

# STAR CEMENT LIMITED

Regd. Office & Works: Lumshnong, PO-Khaliehriat, Distt. – East Jaintia Hills, Meghalaya-793210  
Ph: 03655-278215/16/18, Fax: 03655-278217, e-mail: [lumshnong@starcement.co.in](mailto:lumshnong@starcement.co.in)

Ref: SCL/EHS/LUM/2020-21/029

Dated: 23/03/2021

To,

The Member Secretary  
Meghalaya State Pollution Control Board  
'ARDEN', Lumpyngngad,  
Shillong - 793014

Subject: Monthly Environmental Monitoring Report.

Ref. No.: MPCB/CON-900-Pt-IV/2020-2021/71, Dated. Shillong, the 18<sup>th</sup> May, 2020.

Dear Sir,

Please find enclosed herewith the monthly report of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission, Noise Level monitoring, Water monitoring reports (Drinking, ETP, STP) of **Star Cement Limited** for the month of **February, 2021** for your kind perusal.

Thanking you,

Yours faithfully  
For **Star Cement Limited**


  
Authorized Signatory

Enclosed: Monitoring Report for the month of Feb'21.

**STARCEMENT**  
Solid Setting

Regd. Office & Works: Lumshnong, P.O. - Khaliehriat, Distt. - East Jaintia Hills, Meghalaya - 793 210, Ph: 03655-278215/16/18, Fax: 03655-278217, e-mail: [lumshnong@starcement.co.in](mailto:lumshnong@starcement.co.in)  
Works : Gopinath Bordoloi Road, Village - Chamatapather, Distract - Kamrup (M), Guwahati - 782 402, Assam, e-mail: [guu@starcement.co.in](mailto:guu@starcement.co.in)  
Guwahati Office: Mayur Garden, 2nd Floor, Opp. Rajiv Bhawan, G.S. Road, Guwahati - 781 005, Assam, Ph: 0361-2462215/16, Fax: 0361-2462217, e-mail: [guwahati@starcement.co.in](mailto:guwahati@starcement.co.in)  
Delhi Office: 281, Deepali, Pitampura, Delhi-110 034, Ph: 011 - 2703 3821/22/27, Fax: 011 - 2703 3824, e-mail: [delhi@starcement.co.in](mailto:delhi@starcement.co.in)  
Kolkata Office: 3, Alipore Road, Satyam Tower, 1st Floor, Unit No. 9B, Kolkata - 700 027, Ph: 033-2448 4169/4170, Fax: 033-2448 4168, e-mail: [kolkata@starcement.co.in](mailto:kolkata@starcement.co.in)  
Durgapur Office: C/o - Ma Chand Durga Cement Ltd., Bamunani Industrial Area, P.O. - Bamunani, P.S. - Kanksha, Dist. Burdwan, West Bengal - 713 212  
Siliguri Office: Village - Kartowa, P.O. - Mohanvita, District - Jalpaiguri, West Bengal - 735 135 / Top Plaza, 3rd Floor, Near City Plaza, Sevoke Road, Siliguri - 734 001, Ph: 0353 - 2643611/12

ANKURA Office: Purandar Pur, District - Bankura, West Bengal - 722 155  
AN ISO 9001, ISO 14001 & OHSAS 18001 CERTIFIED COMPANY  
CIN NO. U26942ML2001PLC006663

|   |  |  |                |                |
|---|--|--|----------------|----------------|
|  | <b>STAR CEMENT LIMITED</b><br>Lumshnong, Meghalaya |  | Reference No.  | SCL/Env/F – 01 |
|   |  |  | Issue No.      | 1              |
|   |  |  | Date of Issue: | 24.08.2013     |
|   | <b>AMBIENT AIR QUALITY MONITORING REPORT</b>       |  | Revision No.   | 4              |
|   |  |  | Date of Rev.   | 01.12.2020     |

Ref: SCL/Env/AAQM/Monthly/2020-21/061

**Location of Sampling** : SCL, Lumshnong  
**Date of Sampling** : 03.02.2021 – 04.02.2021  
**Distance between the Industry and sampling Location** : NA  
**Time duration of sampling** : 24 hrs.  
**Weather** : Dry  
**Total Rain Fall (mm)** : No Rain Fall  
**Ambient Temperature (<sup>0</sup>C)**  
    **Maximum** : 24.0 <sup>0</sup>C  
    **Minimum** : 9.2 <sup>0</sup>C  
**Relative Humidity (%)**  
    **Maximum** : 95.3 %  
    **Minimum** : 46.0 %  
**Wind Direction** : E-W  
**Wind Speed (km/hr.)** : 8.0

| Pollutants  | Air Quality Monitoring Analysis Result |                                  |   |                                   | National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area |
|---|--|----------------------------------|---|-----------------------------------|--|
|   | Station Name & No.                     |                                  |   |                                   |  |
|   | 1                                      | 2                                | 3   | 4                                 |  |
|   | (Near Star Club)<br>C/224/20-21        | (Near Pump House)<br>C/225/20-21 | (Near Security Gate No. 3)<br>C/226/20-21 | (Staff Quarters-4)<br>C/227/20-21 |  |
| GPS Coordinate  | 25°10'36"N<br>92°23'16"E 928 m         | 25°10'42"N<br>92°23'32"E 919 m   | 25°10'27"N<br>92°23'37"E 944 m            | 25°10'43"N<br>92°23'14"E 946 m    |  |
| Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3   | 49.5                                   | 54.3                             | 52.8                                      | 52.1                              | 100  |
| Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3 | 29.1                                   | 29.2                             | 30.7                                      | 31.2                              | 60   |
| Sulphur Dioxide SO2 (µg/m3)   | 7.3                                    | 8.2                              | 9.2                                       | 7.1                               | 80   |
| Nitrogen Dioxide NO2 (µg/m3)  | 10.1                                   | 11.5                             | 11.8                                      | 11.3                              | 80   |

