

**AMBIENT AIR QUALITY TEST RESULTS**

M/s HILLS CEMENT COMPANY LIMITED

Vill: Mynkree, 116 KM Stone, NH- 44

Sub Division: Khliehriat; Dist: Jaintia Hills

Meghalaya

(May - 2016)

| LOCATIONS ↓ | Date of Sampling | PM 2.5 ($\mu\text{g}/\text{m}^3$) | PM 10 ($\mu\text{g}/\text{m}^3$) | NO₂ ($\mu\text{g}/\text{m}^3$) | SO₂ ($\mu\text{g}/\text{m}^3$) |
|--|-------------------------|---|--|---|---|
| LIMITS → | -- | 60 (24 hrs. Average) | 100 (24 hrs. Average) | 80 (24 hrs. Average) | 80 (24 hrs. Average) |
| In- Front of Guest House | 11.05.2016 | 32.3 | 64.3 | 7.8 | ND |
| Near Crusher Area | 11.05.2016 | 51.7 | 85.2 | 13.2 | 6.3 |
| In- Front of Compressor House (Cement Mill) | 12.05.2016 | 46.2 | 75.8 | 15.7 | 6.8 |

Analysis Protocol: **IS 5182****ND:** Not Detected

Checked By: Pankaj Baroi; ENVIROCON

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 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, Digboi Stores Building, New Market, Digboi - 786171, Assam.

**STACK EMISSION TEST RESULTS**

M/s HILLS CEMENT COMPANY LIMITED

Vill: Mynkree, 116 KM Stone, NH- 44

Sub Division: Khliehriat; Dist: Jaintia Hills

Meghalaya

(MAY- 2016)

| | | |
|----|---|----------------------|
| 01 | Stack Emission Ref. No. | ENV/HCCL/01/May/2016 |
| 02 | Date of Sampling | 11.05.2016 |
| 03 | Material of Construction | M.S. |
| 04 | Stack Attached To | B.F. of Crusher |
| 05 | Flue Gas Temperature (°C) | 35 |
| 06 | Exit Velocity of Gas (m/sec) | 4.2 |
| 07 | Flow Rate (Nm ³ /hr) | 11,491 |
| 08 | Type of Fuel Used | NA |
| 09 | Analysis Result of Flue Gas | |
| | 1. Particulate Matter (mg/Nm ³) | 40.1 |

Checked By: Pankaj Baroi; ENVIROCON

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STACK EMISSION TEST RESULTS

M/s HILLS CEMENT COMPANY LIMITED

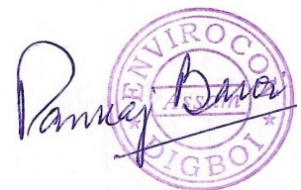
Vill: Mynkree, 116 KM Stone, NH- 44

Sub Division: Khliehriat; Dist: Jaintia Hills

Meghalaya

(MAY- 2016)

| | | |
|----|---|----------------------|
| 01 | Stack Emission Ref. No. | ENV/HCCL/02/May/2016 |
| 02 | Date of Sampling | 11.05.2016 |
| 03 | Material of Construction | M.S. |
| 04 | Stack Attached To | R.A.B.H |
| 05 | Flue Gas Temperature (°C) | 181 |
| 06 | Exit Velocity of Gas (m/sec) | 14.3 |
| 07 | Flow Rate (Nm ³ /hr) | 2,38,884 |
| 08 | Type of Fuel Used | NA |
| 09 | Analysis Result of Flue Gas | |
| | 1. Particulate Matter (mg/Nm ³) | 32.4 |



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M/s HILLS CEMENT COMPANY LIMITED

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Meghalaya

(MAY- 2016)

| | | |
|----|---|----------------------|
| 01 | Stack Emission Ref. No. | ENV/HCCL/03/May/2016 |
| 02 | Date of Sampling | 11.05.2016 |
| 03 | Material of Construction | M.S |
| 04 | Stack Attached To | Coal Mill |
| 05 | Flue Gas Temperature (°C) | 64 |
| 06 | Exit Velocity of Gas (m/sec) | 8.4 |
| 07 | Flow Rate (Nm ³ /hr) | 30,247 |
| 08 | Type of Fuel Used | Coal |
| 09 | Analysis Result of Flue Gas | |
| | 1. Particulate Matter (mg/Nm ³) | 34.8 |

