

# STAR CEMENT MEGHALAYA LIMITED

Ref: SCML/EHS/LUM/2024-25/44

Dated: 07/12/2024

To,

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

**Subject** : Submission of Environmental Monitoring Report for the month of November, 2024.

**Reference** : MPCB/CON-54/2007/2024-2025/89, Dtd: Shillong, the 19<sup>th</sup> June, 2024.

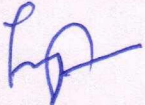
Dear Sir,

This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission & Water (Ground, Surface, STP & ETP) quality monitoring reports of **Star Cement Meghalaya Limited** (formerly known as *Meghalaya Power Limited - 43 MW*) for the month of **November, 2024**.

This is for your kind information, record and kindly acknowledge receipt of the same.

Thanking You,

Yours truly,  
For **STAR CEMENT MEGHALAYA LIMITED**



**Laxmaiah Munjala**  
Unit Head

Enclosed: a/a

**Copy To:** The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-790314.

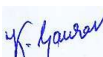


STAR CEMENT MEGHALAYA LIMITED

Lumshnong, Meghalaya

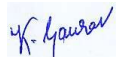
| Date (DD-MM-YYYY) | Pressure (mmHg) | Relative Humidity (%) | Temp. (C) | Manual Rain (mm) |
|-------------------|-----------------|-----------------------|-----------|------------------|
| 01-11-2024        | 720.7           | 72.8                  | 18.9      | 0.0              |
| 02-11-2024        | 724.7           | 71.6                  | 18.2      | 0.0              |
| 03-11-2024        | 719.3           | 72.4                  | 19.1      | 0.0              |
| 04-11-2024        | 722.0           | 70.7                  | 18.9      | 0.0              |
| 05-11-2024        | 723.6           | 70.5                  | 18.8      | 0.0              |
| 06-11-2024        | 721.3           | 71.8                  | 18.2      | 0.0              |
| 07-11-2024        | 721.6           | 70.6                  | 20.0      | 0.0              |
| 08-11-2024        | 720.0           | 70.4                  | 19.0      | 0.0              |
| 09-11-2024        | 718.4           | 70.6                  | 18.7      | 0.0              |
| 10-11-2024        | 716.0           | 71.7                  | 19.1      | 0.0              |
| 11-11-2024        | 721.6           | 74.9                  | 19.2      | 0.0              |
| 12-11-2024        | 722.1           | 74.0                  | 20.9      | 0.0              |
| 13-11-2024        | 719.8           | 78.2                  | 19.0      | 0.0              |
| 14-11-2024        | 716.8           | 75.3                  | 19.1      | 0.0              |
| 15-11-2024        | 723.5           | 75.5                  | 20.0      | 0.0              |
| 16-11-2024        | 721.3           | 72.7                  | 19.6      | 0.0              |
| 17-11-2024        | 720.1           | 79.0                  | 16.8      | 0.0              |
| 18-11-2024        | 716.8           | 78.2                  | 15.4      | 0.0              |
| 19-11-2024        | 723.5           | 71.2                  | 17.1      | 0.0              |
| 20-11-2024        | 721.3           | 64.2                  | 17.0      | 0.0              |
| 21-11-2024        | 726.4           | 67.2                  | 18.5      | 0.0              |
| 22-11-2024        | 720.3           | 72.0                  | 18.8      | 0.0              |
| 23-11-2024        | 716.0           | 71.5                  | 18.9      | 0.0              |
| 24-11-2024        | 721.6           | 69.4                  | 20.1      | 0.0              |
| 25-11-2024        | 722.1           | 72.1                  | 18.9      | 0.0              |
| 26-11-2024        | 719.8           | 68.8                  | 18.1      | 0.0              |
| 27-11-2024        | 722.0           | 71.7                  | 18.6      | 0.0              |
| 28-11-2024        | 723.6           | 73.1                  | 19.1      | 0.0              |
| 29-11-2024        | 722.0           | 75.2                  | 18.4      | 0.0              |
| 30-11-2024        | 716.8           | 75.2                  | 18.0      | 0.0              |
|                   |                 |                       | Total     | 0.0              |