**Remarks:** The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.


  
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VPO – Lumshnong, District – East Jaintia Hill, Meghalaya - 793210

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|  | <b>STAR CEMENT LIMITED</b><br>Lumshnong, Meghalaya | Reference No.  | SCL/Env/F – 01 |
|   |  | Issue No.      | 1              |
|   |  | Date of Issue: | 24.08.2013     |
|   | <b>AMBIENT AIR QUALITY MONITORING REPORT</b>       | Revision No.   | 4              |
|   |  | Date of Rev.   | 01.12.2020     |

Ref: SCL/Env/AAQM/Monthly/2020-21/062

|   |                           |
|---|---------------------------|
| Location of Sampling                                | : SCL, Lumshnong          |
| Date of Sampling                                    | : 05.02.2021 – 06.02.2021 |
| Distance between the Industry and sampling Location | : NA                      |
| Time duration of sampling                           | : 24 hrs.                 |
| Weather   | : Dry                     |
| Total Rain Fall (mm)                                | : No Rain Fall            |
| Ambient Temperature ( $^{\circ}\text{C}$ )          |                           |
| Maximum   | : 26.1 $^{\circ}\text{C}$ |
| Minimum   | : 10.1 $^{\circ}\text{C}$ |
| Relative Humidity (%)                               |                           |
| Maximum   | : 95.2 %                  |
| Minimum   | : 34.0 %                  |
| Wind Direction                                      | : NE - SW                 |
| Wind Speed (km/hr.)                                 | : 11.8                    |

| Pollutants  | Air Quality Monitoring Analysis Result |                                  |   |                                   | National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area |
|---|--|----------------------------------|---|-----------------------------------|--|
|   | Station Name & No.                     |                                  |   |                                   |  |
|   | 1                                      | 2                                | 3   | 4                                 |  |
|   | (Near Star Club)<br>C/228/20-21        | (Near Pump House)<br>C/229/20-21 | (Near Security Gate No. 3)<br>C/230/20-21 | (Staff Quarters-4)<br>C/231/20-21 |  |
| GPS Coordinate  | 25*10'36"N<br>92*23'16"E 928 m         | 25*10'42"N<br>92*23'32"E 919 m   | 25*10'27"N<br>92*23'37"E 944 m            | 25*10'43"N<br>92*23'14"E 946 m    |  |
| Suspended Particulate Matter (Size less than 10 μm) or PM10 μg/m3   | 51.2                                   | 58.1                             | 53.1                                      | 50.5                              | 100  |
| Suspended Particulate Matter (Size less than 2.5 μm) or PM2.5 μg/m3 | 30.4                                   | 34.0                             | 29.3                                      | 29.7                              | 60   |
| Sulphur Dioxide SO2 (μg/m3)   | 6.9                                    | 7.4                              | 7.6                                       | 9.5                               | 80   |
| Nitrogen Dioxide NO2 (μg/m3)  | 9.8                                    | 12.3                             | 10.2                                      | 12.4                              | 80   |

**Remarks:** The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.

  
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|   |  | Issue No.      | 1              |
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|   |  | Revision No.   | 4              |
|   |  | Date of Rev.   | 01.12.2020     |

Ref: SCL/Env/AAQM/Monthly/2020-21/063

|   |                           |
|---|---------------------------|
| Location of Sampling                                | : SCL, Lumshnong          |
| Date of Sampling                                    | : 11.02.2021 – 12.02.2021 |
| Distance between the Industry and sampling Location | : NA                      |
| Time duration of sampling                           | : 24 hrs.                 |
| Weather   | : Dry                     |
| Total Rain Fall (mm)                                | : No Rain Fall            |
| Ambient Temperature ( <sup>0</sup> C)               |                           |
| Maximum   | : 24.0 <sup>0</sup> C     |
| Minimum   | : 10.3 <sup>0</sup> C     |
| Relative Humidity (%)                               |                           |
| Maximum   | : 91.3 %                  |
| Minimum   | : 38.4 %                  |
| Wind Direction                                      | : NE - SW                 |
| Wind Speed (km/hr.)                                 | : 6.0                     |

