

HCCL/MSPCB/21-22/06

Date: 20/12/21

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

Subject: Reports on Ambient Air Quality test, Stack Emission test, Waste Water Analysis (STP) & Noise Level Measurement Test for the month of November 2021

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of **November 2021** for the following test results:-

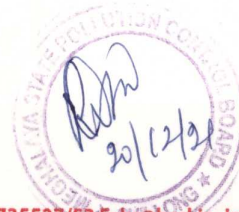
<u>Sl No.</u>	<u>Test Results</u>	<u>Purpose</u>
1	Ambient Air Quality	-
2	Stack Emission	R.A.B.H
3	Stack Emission	Coal Mill
4	Stack Emission	Cooler E.S.P
5	Waste Water Analysis Result (Treated)	STP Water Analysis
6	Noise Level Measurement Test	-

Thanking you,

For Hills Cement Company Ltd  
**HILLS CEMENT COMPANY 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**

HCCL/MSPCB/21-22/06

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**HILLS CEMENT COMPANY LIMITED**



Report No.: ENV/HCCL/21-22/AA-11/01

Date : 08/12/2021

Order No.: HCCL/HO/ENV/21-22/01

Date : 08/04/2021

Report Issued To : **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 <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )
	LIMIT(S) →	---	60	100	80	80
01	In-front of Guest House	15.11.2021	24.2	46.7	<5.0	<6.0
02	Near Crusher Area	15.11.2021	28.6	53.4	5.9	7.1
03	In- Front of Compressor House (Cement Mill)	16.11.2021	23.9	47.2	6.6	7.6
04	Near Mines	16.11.2021	31.6	55.6	<5.0	<6.0

Analysis Protocol: IS 5182

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

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2. Results refer only to the particular parameters tested.
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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/21-22/N-11/01

Date : 08/12/2021

Order No.: HCL/HO/ENV/21-22/01

Date : 08/04/2021

Report Issued To : **HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44, Sub Division: Khliehriat, Dist.: Jaintia Hills, Meghalaya

**NOISE LEVEL MEASUREMENT RESULTS**

Sl. No.	Location(s)	Date Of Measurement	Day Time		Night Time	
			$L_{eq}$ (dB-A)	Limit (dB-A)	$L_{eq}$ (dB-A)	Limit (dB-A)
1	In-front of Guest House	15.11.2021	50.2	75	42.1	70
2	Near Crusher Area	15.11.2021	71.9	75	61.6	70
3	In- Front of Compressor House (Cement Mill)	15.11.2021	71.3	75	66.4	70
4	Near Mines	16.11.2021	48.5	75	35.7	70



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Report No.: ENV/HCL/21-22/SE-11/01  
Date : 08/12/2021

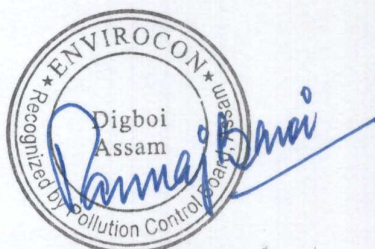
Order No.: HCCL/HO/ENV/21-22/01  
Date : 08/04/2021

Report Issued To : **HILLS CEMENT COMPANY LIMITED**  
Village: Mynkree, 116 KM Stone, NH-44, Sub Division: Khliehriat, Dist.: Jaintia Hills, Meghalaya

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	HCCL/21-22/SE-11/01		
02	Date of Sampling	15.11.2021		
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)	15.6		
08	Flow Rate (Nm³/hr)	251672		
09	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	21	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	721	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	414	mg/Nm³	800

\*NA: Not Applicable



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Report No.: ENV/HCL/21-22/SE-11/02  
Date : 08/12/2021

Order No.: HCCL/HO/ENV/21-22/01  
Date : 08/04/2021

Report Issued To : **HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44, Sub Division: Khliehriat, Dist.: Jaintia Hills, Meghalaya

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	HCCL/21-22/SE-11/02		
02	Date of Sampling	15.11.2021		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	64		
07	Exit Velocity of Gas (m/sec)	11.6		
08	Flow Rate (Nm³/hr)	41769		
09	Type of Fuel Used	Coal		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	26	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	669	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	239	mg/Nm³	800



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Report No.: ENV/HCL/21-22/SE-11/03  
Date : 08/12/2021

Order No.: HCCL/HO/ENV/21-22/01  
Date : 08/04/2021

Report Issued To : **HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44, Sub Division: Khliehriat, Dist.: Jaintia Hills, Meghalaya

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	HCCL/21-22/SE-11/03		
02	Date of Sampling	16.11.2021		
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)	219		
07	Exit Velocity of Gas (m/sec)	10.9		
08	Flow Rate (Nm <sup>3</sup> /hr)	146367		
09	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	20	mg/Nm <sup>3</sup>	30
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	BDL <sup>#</sup>	mg/Nm <sup>3</sup>	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	BDL <sup>#</sup>	mg/Nm <sup>3</sup>	800

\*NA: Not Applicable

#BDL: Below Detectable Limit



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Report No.: ENV/HCL/21-22/WW-11/01

Date : 08/12/2021

Order No.: HCL/HO/ENV/21-22/01

Date : 08/04/2021

Report Issued To : **HILLS CEMENT COMPANY LIMITED**

Village: Mynkree, 116 KM Stone, NH-44, Sub Division: Khliehriat, Dist.: Jaintia Hills, Meghalaya

### **WASTE WATER ANALYSIS RESULTS**

Sample Ref. No. : HCL/21-22/WW-1611/01  
Sample Type/Source : Waste Water (Treated)/STP Outlet  
Sample Collected By : Representative of ENVIROCON  
Sample Collected On : 16.11.2021  
Sample Received On : 20.11.2021  
Analysis Protocol : IS 3025

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Limit (As Per CPCB Standards)
1.	pH	--	6.79	5.5 - 9.0
2.	Temperature	°C	24.9	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	21	100
4.	Biochemical Oxygen Demand	mg/l	24	30
5.	Chemical Oxygen Demand	mg/l	98	250
6.	Oil & Grease	mg/l	<4.0	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	2.8	50
9.	Total Kjeldahl Nitrogen (as NH <sub>3</sub> )	mg/l	9.2	100
10.	Free Ammonia (as NH <sub>3</sub> )	mg/l	<0.01	5.0



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