|                                                                                                                                        |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------|
|                                                       | <b>STAR CEMENT MEGHALAYA LIMITED</b><br><b>THERMAL POWER PLANT (43MW)</b><br>Lumshnong, Meghalaya |                                                                                                   | Reference No.                        | MPL/Env/F – 01                                                                                       |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Issue No.                            | 1                                                                                                    |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Date of Issue:                       | 24.08.2013                                                                                           |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Revision No.                         | 5                                                                                                    |
|                                                                                                                                        | AMBIENT AIR QUALITY MONITORING REPORT                                                             |                                                                                                   | Date of Rev.                         | 01.12.2020                                                                                           |
| Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/20                                                                                 |                                                                                                   |                                                                                                   | Month : November                     |                                                                                                      |
| Location of Sampling: Near ADM Office (South)                                                                                          |                                                                                                   | GPS Coordinate: 25°10'34"N 92°23'46"E 907 m                                                       |                                      |                                                                                                      |
| Sampling Duration:                                                                                                                     | 24 Hrs.                                                                                           | 24 Hrs.                                                                                           | 24 Hrs.                              | 24 Hrs.                                                                                              |
| Date of Sampling                                                                                                                       | PM <sub>10</sub> (µg/m <sup>3</sup> )                                                             | PM <sub>2.5</sub> (µg/m <sup>3</sup> )                                                            | SO <sub>2</sub> (µg/m <sup>3</sup> ) | NO <sub>2</sub> (µg/m <sup>3</sup> )                                                                 |
| 04.11.2024                                                                                                                             | 49.25                                                                                             | 34.69                                                                                             | 16.08                                | 16.88                                                                                                |
| 06.11.2024                                                                                                                             | 50.56                                                                                             | 32.87                                                                                             | 16.29                                | 19.02                                                                                                |
| 08.11.2024                                                                                                                             | 49.27                                                                                             | 35.26                                                                                             | 17.46                                | 20.66                                                                                                |
| 11.11.2024                                                                                                                             | 49.63                                                                                             | 34.46                                                                                             | 18.22                                | 19.36                                                                                                |
| 13.11.2024                                                                                                                             | 50.78                                                                                             | 35.98                                                                                             | 16.46                                | 19.13                                                                                                |
| 15.11.2024                                                                                                                             | 48.18                                                                                             | 32.59                                                                                             | 17.23                                | 20.58                                                                                                |
| 18.11.2024                                                                                                                             | 47.55                                                                                             | 36.08                                                                                             | 15.44                                | 19.48                                                                                                |
| 20.11.2024                                                                                                                             | 46.88                                                                                             | 34.21                                                                                             | 15.07                                | 18.88                                                                                                |
| NAAQS permissible limits for Rural,<br>Industrial, Residential Area                                                                    | 100 (µg/m <sup>3</sup> )                                                                          | 60 (µg/m <sup>3</sup> )                                                                           | 80 (µg/m <sup>3</sup> )              | 80 (µg/m <sup>3</sup> )                                                                              |
| Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009. |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
| <br>Analysed by                                     |                                                                                                   | <br>Checked by |                                      | <br>Verified By |