| Pollutants  | Air Quality Monitoring Analysis Result |                                  |   |                                   | National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area |
|---|--|----------------------------------|---|-----------------------------------|--|
|   | Station Name & No.                     |                                  |   |                                   |  |
|   | 1                                      | 2                                | 3   | 4                                 |  |
|   | (Near Star Club)<br>C/232/20-21        | (Near Pump House)<br>C/233/20-21 | (Near Security Gate No. 3)<br>C/234/20-21 | (Staff Quarters 4)<br>C/235/20-21 |  |
| GPS Coordinate  | 25°10'36"N<br>92°23'16"E 928 m         | 25°10'42"N<br>92°23'32"E 919 m   | 25°10'27"N<br>92°23'37"E 944 m            | 25°10'43"N<br>92°23'14"E 946 m    |  |
| Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3   | 48.3                                   | 54.7                             | 59.2                                      | 56.2                              | 100  |
| Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3 | 31.7                                   | 32.8                             | 32.4                                      | 32.5                              | 60   |
| Sulphur Dioxide SO2 (µg/m3)   | 7.5                                    | 8.3                              | 8.1                                       | 8.1                               | 80   |
| Nitrogen Dioxide NO2 (µg/m3)  | 8.9                                    | 13.5                             | 14.6                                      | 13.5                              | 80   |

**Remarks:** The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.

  
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|   |  | Date of Issue: | 24.08.2013     |
|   | <b>AMBIENT AIR QUALITY MONITORING REPORT</b>       | Revision No.   | 4              |
|   |  | Date of Rev.   | 01.12.2020     |

Ref: SCL/Env/AAQM/Monthly/2020-21/064

**Location of Sampling** : SCL, Lumshnong  
**Date of Sampling** : 15.02.2021 – 16.02.2021  
**Distance between the Industry and sampling Location** : NA  
**Time duration of sampling** : 24 hrs.  
**Weather** : Dry  
**Total Rain Fall (mm)** : No Rain Fall  
**Ambient Temperature (<sup>0</sup>C)**  
**Maximum** : 24.1 <sup>0</sup>C  
**Minimum** : 10.0 <sup>0</sup>C  
**Relative Humidity (%)**  
**Maximum** : 91.0 %  
**Minimum** : 44.0 %  
**Wind Direction** : NE-SW  
**Wind Speed (km/hr.)** : 10.8

| Pollutants  | Air Quality Monitoring Analysis Result |                                  |   |                                   | National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area |
|---|--|----------------------------------|---|-----------------------------------|--|
|   | Station Name & No.                     |                                  |   |                                   |  |
|   | 1                                      | 2                                | 3   | 4                                 |  |
|   | (Near Star Club)<br>C/236/20-21        | (Near Pump House)<br>C/237/20-21 | (Near Security Gate No. 3)<br>C/238/20-21 | (Staff Quarters-4)<br>C/239/20-21 |  |
| GPS Coordinate  | 25°10'36"N<br>92°23'16"E 928 m         | 25°10'42"N<br>92°23'32"E 919 m   | 25°10'27"N<br>92°23'37"E 944 m            | 25°10'43"N<br>92°23'14"E 946 m    |  |
| Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3   | 52.7                                   | 58.2                             | 58.7                                      | 58.4                              | 100  |
| Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3 | 28.4                                   | 36.5                             | 32.6                                      | 32.9                              | 60   |
| Sulphur Dioxide SO2 (µg/m3)   | 6.6                                    | 7.2                              | 8.2                                       | 6.9                               | 80   |
| Nitrogen Dioxide NO2 (µg/m3)  | 11.3                                   | 12.8                             | 12.7                                      | 9.8                               | 80   |

**Remarks:** The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.



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|   |  | Issue No.      | 1              |
|   |  | Date of Issue: | 24.08.2013     |
|   | <b>AMBIENT AIR QUALITY MONITORING REPORT</b>       | Revision No.   | 4              |
|   |  | Date of Rev.   | 01.12.2020     |

Ref: SCL/Env/AAQM/Monthly/2020-21/065

**Location of Sampling** : SCL, Lumshnong  
**Date of Sampling** : 18.02.2021 – 19.02.2021  
**Distance between the Industry and sampling Location** : NA  
**Time duration of sampling** : 24 hrs.  
**Weather** : Dry  
**Total Rain Fall (mm)** : No Rain Fall  
**Ambient Temperature (<sup>0</sup>C)**  
Maximum : 28.5 <sup>0</sup>C  
Minimum : 13.0 <sup>0</sup>C  
**Relative Humidity (%)**  
Maximum : 91.1 %  
Minimum : 34.5 %  
**Wind Direction** : NE - SW  
**Wind Speed (km/hr.)** : 7.4

| Pollutants  | Air Quality Monitoring Analysis Result |                                  |   |                                   | National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area |
|---|--|----------------------------------|---|-----------------------------------|--|
|   | Station Name & No.                     |                                  |   |                                   |  |
|   | 1                                      | 2                                | 3   | 4                                 |  |
|   | (Near Star Club)<br>C/240/20-21        | (Near Pump House)<br>C/241/20-21 | (Near Security Gate No. 3)<br>C/242/20-21 | (Staff Quarters-4)<br>C/243/20-21 |  |
| GPS Coordinate  | 25°10'36"N<br>92°23'16"E 928 m         | 25°10'42"N<br>92°23'32"E 919 m   | 25°10'27"N<br>92°23'37"E 944 m            | 25°10'43"N<br>92°23'14"E 946 m    |  |
| Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3   | 51.2                                   | 53.6                             | 57.3                                      | 61.0                              | 100  |
| Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3 | 31.1                                   | 29.8                             | 29.9                                      | 28.4                              | 60   |
| Sulphur Dioxide SO2 (µg/m3)   | 6.4                                    | 7.5                              | 8.9                                       | 7.2                               | 80   |
| Nitrogen Dioxide NO2 (µg/m3)  | 12.2                                   | 10.6                             | 13.4                                      | 11.7                              | 80   |