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STACK EMISSION TEST RESULTS

M/s HILLS CEMENT COMPANY LIMITED

Vill: Mynkree, 116 KM Stone, NH- 44

Sub Division: Khliehriat; Dist: Jaintia Hills

Meghalaya

(MAY- 2016)

| | | |
|----|---|----------------------|
| 01 | Stack Emission Ref. No. | ENV/HCCL/04/May/2016 |
| 02 | Date of Sampling | 12.05.2016 |
| 03 | Material of Construction | M.S |
| 04 | Stack Attached To | Cooler E.S.P |
| 05 | Flue Gas Temperature (°C) | 227 |
| 06 | Exit Velocity of Gas (m/sec) | 14.7 |
| 07 | Flow Rate (Nm ³ /hr) | 1,94,235 |
| 08 | Type of Fuel Used | Coal |
| 09 | Analysis Result of Flue Gas | |
| | 1. Particulate Matter (mg/Nm ³) | 29.3 |

Pankaj Baroi

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STACK EMISSION TEST RESULTS

M/s HILLS CEMENT COMPANY LIMITED

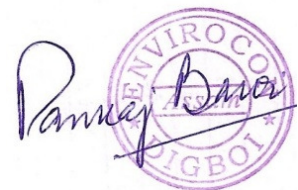
Vill: Mynkree, 116 KM Stone, NH- 44

Sub Division: Khliehriat; Dist: Jaintia Hills

Meghalaya

(MAY- 2016)

| | | |
|----|---|----------------------|
| 01 | Stack Emission Ref. No. | ENV/HCCL/05/May/2016 |
| 02 | Date of Sampling | 12.05.2016 |
| 03 | Material of Construction | M.S |
| 04 | Stack Attached To | Cement Mill |
| 05 | Flue Gas Temperature (°C) | 64 |
| 06 | Exit Velocity of Gas (m/sec) | 8.2 |
| 07 | Flow Rate (Nm ³ /hr) | 29,526 |
| 08 | Type of Fuel Used | NA |
| 09 | Analysis Result of Flue Gas | |
| | 1. Particulate Matter (mg/Nm ³) | 33.6 |



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Meghalaya

(MAY- 2016)

| | | |
|----|---|----------------------|
| 01 | Stack Emission Ref. No. | ENV/HCCL/06/May/2016 |
| 02 | Date of Sampling | 12.05.2016 |
| 03 | Material of Construction | M.S |
| 04 | Stack Attached To | Cement Packing House |
| 05 | Flue Gas Temperature (°C) | 33 |
| 06 | Exit Velocity of Gas (m/sec) | 6.2 |
| 07 | Flow Rate (Nm ³ /hr) | 10,927 |
| 08 | Type of Fuel Used | NA |
| 09 | Analysis Result of Flue Gas | |
| | 1. Particulate Matter (mg/Nm ³) | 38.4 |

ENVIROCON
DIGBOI

Checked By: Pankaj Baroi; ENVIROCON

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NOISE LEVEL MEASUREMENT RESULTS

M/s HILLS CEMENT COMPANY LIMITED

Vill: Mynkree, 116 KM Stone, NH- 44

Sub Division: Khliehriat; Dist: Jaintia Hills

Meghalaya

(MAY- 2016)

Measurement Date: **11.05.2016**

(Day Time)

| Sl. No. | Location | Maximum (dB-A) | Minimum (dB-A) | Leq (dB-A) |
|---------|--------------------|----------------|----------------|------------|
| 1 | Near Kiln Area | 74 | 72 | 73 |
| 2 | Near CCR Building | 67 | 64 | 66 |
| 3 | Main Gate | 70 | 63 | 68 |
| 4 | Near Main Building | 65 | 59 | 62 |

(Night Time)

| Sl. No. | Location | Maximum (dB-A) | Minimum (dB-A) | Leq (dB-A) |
|---------|--------------------|----------------|----------------|------------|
| 1 | Near Kiln Area | 70 | 67 | 69 |
| 2 | Near CCR Building | 59 | 54 | 56 |
| 3 | Main Gate | 56 | 49 | 52 |
| 4 | Near Main Building | 53 | 44 | 47 |



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AMBIENT NOISE LEVEL STANDARDS

SCHEDULE

[Rule 3(1) and 4(1) of Noise Pollution (Regulation & Control) Rules, 2000]

| Area Code | Category of Area/ Zone | Limit in dB (A) in Leq | |
|-----------|------------------------|------------------------|------------|
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

NB:

Silence Zone is an area comprising an area not less than 100 m around Hospitals, Educational Institutions, Courts, Religious Places or any other area which is declared as such by the competent authority.

Specific SHE Standard: Workplace Noise

| Ambient Noise Level | Personal Noise Exposure < 85 dB (A) Leq (8h) | Personal Noise Exposure => 85 dB (A) Leq (8h) |
|------------------------------------|---|--|
| < 85 dB (A) Leq | No action required | PPE Mandatory |
| => 85dB (A) Leq < 90 dB (A) Leq | Hearing protection zone. PPE Advisory. | Hearing protection zone. PPE Mandatory. |
| => 90 dB (A) Leq | Hearing protection zone. PPE Mandatory. | Hearing protection zone. PPE Mandatory. |
