

HCCL/MSPCB/20-21/03

Date: 22/1/21

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 (STP & ETP) for the month of Dec 2020

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of Dec 2020 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 STP & ETP Water Analysis

Thanking you,

For Hills Cement Company Ltd
HILLS CEMENT CO. LTD.

Authorised Signatory

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



HILLS CEMENT COMPANY LIMITED

CORPORATE OFFICE: "SHIVAM COMPLEX", Bharalumukh, A.T. Road, Guwahat, Assam, Pin-781009 | Ph: (0361)2735527/52 E: hr@hccl.in, info@hccl.in
REGISTERED OFFICE & WORKS: Village Mynkree, 116KM Stone(NH 44, Sub Div: Khliehriat, Dist: Jaintia Hills, Meghalaya, PIN-793200

HCCL/MSPCB/20-21/03

Date: 22/01/21

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 (STP & ETP) for the month of Dec 2020

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of Dec 2020 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 STP & ETP Water Analysis

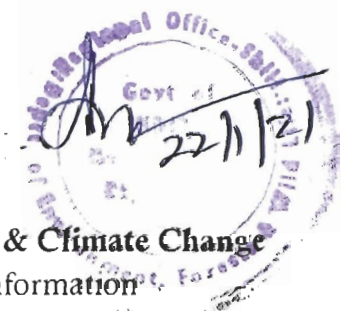
Thanking you,

For Hills Cement Company Ltd
HILLS CEMENT CO. LTD.



Authorised Signatory

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



HILLS CEMENT COMPANY LIMITED

CORPORATE OFFICE: "SHIVAM COMPLEX", Bharalumukh, A.T. Road, Guwahat, Assam, PIN-781009 | Ph: (0361)2735527/52 E: hr@hccl.in, info@hccl.in
REGISTERED OFFICE & WORKS: Village Mynkree, 116KM Stone(NH 44, Sub Div: Khliehriat, Dist: Jaintia Hills, Meghalaya, PIN-793200

Report No.: ENV/HCCL/AAQ/DEC/20-21/01

Date : 06/01/2021

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 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)
	Limit(s) →		60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	In-front of Guest House	24.12.2020	18.9	33.6	<1.0	<1.0
2.	Near Crusher Area	24.12.2020	36.5	71.2	3.3	5.2
3.	In- Front of Compressor House (Cement Mill)	25.12.2020	29.7	62.8	3.5	6.6
4.	Near Mines	25.12.2020	45.4	69.7	1.2	2.6

Analysis Protocol: IS 5182



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/DEC/20-21/01

Date : 06/01/2021

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/20-21/12-01		
02	Date of Sampling	24.12.2020		
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)	31		
07	Exit Velocity of Gas (m/sec)	5.1		
08	Flow Rate (Nm³/hr)	14137		
09	Type of Fuel Used	NA*		
10	Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	19.2	mg/Nm³	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 (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/HCLL/SE/DEC/20-21/02
Date : 06/01/2021
W. O. No. : Nil
Date : 11/03/2019
M/s HILLS CEMENT COMPANY LIMITED

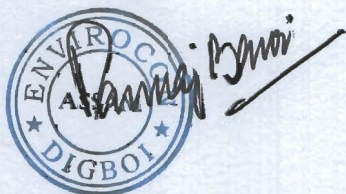
Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist: Jaintia Hills

Meghalaya
STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	HCCL/SE/20-21/12-02		
02	Date of Sampling	24.12.2020		
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)	184		
07	Exit Velocity of Gas (m/sec)	16.8		
08	Flow Rate (Nm³/hr)	278805		
09	Type of Fuel Used	NA*		
10	Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter (as PM)	17.4	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	792.48	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	463.63	mg/Nm³	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/HCLL/SE/DEC/20-21/03

Date : 06/01/2021

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/20-21/12-03		
02	Date of Sampling	24.12.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	63		
07	Exit Velocity of Gas (m/sec)	13.8		
08	Flow Rate (Nm³/hr)	49839		
09	Type of Fuel Used	Coal		
10	Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	20.8	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	801.02	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	427.33	mg/Nm³	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 (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/HCLL/SE/DEC/20-21/04
Date : 06/01/2021
W. O. No. : Nil
Date : 11/03/2019
M/s HILLS CEMENT COMPANY LIMITED

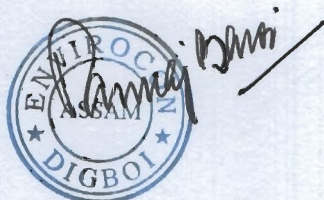
Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khliehriat, Dist.: Jaintia Hills

Meghalaya
STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	HCCL/SE/20-21/12-04		
02	Date of Sampling	25.12.2020		
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)	223		
07	Exit Velocity of Gas (m/sec)	14.8		
08	Flow Rate (Nm³/hr)	197134		
09	Type of Fuel Used	NA*		
10	Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	19.6	mg/Nm³	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/SE/DEC/20-21/05

Date : 06/01/2021

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/20-21/12-05		
02	Date of Sampling	25.12.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Cement Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	61		
07	Exit Velocity of Gas (m/sec)	12.5		
08	Flow Rate (Nm³/hr)	45414		
09	Type of Fuel Used	NA*		
10	Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	21.7	mg/Nm³	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 (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/HCLL/SE/DEC/20-21/06

Date : 06/01/2021

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/20-21/12-06		
02	Date of Sampling	25.12.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Packing House		
05	Stack Diameter (Meter)	0.8		
06	Flue Gas Temperature (°C)	27		
07	Exit Velocity of Gas (m/sec)	13.2		
08	Flow Rate (Nm³/hr)	23730		
09	Type of Fuel Used	NA*		
10	Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	18.1	mg/Nm³	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/HCCCL/STP/DEC/20-21/01

Date : 06/01/2021

W. O. No. : HCCL/HO/ENV/20-21/01

Date : 18/11/2020

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 : 25.12.2020

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limit (CPCB Norms)
1.	pH	--	6.7	5.5 - 9.0
2.	Temperature	°C	19.3	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	26	100
4.	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	25	30
5.	Chemical Oxygen Demand	mg/l	96	250
6.	Oil & Grease	mg/l	0.31	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	3.3	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	13.8	100
10.	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025

ND: Not Detected



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/HCL/ETP/DEC/20-21/01

Date : 06/01/2021

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 : ETP Treated Water

Sample Source : ETP Outlet

Collected By : Jointly by Envirocon & Client

Collected On : 25.12.2020

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limit (CPCB Norms)
1.	pH	--	6.81	5.5 – 9.0
2.	Temperature	°C	19.3	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	14	100
4.	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	19	30
5.	Chemical Oxygen Demand	mg/l	78	250
6.	Oil & Grease	mg/l	0.52	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	2.9	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	9.6	100
10.	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025

ND: Not Detected



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.