



O/C MSPCB

Website: www.tajcement.com
CIN: U26942ML2003PLC007295

HCCL/MSPCB/22-23/09

Date: 28/03/2023

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 December 2022

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of **December 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**

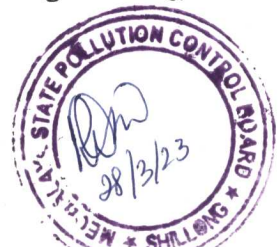
HILLS CEMENT CO. LTD.


Authorised Signatory
Authorised Signatory

Copy To: - (1) **The Joint Director (S), Ministry of Environment, Forest & Climate Change NE Regional Office, Lumbatngen, Shillong 793021** for information
(2) **The Regional Director Regional Directorate (NE), Central Pollution Control Board, TUM-SIR, Lower Motinagar, Near Fire Brigade HQ, Shillong-793014**

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





O/L C/PCB

Website: www.tajcement.com
CIN: U26942ML2003PLC007295

HCCL/MSPCB/22-23/09

Date:

To,
The Member Secretary,
Meghalaya State Pollution Control Board
ARDEN Lumpyngrigad
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 December 2022

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of **December 2022** for the following test results:

Sl No.	Test Results	Purpose
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.

Authorised Signatory
Authorised Signatory

Copy To: - (1) The Joint Director (S), Ministry of Environment, Forest & Climate Change
NE Regional Office, Lumbatngen, Shillong 793021 for information
(2) The Regional Director Regional Directorate (NE), Central Pollution
Control Board, TUM-SIR, Lower Motinagar, Near Fire Brigade HQ,
Shillong-793014

**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



D/C MOEFCC

Website: www.tajcement.com
CIN: U26942ML2003PLC007295

HCCL/MSPCB/22-23/09

Date:

To,
The Member Secretary,
Meghalaya State Pollution Control Board
ARDEN Lumpyngngad
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 December 2022

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of **December 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.
Authorised Signatory
Authorised Signatory

Copy To: - (1) **The Joint Director (S), Ministry of Environment, Forest & Climate Change**
NE Regional Office, Lumbatngen, Shillong 793021 for information
(2) **The Regional Director Regional Directorate (NE), Central Pollution**
Control Board, TUM-SIR, Lower Motinagar, Near Fire Brigade HQ,
Shillong-793014

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/HCL/22-23/AA-12/01

Date : 09/01/2023

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

Date : 08/04/2021

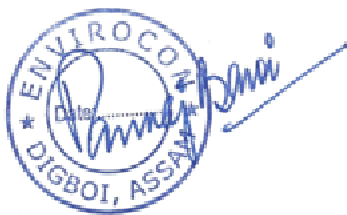
Report Issued To : **HILLS CEMENT COMPANY LIMITED**

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

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	100	80	80
01	In-front of Guest House	27.12.2022	24.7	43.2	<5.0	<6.0
02	Near Crusher Area	27.12.2022	31.2	51.6	5.8	6.9
03	In- Front of Compressor House (Cement Mill)	28.12.2022	29.5	49.2	6.7	7.3
04	Near Mines	28.12.2022	26.3	46.5	<5.0	<6.0

Analysis Protocol: IS 5182

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

- NOTE:**
1. Results reported are valid at the time of and under the prevailing conditions of measurement.
 2. Results refer only to the particular parameters tested.
 3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

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/22-23/N-12/01

Date : 09/01/2023

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	27.12.2022	51.6	75	44.8	70
2	Near Crusher Area	27.12.2022	70.3	75	66.3	70
3	In- Front of Compressor House (Cement Mill)	28.12.2022	69.8	75	64.7	70
4	Near Mines	28.12.2022	50.2	75	39.2	70

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

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

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/22-23/SE-12/01

Date : 09/01/2023

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

STACK EMISSION TEST RESULTS

01	Test Ref. No.	HCCL/22-23/SE-12/01		
02	Date of Sampling	27.12.2022		
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)	178		
07	Exit Velocity of Gas (m/sec)	15.3		
08	Flow Rate (Nm³/hr)	257290		
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)	585	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	356	mg/Nm³	800

