



HCCL/MSPCB/19-20/02

Date: 11th Nov 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 & Fugitive Emission for the month of Oct 2019

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of Oct 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	Packing House
8	Waste Water Analysis Result	Treated ETP Water

Thanking you,

For Hills Cement Company Ltd

HILLS CEMENT CO. LTD.

Nikhil Anand
Authorised Signatory



Copy To: - The Joint Director (S), Ministry of Environment, Forest & Climate Change
NE Regional Office, Lumbatngan, 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, 118KM Stone, NH-44, Sub Div. : Khliehriat, Dist. : Jaintia Hills, Meghalaya-793200, Ph : 03655-215864, E-mail : hillsproject@gmail.com



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M. K. S. S. S.
Authorised Signatory

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Report No.: ENV/HCL/AAQ/OCT/19-20/01

Date : 05/11/2019

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 ($\mu\text{g}/\text{m}^3$)	PM 10 ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)	SO 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	24.10.2019	18.6	32.8	BDL	BDL
2.	Near Crusher Area	24.10.2019	27.5	56.2	5.5	BDL
3.	In- Front of Compressor House (Cement Mill)	25.10.2019	26.4	52.2	6.5	BDL
4.	Near Mines	25.10.2019	32.6	70.4	8.8	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/SE/OCT/19-20/01

Date : 05/11/2019

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/19-20/10-01		
02	Date of Sampling	24.10.2019		
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)	30		
07	Exit Velocity of Gas (m/sec)	4.6		
08	Flow Rate (Nm ³ /hr)	12793		
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	20.2	mg/Nm ³	30

*NA: Not Applicable



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Report No.: ENV/HCCL/SE/OCT/19-20/02

W. O. No. : Nil

Date : 05/11/2019

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/19-20/10-02		
02	Date of Sampling	24.10.2019		
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)	184		
07	Exit Velocity of Gas (m/sec)	16.4		
08	Flow Rate (Nm ³ /hr)	272167		
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)	22.6	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	676.8	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	379.2	mg/Nm ³	800

*NA: Not Applicable


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Report No.: ENV/HCLL/SE/OCT/19-20/03

Date : 05/11/2019

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/19-20/10-03		
02	Date of Sampling	24.10.2019		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	58		
07	Exit Velocity of Gas (m/sec)	14.2		
08	Flow Rate (Nm ³ /hr)	52058		
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	27.2	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	688.6	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	363.4	mg/Nm ³	800



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Report No.: ENV/HCCL/SE/OCT/19-20/04

Date : 05/11/2019

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/19-20/10-04		
02	Date of Sampling	25.10.2019		
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)	16.2		
08	Flow Rate (Nm ³ /hr)	217095		
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	23.5	mg/Nm ³	30

*NA: Not Applicable


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Report No.: ENV/HCCL/SE/OCT/19-20/05

Date : 05/11/2019

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/19-20/10-05		
02	Date of Sampling	25.10.2019		
03	Material of Construction	M. S.		
04	Stack Attached To	Cement Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	63		
07	Exit Velocity of Gas (m/sec)	14.6		
08	Flow Rate (Nm ³ /hr)	52728		
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	26.9	mg/Nm ³	30

*NA: Not Applicable



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Report No.: ENV/HCL/SE/OCT/19-20/06

Date : 05/11/2019

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/19-20/10-06		
02	Date of Sampling	25.10.2019		
03	Material of Construction	M. S.		
04	Stack Attached To	Packing House		
05	Stack Diameter (Meter)	0.8		
06	Flue Gas Temperature (°C)	28		
07	Exit Velocity of Gas (m/sec)	13.2		
08	Flow Rate (Nm ³ /hr)	23651		
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	26.8	mg/Nm ³	30

*NA: Not Applicable



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Report No.: ENV/HCL/STP/OCT/19-20/01
Date : 05/11/2019

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 : 25.10.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limit (CPCB Norms)
1.	pH	--	6.7	5.5 - 9.0
2.	Temperature	°C	25.6	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	16.3	100
4.	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	17	30
5.	Chemical Oxygen Demand	mg/l	62	250
6.	Oil & Grease	mg/l	<0.1	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	6.1	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	17.2	100
10.	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025

ND: Not Detected



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Report No. : ENV/HCCCL/FE/OCT/2019-20/01

Date : 05/11/2019

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

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
24.10.2019	Coal Storage Section	952	2000
24.10.2019	Lime Stone Storage Section	1166	5000
25.10.2019	Fly-ash Storage Section	2841	5000
25.10.2019	Cement Packing Section	3321	5000



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