**Remarks:** The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.


  
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|   |  | Issue No.      | 1              |
|   |  | Date of Issue: | 24.08.2013     |
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|   |  | Date of Rev.   | 01.12.2020     |

Ref: SCL/Env/AAQM/Monthly/2020-21/066

|   |                           |
|---|---------------------------|
| Location of Sampling                                | : SCL, Lumshnong          |
| Date of Sampling                                    | : 20.02.2021 – 21.02.2021 |
| Distance between the Industry and sampling Location | : NA                      |
| Time duration of sampling                           | : 24 hrs.                 |
| Weather   | : Dry                     |
| Total Rain Fall (mm)                                | : No Rain Fall            |
| Ambient Temperature ( <sup>0</sup> C)               |                           |
| Maximum   | : 26.2 <sup>0</sup> C     |
| Minimum   | : 14.1 <sup>0</sup> C     |
| Relative Humidity (%)                               |                           |
| Maximum   | : 86.4 %                  |
| Minimum   | : 42.1 %                  |
| Wind Direction                                      | : N-W                     |
| Wind Speed (km/hr.)                                 | : 3.1                     |

| Pollutants  | Air Quality Monitoring Analysis Result |                                  |   |                                   | National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area |
|---|--|----------------------------------|---|-----------------------------------|--|
|   | Station Name & No.                     |                                  |   |                                   |  |
|   | 1                                      | 2                                | 3   | 4                                 |  |
|   | (Near Star Club)<br>C/245/20-21        | (Near Pump House)<br>C/246/20-21 | (Near Security Gate No. 3)<br>C/247/20-21 | (Staff Quarters 4)<br>C/248/20-21 |  |
| GPS Coordinate  | 25°10'36"N<br>92°23'16"E 928 m         | 25°10'42"N<br>92°23'32"E 919 m   | 25°10'27"N<br>92°23'37"E 944 m            | 25°10'43"N<br>92°23'14"E 946 m    |  |
| Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3   | 53.9                                   | 59.8                             | 59.8                                      | 57.3                              | 100  |
| Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3 | 29.5                                   | 36.4                             | 33.2                                      | 34.1                              | 60   |
| Sulphur Dioxide SO2 (µg/m3)   | 7.3                                    | 8.1                              | 7.3                                       | 8.6                               | 80   |
| Nitrogen Dioxide NO2 (µg/m3)  | 10.8                                   | 12.8                             | 12.6                                      | 12.6                              | 80   |

**Remarks:** The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.



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|   |  | Date of Rev.   | 01.12.2020     |

Ref: SCL/Env/AAQM/Monthly/2020-21/067

**Location of Sampling** : SCL, Lumshnong  
**Date of Sampling** : 24.02.2021 – 25.02.2021  
**Distance between the Industry and sampling Location** : NA  
**Time duration of sampling** : 24 hrs.  
**Weather** : Dry  
**Total Rain Fall (mm)** : No Rain Fall  
**Ambient Temperature (<sup>0</sup>C)**  
Maximum : 26.4 <sup>0</sup>C  
Minimum : 12.1 <sup>0</sup>C  
**Relative Humidity (%)**  
Maximum : 88.6 %  
Minimum : 37.1 %  
**Wind Direction** : NE - SW  
**Wind Speed (km/hr.)** : 17.8

| Pollutants  | Air Quality Monitoring Analysis Result |                                  |   |                                   | National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area |
|---|--|----------------------------------|---|-----------------------------------|--|
|   | Station Name & No.                     |                                  |   |                                   |  |
|   | 1                                      | 2                                | 3   | 4                                 |  |
|   | (Near Star Club)<br>C/249/20-21        | (Near Pump House)<br>C/250/20-21 | (Near Security Gate No. 3)<br>C/251/20-21 | (Staff Quarters 4)<br>C/252/20-21 |  |
| GPS Coordinate  | 25°10'36"N<br>92°23'16"E 928 m         | 25°10'42"N<br>92°23'32"E 919 m   | 25°10'27"N<br>92°23'37"E 944 m            | 25°10'43"N<br>92°23'14"E 946 m    |  |
| Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3   | 48.8                                   | 50.1                             | 56.2                                      | 46.8                              | 100  |
| Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3 | 32.5                                   | 30.8                             | 29.4                                      | 29.5                              | 60   |
| Sulphur Dioxide SO2 (µg/m3)   | 8.1                                    | 6.8                              | 7.5                                       | 8.9                               | 80   |
| Nitrogen Dioxide NO2 (µg/m3)  | 11.2                                   | 12.4                             | 11.3                                      | 9.7                               | 80   |

**Remarks:** The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.

  
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Ref: SCL/Env/AAQM/Monthly/2020-21/068

