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CIN: U26942ML2003PLC007295

HCCL/MSPCB/20-21/01

Date: 17th June 2020

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

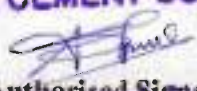
Subject: Reports on Ambient air quality test results, Stack Emission Test Results & Waste Water Analysis (STP & ETP) for the month of March 2020

Dear Sir,

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

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


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 LIMITED

CORPORATE OFFICE: "SHIVAM COMPLEX", Bharalumukh, A.T Road, Guwahati, Assam. PIN-781009. Ph: 0361-2531144. E: info@hillsce.in
REGISTERED OFFICE & WORKS: Village Mynkree, 116KM Stone (NH 44), Sub Div: Khasi, Dist: Jaintia, Hills, Meghalaya. PIN-793200



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REGISTERED OFFICE & WORKS: Village Mynkree, T16KM Stone (NH 44), Sub Div: Khliehria, Dist: Jaintia, Hills: Meghalaya. PIN-793200

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

Date : 25/04/2020

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
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	13.03.2020	25.6	38.2	BDL	BDL
2.	Near Crusher Area	13.03.2020	36.7	62.8	6.5	BDL
3.	In- Front of Compressor House (Cement Mill)	14.03.2020	29.3	58.7	6.1	BDL
4.	Near Mines	14.03.2020	31.4	61.3	5.8	BDL

Analysis Protocol: IS 5182

BDL: Below Detectable Level

Checked By: Mr. Pankaj Barua



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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/FE/MAR/2019-20/01

Date : 25/04/2020

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 ($\mu\text{g}/\text{m}^3$)
13.03.2020	Coal Storage Section	893	2000
14.03.2020	Lime Stone Storage Section	1307	5000




Checked By: Mr. Pankaj Baroi, ENVIROCON

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

Date : 25/04/2020

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.	HCCL/SE/19-20/03-01		
02	Date of Sampling	13.03.2020		
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)	28		
07	Exit Velocity of Gas (m/sec)	4.1		
08	Flow Rate (Nm³/hr)	11478		
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

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Report No.: ENV/HCLL/SE/MAR/19-20/02
Date : 25/04/2020
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.	HCCL/SE/19-20/03-02		
02	Date of Sampling	13.03.2020		
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)	181		
07	Exit Velocity of Gas (m/sec)	16.3		
08	Flow Rate (Nm³/hr)	272295		
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)	21.8	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	772.5	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	491.3	mg/Nm³	800

*NA: Not Applicable



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

Date : 25/04/2020

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.	HCCL/SE/19-20/03-04		
02	Date of Sampling	14.03.2020		
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

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

Date : 25/04/2020

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.	HCCL/SE/19-20/03-03		
02	Date of Sampling	13.03.2020		
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)	13.1		
08	Flow Rate (Nm³/hr)	48025		
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	23.2	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	742.5	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	424.3	mg/Nm³	800



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Report No.: ENV/HCCCL/SE/MAR/19-20/05
Date : 25/04/2020
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.	HCCL/SE/19-20/03-05		
02	Date of Sampling	14.03.2020		
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 (Nm ³ /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/Nm ³	30

*NA: Not Applicable


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

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Report No.: ENV/HCLL/SE/MAR/19-20/06

W. O. No. : Nil

Date : 25/04/2020

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/19-20/03-06		
02	Date of Sampling	14.03.2020		
03	Material of Construction	M. S.		
04	Stack Attached To	Packing House		
05	Stack Diameter (Meter)	0.8		
06	Flue Gas Temperature (°C)	24		
07	Exit Velocity of Gas (m/sec)	12.9		
08	Flow Rate (Nm³/hr)	23425		
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



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Report No.: ENV/HCLL/SW/MAR/19-20/01

Date : 25/04/2020

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 : 14.03.2020

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	15.2	100
4.	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	18	30
5.	Chemical Oxygen Demand	mg/l	69	250
6.	Oil & Grease	mg/l	0.24	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	3.2	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	12.6	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

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Report No.: ENV/HCLL/ETP/MAR/19-20/01

Date : 25/04/2020

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: 14.03.2020

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.6	5.5 – 9.0
02	Temperature	°C	23.3	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	12.6	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	15	30
05	Chemical Oxygen Demand	mg/l	58	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	5.9	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	19.1	100
10	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



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