

HCCL/MSPCB/20-21/02

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) for the month of Nov 2020

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of Nov 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 Water Analysis

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

[Signature]

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, Guwahati, 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/20-21/02

Date: 22/01/21

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REGISTERED OFFICE & WORKS: Village Mynkree, 116KM Stone(NH 44), Sub Div: Khliehriat, Dist: Jaintia Hills, Meghalaya, PIN-793200

Report No.: ENV/HCCL/AAQ/NOV/20-21/01
Date : 09/12/2020
W. O. No. :
Date :
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	22.11.2020	19.6	35.7	<1.0	<1.0
2.	Near Crusher Area	22.11.2020	39.4	76.8	3.1	5.6
3.	In- Front of Compressor House (Cement Mill)	23.11.2020	30.2	64.2	3.6	6.4
4.	Near Mines	23.11.2020	44.6	83.6	1.9	2.2

Analysis Protocol: IS 5182




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/HCL/FE/NOV/2020-21/01**Date : 09/12/2020****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**PROCESS FUGITIVE EMISSION TEST RESULTS**

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
22.11.2020	Coal Storage Section	712	2000
23.11.2020	Lime Stone Storage Section	1621	5000
22.11.2020	Fly-ash Storage Section	2648	5000
23.11.2020	Cement Packing Section	3204	5000

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

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Report No.: ENV/HCL/SE/NOV/20-21/01

Date : 09/12/2020

W. O. No. :

Date :

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/20-21/11-01		
02	Date of Sampling	22.11.2020		
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)	26		
07	Exit Velocity of Gas (m/sec)	5.3		
08	Flow Rate (Nm³/hr)	14937.22		
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	18.6	mg/Nm³	30

*NA: Not Applicable

Pankaj Baroi
Checked By: Mr. Pankaj Baroi, ENVIROCON

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Date : 09/12/2020
W. O. No. :
Date :
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/20-21/11-02		
02	Date of Sampling	22.11.2020		
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)	178		
07	Exit Velocity of Gas (m/sec)	16.4		
08	Flow Rate (Nm³/hr)	275787.62		
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)	16.1	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	723.4	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	522.6	mg/Nm³	800

*NA: Not Applicable


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

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Report No. : ENV/HCLL/SE/NOV/20-21/03
Date : 09/12/2020
W. O. No. :
Date :
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/20-21/11-03		
02	Date of Sampling	22.11.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	61		
07	Exit Velocity of Gas (m/sec)	14.1		
08	Flow Rate (Nm³/hr)	51227.14		
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	21.1	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	826.7	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	613.9	mg/Nm³	800


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

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Report No.: ENV/HCCL/SE/NOV/20-21/04

W. O. No. :

Date : 09/12/2020

Date :

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/20-21/11-04		
02	Date of Sampling	23.11.2020		
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)	216		
07	Exit Velocity of Gas (m/sec)	15.1		
08	Flow Rate (Nm³/hr)	204008.9		
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	14.8	mg/Nm³	30

*NA: Not Applicable



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Report No.: ENV/HCLL/SE/NOV/20-21/05
Date : 09/12/2020
W. O. No. :
Date :
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/20-21/11-05		
02	Date of Sampling	23.11.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Cement Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	59		
07	Exit Velocity of Gas (m/sec)	12.6		
08	Flow Rate (Nm³/hr)	46053.21		
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	18.9	mg/Nm³	30

*NA: Not Applicable

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

Date : 09/12/2020

W. O. No. :

Date :

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/20-21/11-06		
02	Date of Sampling	23.11.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Packing House		
05	Stack Diameter (Meter)	0.8		
06	Flue Gas Temperature (°C)	23		
07	Exit Velocity of Gas (m/sec)	13.2		
08	Flow Rate (Nm³/hr)	24050.67		
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	18.3	mg/Nm³	30

*NA: Not Applicable

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Report No.: ENV/HCLL/SW/NOV/20-21/01

Date : 09/12/2020

W. O. No. :

Date :

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 : 23.11.2020

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limit (CPCB Norms)
1.	pH	--	6.83	5.5 – 9.0
2.	Temperature	°C	22.1	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	22	100
4.	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	24	30
5.	Chemical Oxygen Demand	mg/l	91	250
6.	Oil & Grease	mg/l	0.36	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	3.6	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	14.1	100
10.	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025

ND: Not Detected


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