**Location of Sampling** : SCL, Lumshnong  
**Date of Sampling** : 26.02.2021 – 27.02.2021  
**Distance between the Industry and sampling Location** : NA  
**Time duration of sampling** : 24 hrs.  
**Weather** : Dry  
**Total Rain Fall (mm)** : No Rain Fall  
**Ambient Temperature (<sup>0</sup>C)**  
Maximum : 25.2 <sup>0</sup>C  
Minimum : 15.2 <sup>0</sup>C  
**Relative Humidity (%)**  
Maximum : 94.2 %  
Minimum : 57.1 %  
**Wind Direction** : NE - SW  
**Wind Speed (km/hr.)** : 23.5

| Pollutants  | Air Quality Monitoring Analysis Result |                                  |   |                                   | National Ambient Air Quality Standards Permissible Limits for Rural , Ind., Residential Area |
|---|--|----------------------------------|---|-----------------------------------|--|
|   | Station Name & No.                     |                                  |   |                                   |  |
|   | 1                                      | 2                                | 3   | 4                                 |  |
|   | (Near Star Club)<br>C/253/20-21        | (Near Pump House)<br>C/254/20-21 | (Near Security Gate No. 3)<br>C/255/20-21 | (Staff Quarters 4)<br>C/256/20-21 |  |
| GPS Coordinate  | 25°10'36"N<br>92°23'16"E 928 m         | 25°10'42"N<br>92°23'32"E 919 m   | 25°10'27"N<br>92°23'37"E 944 m            | 25°10'43"N<br>92°23'14"E 946 m    |  |
| Suspended Particulate Matter (Size less than 10 µm) or PM10 µg/m3   | 49.1                                   | 55.2                             | 60.7                                      | 53.4                              | 100  |
| Suspended Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m3 | 33.8                                   | 33.5                             | 31.6                                      | 28.3                              | 60   |
| Sulphur Dioxide SO2 (µg/m3)   | 7.9                                    | 7.9                              | 7.4                                       | 8.4                               | 80   |
| Nitrogen Dioxide NO2 (µg/m3)  | 10.7                                   | 9.7                              | 12.5                                      | 10.4                              | 80   |

**Remarks:** The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Rural Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.



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VPO – Lumshnong, District – East Jaintia Hill, Meghalaya - 793210

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|  | <b>STAR CEMENT LIMITED</b><br><b>Lumshnong, Meghalaya</b> | Reference No.  | SCL/EHS/F - 02 |
|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 02/02/2021


**Type of Stack** : Primary Crusher (Bag Filter)

**Laboratory Report No.** : S/101/20-21

**Parameters:**

1) Particulate Matter (PM) : 17.1 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

  
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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong  
**Date of Sampling** : 02/02/2021  
**Type of Stack** : Secondary Crusher (Bag Filter)  
**Laboratory Report No.** : S/102/20-21

**Parameters:**

1) Particulate Matter (PM) : 20.3 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

  
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|  | <b>STAR CEMENT LIMITED</b><br><b>Lumshnong, Meghalaya</b> | Reference No.  | SCL/EHS/F - 02 |
|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 02/02/2021

**Type of Stack** : RABH

**Laboratory Report No.** : S/103/20-21

**Parameters:**

1) Particulate Matter (PM) : 16.8 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  | <b>STAR CEMENT LIMITED</b><br><b>Lumshnong, Meghalaya</b> | Reference No.  | SCL/EHS/F - 02 |
|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 02/02/2021

**Type of Stack** : Coal Mill

**Laboratory Report No.** : S/104/20-21

**Parameters:**

1) Particulate Matter (PM) : 22.4 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 08/02/2021

**Type of Stack** : Cooler ESP

**Laboratory Report No.** : S/105/20-21

**Parameters:**

1) Particulate Matter (PM) : 19.6 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong  
**Date of Sampling** : 08/02/2021  
**Type of Stack** : Roller Press Mill (581 Bag Filter-1)  
**Laboratory Report No.** : S/106/20-21

**Parameters:**

1) Particulate Matter (PM) : 18.7 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 08/02/2021

**Type of Stack** : Cement Mill (Bag Filter)

**Laboratory Report No.** : S/107/20-21

**Parameters:**

1) Particulate Matter (PM) :20.9 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

  
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|  | <b>STAR CEMENT LIMITED</b><br><b>Lumshnong, Meghalaya</b> | Reference No.  | SCL/EHS/F - 02 |
|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong  
**Date of Sampling** : 08/02/2021  
**Type of Stack** : Packing Plant (Bag Filter)  
**Laboratory Report No.** : S/108/20-21

**Parameters:**

1) Particulate Matter (PM) : 14.5 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

  
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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong  
**Date of Sampling** : 17/02/2021  
**Type of Stack** : Primary Crusher (Bag Filter)  
**Laboratory Report No.** : S/109/20-21

**Parameters:**

1) Particulate Matter (PM) : 17.8 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

  
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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong  
**Date of Sampling** : 17/02/2021  
**Type of Stack** : Secondary Crusher (Bag Filter)  
**Laboratory Report No.** : S/110/20-21

**Parameters:**

1) Particulate Matter (PM) : 21.4 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

  
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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 17/02/2021

**Type of Stack** : RABH

**Laboratory Report No.** : S/111/20-21

**Parameters:**

1) Particulate Matter (PM) : 16.2 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 17/02/2021

**Type of Stack** : Coal Mill

**Laboratory Report No.** : S/112/20-21

**Parameters:**

1) Particulate Matter (PM) : 24.7 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 27/02/2021

