



HCCL/MSPCB/19-20/05

Date: 27th Jan 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 (ETP & STP) for the month of Dec 2019

Dear Sir,

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

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 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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Report No.: ENV/HCLL/AAQ/DEC/19-20/01

W. O. No. : Nil

Date : 06/01/2020

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 ³)	PM 10 (µg/m ³)	NO ₂ (µg/m ³)	SO ₂ (µg/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	15.12.2019	24.5	38.4	BDL	BDL
2.	Near Crusher Area	15.12.2019	30.4	60.2	5.9	BDL
3.	In- Front of Compressor House (Cement Mill)	16.12.2019	27.7	57.7	6.6	BDL
4.	Near Mines	16.12.2019	29.3	70.4	9.5	BDL

Analysis Protocol: IS 5182

BDL: Below Detectable Level



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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

Date : 06/01/2020

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/19-20/12-01		
02	Date of Sampling	15.12.2019		
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)	36		
07	Exit Velocity of Gas (m/sec)	5.5		
08	Flow Rate (Nm ³ /hr)	14999		
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	24.6	mg/Nm ³	30

*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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

Date : 06/01/2020

W. O. No. : Nil

Date : 11/03/2019

M/s HILLS CEMENT COMPANY LIMITED

Village: Mynkree, 116 KM Stone, NH-44

Sub Division: Khllehriat, Dist.: Jaintia Hills

Meghalaya
STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	HCLL/SE/19-20/12-02		
02	Date of Sampling	15.12.2019		
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)	194		
07	Exit Velocity of Gas (m/sec)	20.2		
08	Flow Rate (Nm ³ /hr)	328051		
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)	26.2	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	623.6	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	374.5	mg/Nm ³	800

*NA: Not Applicable



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Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs

Associate Services: Certification by Competent Person (CIE), NDT, Hydraulic Testing, Chartered Engineer Services etc

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

Date : 06/01/2020

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/19-20/12-03		
02	Date of Sampling	15.12.2019		
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)	16.2		
08	Flow Rate (Nm ³ /hr)	58506		
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	23.7	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	717.12	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	428.06	mg/Nm ³	800



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Associate Services: Certification by Competent Person (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc

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

W. O. No. : Nil

Date : 06/01/2020

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/19-20/12-04		
02	Date of Sampling	16.12.2019		
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)	16.8		
08	Flow Rate (Nm ³ /hr)	225135		
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	22.6	mg/Nm ³	30

*NA: Not Applicable



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Associate Services: Certification by Competent Person (CIE) NDT, Hydraulic Testing, Chartered Engineer Services etc

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

W. O. No. : Nil

Date : 06/01/2020

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/19-20/12-05		
02	Date of Sampling	16.12.2019		
03	Material of Construction	M. S.		
04	Stack Attached To	Cement Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	62		
07	Exit Velocity of Gas (m/sec)	14.9		
08	Flow Rate (Nm ³ /hr)	53972		
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	23.7	mg/Nm ³	30

*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/HCCL/SE/DEC/19-20/06

W. O. No. : Nil

Date : 06/01/2020

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/19-20/12-06		
02	Date of Sampling	16.12.2019		
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	22.5	mg/Nm ³	30

*NA: Not Applicable



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Report No.: ENV/HCL/STP/DEC/19-20/01

W. O. No. : Nil

Date : 06/01/2020

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 : 16.12.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limit (CPCB Norms)
1.	pH	--	6.5	5.5 - 9.0
2.	Temperature	°C	19.2	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	12.6	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	<0.1	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	4.3	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	14.9	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/HCLL/ETP/DEC/19-20/01
Date : 06/01/2020
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
WASTE WATER ANALYSIS RESULTS

 Sample Type : Treated ETP Water
 Sample Source : ETP Outlet

 Collected By: Jointly by Envirocon & Client
 Collected On: 16.12.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.9	5.5 - 9.0
02	Temperature	°C	19.3	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	10.5	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	17	30
05	Chemical Oxygen Demand	mg/l	61	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	6.4	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	18.6	100
10	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



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