

HCCL/MSPCB/22-23/06

Date: 18/10/22.....

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

Subject: Reports on Ambient Air Quality test, Stack Emission test, Fugitive Emission, Waste Water Analysis (STP & ETP) & Noise Level Measurement Test for the month of September 2022

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of **September 2022** 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	ETP & STP Water Analysis
6	Noise Level Measurement Test	
7	Fugitive Emission Test	

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

b/c MOEFCC



Website: www.tajcement.com
CIN: U26942ML2003PLC007295

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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

Report No.: ENV/HCLL/22-23/AA-09/01
Date : 08/10/2022

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

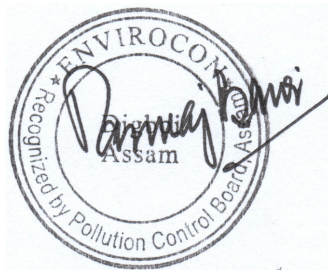
Report Issued To : **HILLS CEMENT COMPANY LIMITED**

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 (µg/m ³)	PM 10 (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
	LIMIT(S) →	---	60	100	80	80
01	In-front of Guest House	11.09.2022	26.3	38.6	<5.0	<6.0
02	Near Crusher Area	11.09.2022	31.2	50.7	5.8	6.7
03	In- Front of Compressor House (Cement Mill)	12.09.2022	25.7	46.9	6.2	7.3
04	Near Mines	12.09.2022	29.1	47.5	<5.0	<6.0

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.

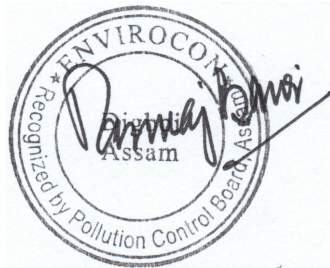
Report No.: ENV/HCLL/22-23/N-09/01
Date : 08/10/2022

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

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	11.09.2022	52.3	75	43.7	70
2	Near Crusher Area	11.09.2022	70.6	75	64.3	70
3	In- Front of Compressor House (Cement Mill)	12.09.2022	71.8	75	63.8	70
4	Near Mines	12.09.2022	44.7	75	38.2	70



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Report No.: ENV/HCL/22-23/SE-09/01
Date : 08/07/2022

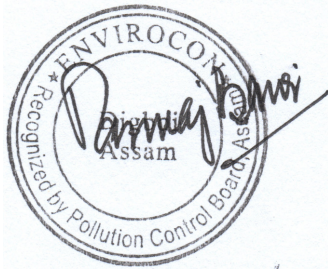
Order No.: HCCL/HO/ENV/21-22/01
Date : 08/04/2021

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/22-23/SE-09/01		
02	Date of Sampling	11.09.2022		
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)	173		
07	Exit Velocity of Gas (m/sec)	14.6		
08	Flow Rate (Nm ³ /hr)	248271		
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/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	512	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	371	mg/Nm ³	800

*NA: Not Applicable



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Report No.: ENV/HCLL/22-23/SE-09/02

Date : 08/10/2022

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/22-23/SE-09/02		
02	Date of Sampling	11.09.2022		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	51		
07	Exit Velocity of Gas (m/sec)	10.1		
08	Flow Rate (Nm ³ /hr)	37827		
09	Type of Fuel Used	Coal		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	17	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	429	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	261	mg/Nm ³	800



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Report No.: ENV/HCCL/22-23/SE-09/03
Date : 08/10/2022

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

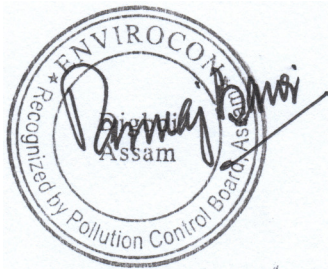
Report Issued To : **HILLS CEMENT COMPANY LIMITED**
Village: Mynkree, 116 KM Stone, NH-44, Sub Division: Khliehriat, Dist.: Jaintia Hills, Meghalaya

STACK EMISSION TEST RESULTS

01	Test Ref. No.	HCCL/22-23/SE-09/03		
02	Date of Sampling	12.09.2022		
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)	222		
07	Exit Velocity of Gas (m/sec)	5.6		
08	Flow Rate (Nm ³ /hr)	74742		
09	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	26	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	BDL#	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	BDL#	mg/Nm ³	800

*NA: Not Applicable

#BDL: Below Detectable Limit



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

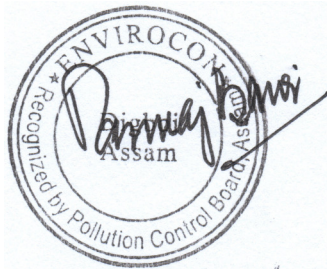
Date : 08/04/2021

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

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

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
11.09.2022	Coal Storage Section	658	2000
11.09.2022	Lime Stone Storage Section	2134	5000
12.09.2022	Fly-ash Storage Section	2680	5000
12.09.2022	Cement Packing Section	3156	5000



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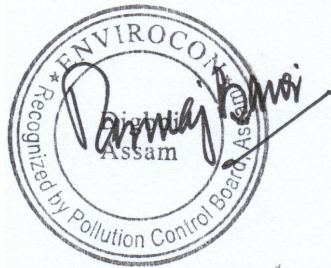
STP WATER ANALYSIS RESULTS

Sample Ref. No. : HCCL/2022/STP-2609/01 Sample Source : STP Outlet (SCL) Sample Type : STP Treated Water
Collected On : 26-09-2022 Received On : 28-09-2022 Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Limit [G.S.R. 1265 (E), 2017]
1	pH	6.86	6.5 – 9.0
2	Total Suspended Solids (as TSS), mg/l	41	<100
3	Biochemical Oxygen Demand (as BOD), mg/l	17	30
4	Chemical Oxygen Demand (as COD), mg/l	64	250*
5	Oil & Grease, mg/l	<4.0	10.0*
6	Fecal Coliform (as FC), MPN/100 ml	812	<1000

*Limit as per G.S.R. 801(E), 31.12.1993

Analysis Protocol: IS 3025
MPN: Most Probable Number



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Date : 08/10/2022

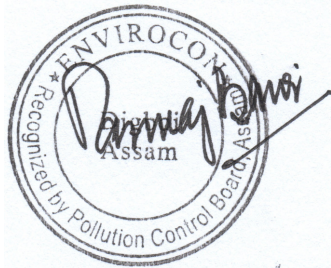
Order No.: HCCL/HO/ENV/21-22/01
Date : 08/04/2021

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

WASTE WATER ANALYSIS RESULTS

Sample Ref. No. : HCCL/22-23/WW-2609/01
Sample Type/Source : Waste Water (Treated)/ETP Outlet
Sample Collected By : Representative of ENVIROCON
Sample Collected On : 26.09.2022
Sample Received On : 28.09.2022
Analysis Protocol : IS 3025

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Limit (As Per G.S.R. 801(E), 31.12.1993)
1.	pH	--	6.82	5.5 – 9.0
2.	Temperature	°C	26.2	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	23	100
4.	Biochemical Oxygen Demand	mg/l	21	30
5.	Chemical Oxygen Demand	mg/l	83	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	9.3	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	26	100
10.	Free Ammonia (as NH ₃)	mg/l	0.06	5.0



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