**Type of Stack** : Cooler ESP

**Laboratory Report No.** : S/113/20-21

**Parameters:**

1) Particulate Matter (PM) : 19.1 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  | <b>STAR CEMENT LIMITED</b><br><b>Lumshnong, Meghalaya</b> | Reference No.  | SCL/EHS/F - 02 |
|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong  
**Date of Sampling** : 27/02/2021  
**Type of Stack** : Roller Press Mill (581 Bag Filter-1)  
**Laboratory Report No.** : S/114/20-21

**Parameters:**

1) Particulate Matter (PM) : 15.6 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  | <b>STAR CEMENT LIMITED</b><br><b>Lumshnong, Meghalaya</b> | Reference No.  | SCL/EHS/F - 02 |
|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong

**Date of Sampling** : 27/02/2021

**Type of Stack** : Cement Mill (Bag Filter)

**Laboratory Report No.** : S/115/20-21

**Parameters:**

1) Particulate Matter (PM) : 18.2 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.



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|  |   | Issue No.      | 01             |
|  | <b>STACK ANALYSIS REPORT</b>                              | Date of Issue: | 24.08.2013     |
|  |   | Revision No.   | 04             |
|  |   | Date of Rev.   | 01.06.2019     |

**Name of Sampling Location** : SCL, Lumshnong  
**Date of Sampling** : 27/02/2021  
**Type of Stack** : Packing Plant (Bag Filter)  
**Laboratory Report No.** : S/116/20-21

**Parameters:**


1) Particulate Matter (PM) : 12.6 mg/Nm<sup>3</sup>

**Remarks:** The parameter tested was found to be within the permissible limits of Stack Emission Standards as per EPA Notification G.S.R. 496(E) dated 9<sup>th</sup> May, 2016 and G.S.R. 497(E) dated 10<sup>th</sup> May, 2016.

  
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|  | <b>STAR CEMENT LIMITED</b><br><b>Lumshnong, Meghalaya</b> | Document No.   | SCL/EHS/Env/F-04 |
|  |   | Date of Issued | 01/05/2019       |
|  | <b>FUGITIVE EMISSION MONITORING REPORT</b>                | Revision No.   | 02               |
|  |   | Revision Date  | 01/01/2021       |

Ref: SCL/Env/Fugitive/Monthly/2020-21/008

**Month: February - 2021**




| Date       | Location                     | Fugitive Emission Results<br>(in $\mu\text{g}/\text{m}^3$ ) | Limit<br>(in $\mu\text{g}/\text{m}^3$ ) |
|------------|------------------------------|---|---|
| 22.02.2021 | Coal Storage Section         | 1265  | 2000                                    |
| 22.02.2021 | Limestone Storage<br>Section | 1850  | 5000                                    |
| 22.02.2021 | Cement Packing Plant         | 2160  | 5000                                    |



