



HCCL/MSPCB/21-22/05

Date: 24/11/21

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 October 2021

Dear Sir,

Please find enclosed herewith to this letter the reports for the month of October 2021 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 (Treated) | STP Water Analysis |
| 6 | Noise Level Measurement Test | - |

Thanking you,

For Hills Cement Company Ltd HILLS CEMENT COMPANY LTD.

Authorized Signatory
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



Date: 2.4./11./21



To,

HCCL/MSPCB/21-22/05

The Member Secretary,

ARDEN Lumpyngngad

Meghalaya State Pollution Control Board

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 October 2021

Dear Sir.

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

| Test Results | Purpose |
|--|---|
| Ambient Air Quality | - |
| Stack Emission | R.A.B.H |
| Stack Emission | Coal Mill |
| Stack Emission | Cooler E.S.P |
| Waste Water Analysis Result (Treated) | STP Water Analysis |
| Noise Level Measurement Test | - |
| | Ambient Air Quality Stack Emission Stack Emission Stack Emission Waste Water Analysis Result (Treated) |

Thanking you,

For Hills Cement Company Ltd HILLS CEMENT COMPANY LTD.

Authorized Signatory Authorised Signatory

Copy Toy- The Joint Director (S), Ministry of Environment, Forest NE Regional Office, Lumbatngen, Shillong-793021 for information

HILLS CEMENT COMPANY LIMITED

ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/HCCL/21-22/AA-10/01

Date : 08/11/2021

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)↓ | TION(S)↓ Date of Sampling | PM 2.5 (μg/m³) | PM 10 (μg/m³) | SO ₂ (μg/m³) | NO ₂ (μg/m³) |
|---------|--|---------------------------|-------------------|------------------|----------------------------|----------------------------|
| | $LIMIT(S) \rightarrow$ | *** | 60 | 100 | 80 | 80 |
| 01 | In-front of Guest House | 06.10.2021 | 23.4 | 44.6 | <5.0 | < 6.0 |
| 02 | Near Crusher Area | 07.10.2021 | 27.8 | 51.9 | 5.2 | 7.5 |
| 03 | In- Front of Compressor House (Cement Mill) | 06.10.2021 | 22.5 | 48.4 | 6.2 | 7.8 |
| 04 | Near Mines | 07.10.2021 | 29.3 | 53.7 | <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.



ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/HCCL/21-22/N-10/01

Date : 08/11/2021

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

NOISE LEVEL MEASUREMENT RESULTS

| | | Date | Day Time | | Night Time | |
|---------|--|------------|---------------------------|-----------------|---------------------------|-----------------|
| Sl. No. | No. Location(s) Of Measurement | | L _{eq} (dB-A) | Limit (dB-A) | L _{eq} (dB-A) | Limit (dB-A) |
| 1 | In-front of Guest House | 06.10.2021 | 49.3 | 75 | 41.2 | 70 |
| 2 | Near Crusher Area | 06.10.2021 | 71.2 | 75 | 60.3 | 70 |
| 3 | In- Front of Compressor House (Cement Mill) | 07.10.2021 | 69.8 | 75 | 68.5 | 70 |
| 4 | Near Mines | 07.10.2021 | 46.7 | 75 | 34.3 | 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.

ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/HCCL/21-22/SE-10/01

Date : 08/11/2021

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. | н | HCCL/21-22/SE-10/01 | | | | |
|---------|--|-------------------------|--------------------------|-----|--|--|--|
| 02 | Date of Sampling | | 06.10.2021 | | | | |
| 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) | | 179 | | | | |
| 07 | Exit Velocity of Gas (m/sec) | | 15.1 | | | | |
| 08 | Flow Rate (Nm³/hr) | | 253365 | | | | |
| 09 | Type of Fuel Used | | NA* | | | | |
| | Analy | sis Results of Flue Gas | | | | | |
| SI. No. | Parameter(s) | Result(s) | Result(s) Unit(s) | | | | |
| j. | Particulate Matter | 19 | 19 mg/Nm ³ | | | | |
| ii. | Sulphur Dioxide (as SO ₂) | 666 | 666 mg/Nm ³ 1 | | | | |
| iii. | Oxides of Nitrogen (as NO _x) | 287 | 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.