*NA: Not Applicable

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

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

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/22-23/SE-12/02

Date : 09/01/2023

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

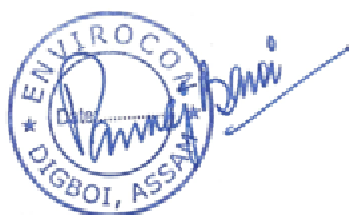
Date : 08/04/2021

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-12/02		
02	Date of Sampling	27.12.2022		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Stack Diameter (Meter)	1.2		
06	Flue Gas Temperature (°C)	55		
07	Exit Velocity of Gas (m/sec)	11.6		
08	Flow Rate (Nm³/hr)	42915		
09	Type of Fuel Used	Coal		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	23	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	388	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	216	mg/Nm³	800



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

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

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/22-23/SE-12/03

Date : 09/01/2023

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

STACK EMISSION TEST RESULTS

01	Test Ref. No.	HCCL/22-23/SE-12/03		
02	Date of Sampling	28.12.2022		
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)	217		
07	Exit Velocity of Gas (m/sec)	6.2		
08	Flow Rate (Nm³/hr)	83594		
09	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	27	mg/Nm³	30
ii.	Sulphur Dioxide (as SO₂)	BDL#	mg/Nm³	1000
iii.	Oxides of Nitrogen (as NOₓ)	BDL#	mg/Nm³	800

*NA: Not Applicable

#BDL: Below Detectable Limit



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

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

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/HCCL/22-23/WW-12/01

Date : 09/01/2023

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-2912/01
Sample Type/Source : Waste Water (Treated)/STP Outlet
Sample Collected By : Representative of ENVIROCON
Sample Collected On : 29.12.2022
Sample Received On : 31.12.2022
Analysis Protocol : IS 3025

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Limit (As Per CPCB Standards)
1.	pH	--	6.94	5.5 – 9.0
2.	Temperature	°C	23.4	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	31	100
4.	Biochemical Oxygen Demand	mg/l	22	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	3.9	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	12.4	100
10.	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

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

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

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/22-23/FE-09/01

Date : 09/01/2023

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

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
27.12.2022	Coal Storage Section	478	2000
27.12.2022	Lime Stone Storage Section	1852	5000
28.12.2022	Fly-ash Storage Section	2203	5000
28.12.2022	Cement Packing Section	2964	5000

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

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

Report No.: ENV/HCL/22-23/WW-12/01

Date : 09/01/2023

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

STP WATER ANALYSIS RESULTS

Sample Ref. No. : HCL/2022/STP-2812/01

Sample Source : STP Outlet (SCL)

Sample Type : STP Treated Water

Collected On : 28-12-2022

Received On : 30-12-2022

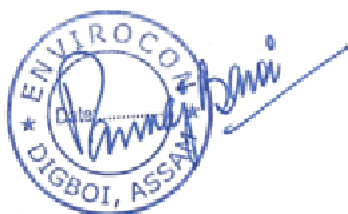
Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Limit [G.S.R. 1265 (E), 2017]
1	pH	6.81	6.5 – 9.0
2	Total Suspended Solids (as TSS), mg/l	28	<100
3	Biochemical Oxygen Demand (as BOD), mg/l	12	30
4	Chemical Oxygen Demand (as COD), mg/l	46	250*
5	Oil & Grease, mg/l	<4.0	10.0*
6	Fecal Coliform (as FC), MPN/100 ml	856	<1000

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

Analysis Protocol: IS 3025

MPN: Most Probable Number

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

- NOTE:**
1. Results reported are valid at the time of and under the prevailing conditions of measurement.
 2. Results refer only to the particular parameters tested.
 3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

Report No.: ENV/HCL/21-22/WW-12/02

Date : 09/01/2023

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 RESULTSSample Ref. No. : HCL/22-23/WW-2812/01
Sample Type/Source : Waste Water (Treated)/ETP Outlet
Sample Collected By : Representative of ENVIROCON
Sample Collected On : 28.12.2022
Sample Received On : 30.12.2022
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	--	6.94	5.5 – 9.0
2.	Temperature	°C	23.4	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	31	100
4.	Biochemical Oxygen Demand	mg/l	22	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	3.9	50
9.	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	12.4	100
10.	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

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

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

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.