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|---|-------------------------------|---|------|------|---|---|------------------|------|-------------------|
|    | STAR CEMENT LIMITED           |   |      |      | Document No.  |   | MPL/EHS/Env/F-03 |      |                   |
|   |                               |   |      |      | Effective Date  |   | 01-05-2019       |      |                   |
|   | Lumshnong, Meghalaya          |   |      |      | Revision No.  |   | 04               |      |                   |
|   |                               |   |      |      | Revision Date   |   | 01-01-2021       |      |                   |
| NOISE LEVEL MONITORING REPORT   |                               |   |      |      |   |   |                  |      |                   |
| Ref: SCL(LM)/Env/Noise/Monthly/2020-21/010  |                               |   |      |      | Month:  |   | 03.02.2021       |      |                   |
| S. No.  | Location                      | Measured Values dB(A)<br>Day time (6:00am to 10:00pm) |      |      | Norms<br>In dB(A)   | Measured Values dB(A)<br>Night time (10:00pm to 6:00am) |                  |      | Norms<br>in dB(A) |
|   |                               | Min.  | Max. | Avg. |   | Min.  | Max.             | Avg. |                   |
| A   | Plant                         |   |      |      |   |   |                  |      |                   |
| 1   | Kiln                          | 64.3  | 69.1 | 66.7 | 75  | 62.3  | 66.2             | 64.3 | 70                |
| 2   | Raw Mill                      | 66.8  | 70.5 | 68.7 |   | 64.8  | 67.5             | 66.2 |                   |
| 3   | Raw Mill WF                   | 64.2  | 69.2 | 66.7 |   | 59.2  | 69.6             | 64.4 |                   |
| 4   | Coal Mill                     | 62.8  | 65.3 | 64.1 |   | 60.4  | 63.5             | 62.0 |                   |
| 5   | Cement Mill                   | 64.3  | 67.2 | 65.8 |   | 62.3  | 63.9             | 63.1 |                   |
| 6   | Cement Mill WF                | 61.5  | 66.4 | 64.0 |   | 59.6  | 65.6             | 62.6 |                   |
| 7   | Primary Crusher (Dump Hopper) | 64.8  | 68.7 | 66.8 |   | 59.9  | 67.2             | 63.6 |                   |
| 8   | Primary Crusher (Near BC-1)   | 62.2  | 67.5 | 64.9 |   | 67.3  | 71.1             | 69.2 |                   |
| 9   | Secondary Crusher             | 65.6  | 68.8 | 67.2 |   | 68.6  | 70.8             | 69.7 |                   |
| B.  | DG House                      |   |      |      |   |   |                  |      |                   |
| 1   | Control Room                  | 58.9  | 62.4 | 60.7 | 75  | 55.9  | 60.9             | 58.4 | 70                |
| 2   | Office                        | 51.2  | 58.6 | 54.9 |   | 49.7  | 67.4             | 58.6 |                   |
| C.  | Offices                       |   |      |      |   |   |                  |      |                   |
| 1   | CCR                           | 52.1  | 64.7 | 58.4 | 75  | 56.1  | 60.6             | 58.4 | 70                |
| 2   | Meeting Room                  | 52.8  | 58.3 | 55.6 |   | 48.4  | 59.8             | 54.1 |                   |
| 3   | VP'S Room                     | 50.9  | 59.4 | 55.2 |   | 50.3  | 57.4             | 53.9 |                   |
| 4   | Inst. Shift Room              | 53.6  | 62.1 | 57.9 |   | 48.6  | 59.1             | 53.9 |                   |
| 5   | Drawing Office                | 53.7  | 60.5 | 57.1 |   | 47.2  | 54.8             | 51.0 |                   |
| 6   | QC Department                 |   |      |      |   |   |                  |      |                   |
|   | a) Chemical Lab               | 63.2  | 67.6 | 65.4 |   | 52.8  | 68.4             | 60.6 |                   |
|   | b) Physical Lab               | 63.9  | 68.5 | 66.2 |   | 56.9  | 69.3             | 63.1 |                   |
|   | c) Shift Lab                  | 57.3  | 66.7 | 62.0 |   | 53.4  | 65.2             | 59.3 |                   |
|   | d) Sample Preparation Room    | 62.3  | 65.9 | 64.1 |   | 58.6  | 61.0             | 59.8 |                   |
| D.  | Residential                   |   |      |      |   |   |                  |      |                   |
| 1   | Bachelor Hostel               | 45.1  | 47.9 | 46.5 | 55  | 42.3  | 48.3             | 45.3 | 45                |
| 2   | HOD'S Quater's                | 44.8  | 50.1 | 47.5 |   | 40.8  | 46.7             | 43.8 |                   |
| 3   | 650 Quater's                  | 44.5  | 49.5 | 47.0 |   | 41.0  | 45.5             | 43.3 |                   |
| 4   | 250 Quater's                  | 41.8  | 47.5 | 44.7 |   | 39.8  | 40.9             | 40.4 |                   |
| 5   | Hut                           | 40.7  | 46.6 | 43.7 |   | 35.9  | 42.9             | 39.4 |                   |
| E.  | Dispensery                    | 41.1  | 44.7 | 42.9 |   | 42.1  | 44.8             | 43.5 |                   |
|  |                               |   |      |      |  |   |                  |      |                   |
| Measured By:  |                               |   |      |      | Verified By:  |   |                  |      |                   |


|  |  |  |                |                |
|--|--|--|----------------|----------------|
|  | <b>STAR CEMENT LIMITED</b><br>Lumshnong, Meghalaya |  | Reference No.  | SCL/EHS/F - 04 |
|  |  |  | Issue No.      | 01             |
|  | <b>WATER TESTING REPORT</b>                        |  | Date of Issue: | 24.08.2013     |
|  |  |  | Revision No.   | 03             |
|  |  |  | Date of Rev.   | 01.06.2019     |

| <b>Report No. – 10</b>   |                                     |        |                           |  |   |
|--|-------------------------------------|--------|---------------------------|--|---|
| Date of Sample Collection: 09.02.2021<br>Analysis Date: 09.02.2021 to 12.02.2021 |                                     |        |                           |  |   |
| Sl. No   | Parameter                           | Unit   | Drinking Water (RO Plant) | Indian Standard Specification for Drinking Water IS : 10500-2012 Acceptable Limit (Max.) | Indian Standard Specification for Drinking Water IS : 10500-2012 Permissible Limit (Max.) |
| 1  | pH                                  | Hazen  | 7.1                       | 6.5 to 8.5   | No relaxation   |
| 2  | Colour                              | mg/lit | Colourless                | 5  | 15  |
| 3  | Odour                               | mg/lit | Agreeable                 | Agreeable  | Agreeable   |
| 4  | Total Hardness as CaCO <sub>3</sub> | mg/lit | 59.2                      | 200  | 600   |
| 5  | Calcium as Ca                       | mg/lit | 14.7                      | 75   | 200   |
| 6  | Magnesium as Mg                     | mg/lit | 5.8                       | 30   | 100   |
| 7  | Total Dissolve Solids               | mg/lit | 139                       | 500  | 2000  |
| 8  | Chloride                            | mg/lit | 12.7                      | 250  | 1000  |
| 9  | Total Residual Chlorine             | mg/lit | BDL                       | 0.2  | 1   |
| 10   | Turbidity                           | NTU    | 0.06                      | 1  | 5   |
| 11   | Iron                                | mg/lit | BDL                       | 0.3  | No Relaxation   |
| 12   | Dissolved Oxygen                    | mg/lit | 3.1                       | -  | -   |