Envirocon Building, I.O.C.L (AOD) New Market P.O.: Digboi, Dist.: Tinsukia, Assam – 786 171 Ph: 03751-264414, 9435008657, 8876028672

E-mail: envirocon@rediffmail.com

ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/HCCL/21-22/SE-10/02

Date : 08/11/2021

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. | Н | HCCL/21-22/SE-10/02 | | | | |
|---------|--|-------------------------|---------------------------|-----|--|--|--|
| 02 | Date of Sampling | | 06.10.2021 | | | | |
| 03 | Material of Construction | | M. S. | | | | |
| 04 | Stack Attached To | | Coal Mill | | | | |
| 05 | Stack Diameter (Meter) | | 1.2 | | | | |
| 06 | Flue Gas Temperature (°C) | | 59 | | | | |
| 07 | Exit Velocity of Gas (m/sec) | | 13.2 | | | | |
| 08 | Flow Rate (Nm³/hr) | | 48246 | | | | |
| 09 | Type of Fuel Used | | Coal | | | | |
| | Analy | sis Results of Flue Gas | | | | | |
| Sl. No. | Parameter(s) | Result(s) | Result(s) Unit(s) | | | | |
| L. | Particulate Matter | 23 | 23 mg/Nm ³ | | | | |
| ű. | Sulphur Dioxide (as SO ₂) | 691 | 691 mg/Nm ³ 10 | | | | |
| iii. | Oxides of Nitrogen (as NO _x) | 315 | 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.

Envirocon Building, I.O.C.L (AOD) New Market P.O.: Digboi, Dist.: Tinsukia, Assam – 786 171 Ph: 03751-264414, 9435008657, 8876028672

ISO 9001:2015 Certified ISO 45001:2018 Certified

E-mail: envirocon@rediffmail.com

Report No.: ENV/HCCL/21-22/SE-10/03

Date : 08/11/2021

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-10/03 | | | | | |
|---------|--|-------------------------|--|-----|--|--|--|
| 02 | Date of Sampling | | 07.10.2021 | | | | |
| 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) | | 221 | | | | |
| 07 | Exit Velocity of Gas (m/sec) | | 16.2 | | | | |
| 08 | Flow Rate (Nm³/hr) | | 216655 | | | | |
| 09 | Type of Fuel Used | | NA* | | | | |
| | Analy | sis Results of Flue Gas | | | | | |
| Sl. No. | Parameter(s) | Result(s) | Result(s) Unit(s) | | | | |
| i. | Particulate Matter | 17 | 17 mg/Nm ³ | | | | |
| ii. | Sulphur Dioxide (as SO ₂) | BDL* | BDL ^a mg/Nm ³ 10 | | | | |
| 111. | Oxides of Nitrogen (as NO _x) | 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, LO.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.



ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/HCCL/21-22/WW-10/01

Date : 08/11/2021

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

WASTE WATER ANALYSIS RESULTS

Sample Ref. No. :

: HCCL/21-22/WW-0710/01

Sample Type/Source

: Waste Water (Treated)/STP Outlet

Sample Collected By

: Representative of ENVIROCON

Sample Collected On Sample Received On : 07.10.2021 : 09.10.2021

Analysis Protocol

: IS 3025

| Sl. No. | Parameter(s) | Unit(s) | Result(s) | Limit (As Per CPCB Standards) |
|---------|---|---------|-----------|--|
| 1. | pH | | 6.71 | 5.5 - 9.0 |
| 2. | Temperature | °C | 26.1 | shall not exceed 5°C above the receiving water temperature |
| 3. | Total Suspended Solids | mg/l | 17 | 100 |
| 4. | Biochemical Oxygen Demand | mg/l | 22 | 30 |
| 5. | Chemical Oxygen Demand | mg/l | 91 | 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 | 2.6 | 50 |
| 9. | Total Kjeldahl Nitrogen (as NH ₃) | mg/l | 8.7 | 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.