coal		
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	28.4	mg/Nm <sup>3</sup>	30
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	724.9	mg/Nm <sup>3</sup>	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	434.6	mg/Nm <sup>3</sup>	800


 Checked By: Mr. Pankaj Baroi, **ENVIROCON**

**NOTE:**

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi - 786171, Assam.

**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/SE/SEPT/19-20/04

Date : 03/10/2019

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/19-20/09-04		
02	Date of Sampling	25.092019		
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)	231		
07	Exit Velocity of Gas (m/sec)	16.8		
08	Flow Rate (Nm <sup>3</sup> /hr)	220222		
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	23.7	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

- NOTE:**
1. Results reported are valid at the time of and under the prevailing conditions of measurement.
  2. Results refer only to the particular parameters tested.
  3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

**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/HCCL/SE/SEPT/19-20/05

W. O. No. : Nil

Date : 03/10/2019

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/19-20/09-05		
02	Date of Sampling	26.09.2019		
03	Material of Construction	M. S.		
04	Stack Attached To	Cement Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	58		
07	Exit Velocity of Gas (m/sec)	13.7		
08	Flow Rate (Nm <sup>3</sup> /hr)	50225		
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	26.2	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

- NOTE:**
1. Results reported are valid at the time of and under the prevailing conditions of measurement.
  2. Results refer only to the particular parameters tested.
  3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

**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/HCCL/SE/SEPT/19-20/06

W. O. No. : Nil

Date : 03/10/2019

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/19-20/09-06		
02	Date of Sampling	26.09.2019		
03	Material of Construction	M. S.		
04	Stack Attached To	Packing House		
05	Stack Diameter (Meter)	0.8		
06	Flue Gas Temperature (°C)	26		
07	Exit Velocity of Gas (m/sec)	12.5		
08	Flow Rate (Nm <sup>3</sup> /hr)	22547		
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	21.9	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

**NOTE:**

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

**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/ETP/SEPT/19-20/01

Date : 03/10/2019

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

**WASTE WATER ANALYSIS RESULTS**

Sample Type : Treated ETP Water  
 Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client  
 Collected On: 26.09.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.7	5.5 - 9.0
02	Temperature	°C	28.2	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	15.9	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	22	30
05	Chemical Oxygen Demand	mg/l	68	250
06	Oil & Grease	mg/l	<0.1	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	9.3	50
09	Total Kjeldahl Nitrogen (as NH <sub>3</sub> )	mg/l	22.4	100
10	Free Ammonia (as NH <sub>3</sub> )	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

- NOTE:**
1. Results reported are valid at the time of and under the prevailing conditions of measurement.
  2. Results refer only to the particular parameters tested.
  3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.