  
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|--|--|--|----------------|----------------|
|  | <b>STAR CEMENT LIMITED</b><br>Lumshnong, Meghalaya |  | Reference No.  | SCL/EHS/F - 04 |
|  |  |  | Issue No.      | 01             |
|  |  |  | Date of Issue: | 24.08.2013     |
|  | <b>WATER TESTING REPORT</b>                        |  | Revision No.   | 03             |
|  |  |  | Date of Rev.   | 01.06.2019     |

| Report No. – 10  |  |        |            |   |
|--|--|--------|------------|---|
| Date of Sample Collection: 09.02.2021<br>Analysis Date: 09.02.2021 to 12.02.2021 |  |        |            |   |
| S. No.   | Parameter  | Unit   | ETP Outlet | Standard Norms For Discharge of Environment Pollution<br>(Notification Date:- 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014-2015/34 - dated Shillong, the 3rd SEP, 2014. |
| 1  | pH   | -      | 7.4        | 5.5 to 9.0  |
| 2  | Suspended Solids                                       | mg/lit | 23.2       | 100   |
| 3  | Total Dissolve Solids                                  | mg/lit | 338.3      | -   |
| 4  | Cemical Oxegan Demand                                  | mg/lit | 55.2       | 250   |
| 5  | Biochemical Oxegan Demand<br>( For 3 days at 27deg. C) | mg/lit | 20.7       | 30  |
| 6  | Oil& Grease  | mg/lit | <3         | 10  |
| 7  | Dissolved Oxygen                                       | mg/lit | 5.7        | -   |

  
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# STAR CEMENT LIMITED

Lumshnong, Meghalaya

## WATER TESTING REPORT

|                |                |
|----------------|----------------|
| Reference No.  | SCL/EHS/F - 04 |
| Issue No.      | 01             |
| Date of Issue: | 24.08.2013     |
| Revision No.   | 03             |
| Date of Rev.   | 01.06.2019     |

Report No. – 10

Date of Sample Collection: 09.02.2021

Analysis Date: 09.02.2021 – 12.02.2021

| S.N o. | Parameter   | Unit   | Plant Nala Inlet | Plant Nala Out Let | STP Inlet Water | STP Outlet | Standard Norms For Discharge of Environment Pollution (Notification Date:- 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014-2015/34 – dated Shillong, the 3rd SEP , 2014. | Indian Standard Specification for Drinking Water IS : 10500 -2012<br>Acceptable Limit (Max.) | Indian Standard Specification for Drinking Water IS : 10500 -2012<br>Permissible Limit (Max.) |
|--------|---|--------|------------------|--------------------|-----------------|------------|---|--|---|
| 1      | pH  |        | 6.7              | 6.5                | 6.8             | 6.2        | 5.5 to 9.0  | 6.5 to 8.5   | No relaxation   |
| 2      | Colour  | Hazen  | Colourless       | Colourless         | Colourless      | Colourless | Colourless  | 5  | 15  |
| 3      | Odour   |        | Odourless        | Odourless          | Odourless       | Odourless  | Odourless   | Agreeable  | Agreeable   |
| 4      | Total Residual Chlorine                             | mg/lit | NIL              | NIL                | NIL             | NIL        | 1   | 0.2  | 1   |
| 5      | Chloride  | mg/lit | 4.2              | 5.1                | 85.4            | 83.9       | 250   | 250  | 1000  |
| 6      | Total Hardness as CaCO <sub>3</sub>                 | mg/lit | 154.5            | 168.8              | 165.5           | 152.4      | -   | 200  | 600   |
| 7      | Calcium as Ca                                       | mg/lit | 26.8             | 29.7               | 98.6            | 16.2       | -   | 75   | 200   |
| 8      | Magnesium as Mg                                     | mg/lit | 15.2             | 18.8               | 12.7            | 8.3        | -   | 30   | 100   |
| 9      | Suspended Solids                                    | mg/lit | 42.6             | 50.8               | 64.8            | 16.8       | 100   | -  | -   |
| 10     | Total Dissolve Solids                               | mg/lit | 101.7            | 362.7              | 557.9           | 461.2      | -   | 500  | 2000  |
| 11     | Cemical Oxegan Demand                               | mg/lit | 31.8             | 26.1               | 349.7           | 69.2       | 250   | -  | -   |
| 12     | Biochemical Oxegan Demand ( For 3 days at 27deg. C) | mg/lit | NIL              | <2                 | 169             | 15.2       | 30  | -  | -   |
| 13     | Oil & Grease  | mg/lit | NIL              | <3                 | 2.9             | <3         | 10  | -  | -   |
| 15     | Temperature   | deg. C | 22.5             | 25.6               | 27.6            | 30.7       | Shall not be exceed 50 Deg. C the   | -  | -   |
| 16     | Ammonical Nitrogen (as N)                           | mg/lit | -                | -                  | -               | -          | 50  | -  | -   |
| 17     | Total kjeldahl Nitrogen (asN)                       | mg/lit | -                | -                  | -               | -          | 100   | -  | -   |
| 18     | Free Ammonia (asNH <sub>3</sub> )                   | mg/lit | -                | -                  | -               | -          | 5   | -  | -   |
| 19     | Conductivity  |        | 168              | 166                | 309             | 210        | -   | -  | -   |

  
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VPO – Lumshnong, District – Jaintia Hills, Meghalaya – 793210