|                                                                                                                                        |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------|
|                                                       | <b>STAR CEMENT MEGHALAYA LIMITED</b><br><b>THERMAL POWER PLANT (43MW)</b><br>Lumshnong, Meghalaya |                                                                                                   | Reference No.                        | MPL/Env/F – 01                                                                                       |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Issue No.                            | 1                                                                                                    |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Date of Issue:                       | 24.08.2013                                                                                           |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Revision No.                         | 5                                                                                                    |
|                                                                                                                                        | AMBIENT AIR QUALITY MONITORING REPORT                                                             |                                                                                                   | Date of Rev.                         | 01.12.2020                                                                                           |
| Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/20                                                                                 |                                                                                                   |                                                                                                   | Month : November                     |                                                                                                      |
| Location of Sampling: Near STP                                                                                                         |                                                                                                   | GPS Coordinate: 25°10'49"N 92°23'58"E 947 m                                                       |                                      |                                                                                                      |
| Sampling Duration:                                                                                                                     | 24 Hrs.                                                                                           | 24 Hrs.                                                                                           | 24 Hrs.                              | 24 Hrs.                                                                                              |
| Date of Sampling                                                                                                                       | PM <sub>10</sub> (µg/m <sup>3</sup> )                                                             | PM <sub>2.5</sub> (µg/m <sup>3</sup> )                                                            | SO <sub>2</sub> (µg/m <sup>3</sup> ) | NO <sub>2</sub> (µg/m <sup>3</sup> )                                                                 |
| 04.11.2024                                                                                                                             | 48.56                                                                                             | 32.46                                                                                             | 17.25                                | 19.88                                                                                                |
| 06.11.2024                                                                                                                             | 43.51                                                                                             | 33.58                                                                                             | 17.98                                | 20.46                                                                                                |
| 08.11.2024                                                                                                                             | 51.06                                                                                             | 39.15                                                                                             | 16.22                                | 17.33                                                                                                |
| 11.11.2024                                                                                                                             | 48.46                                                                                             | 37.28                                                                                             | 16.14                                | 19.08                                                                                                |
| 13.11.2024                                                                                                                             | 46.89                                                                                             | 39.38                                                                                             | 17.59                                | 19.96                                                                                                |
| 15.11.2024                                                                                                                             | 48.22                                                                                             | 37.16                                                                                             | 16.52                                | 17.56                                                                                                |
| 18.11.2024                                                                                                                             | 49.16                                                                                             | 35.78                                                                                             | 17.21                                | 19.29                                                                                                |
| 20.11.2024                                                                                                                             | 49.64                                                                                             | 32.09                                                                                             | 16.45                                | 18.52                                                                                                |
| NAAQS permissible limits for Rural,<br>Industrial, Residential Area                                                                    | 100 (µg/m <sup>3</sup> )                                                                          | 60 (µg/m <sup>3</sup> )                                                                           | 80 (µg/m <sup>3</sup> )              | 80 (µg/m <sup>3</sup> )                                                                              |
| Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009. |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
| <br>Analysed by                                     |                                                                                                   | <br>Checked by |                                      | <br>Verified By |

|                                                                                                                                        |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------|
|                                                       | <b>STAR CEMENT MEGHALAYA LIMITED</b><br><b>THERMAL POWER PLANT (43MW)</b><br>Lumshnong, Meghalaya |                                                                                                   | Reference No.                        | MPL/Env/F – 01                                                                                       |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Issue No.                            | 1                                                                                                    |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Date of Issue:                       | 24.08.2013                                                                                           |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Revision No.                         | 5                                                                                                    |
|                                                                                                                                        | <b>AMBIENT AIR QUALITY MONITORING REPORT</b>                                                      |                                                                                                   | Date of Rev.                         | 01.12.2020                                                                                           |
| Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/20                                                                                 |                                                                                                   |                                                                                                   | Month : November                     |                                                                                                      |
| Location of Sampling: Near Piezometer Well                                                                                             |                                                                                                   | GPS Coordinate: 25°10'35"N 92°23'53"E 348 m                                                       |                                      |                                                                                                      |
| Sampling Duration:                                                                                                                     | 24 Hrs.                                                                                           | 24 Hrs.                                                                                           | 24 Hrs.                              | 24 Hrs.                                                                                              |
| Date of Sampling                                                                                                                       | PM <sub>10</sub> (µg/m <sup>3</sup> )                                                             | PM <sub>2.5</sub> (µg/m <sup>3</sup> )                                                            | SO <sub>2</sub> (µg/m <sup>3</sup> ) | NO <sub>2</sub> (µg/m <sup>3</sup> )                                                                 |
| 04.11.2024                                                                                                                             | 50.89                                                                                             | 40.65                                                                                             | 15.63                                | 18.99                                                                                                |
| 06.11.2024                                                                                                                             | 52.44                                                                                             | 35.28                                                                                             | 16.98                                | 20.38                                                                                                |
| 08.11.2024                                                                                                                             | 49.13                                                                                             | 36.02                                                                                             | 15.46                                | 22.52                                                                                                |
| 11.11.2024                                                                                                                             | 55.16                                                                                             | 39.09                                                                                             | 14.81                                | 21.44                                                                                                |
| 13.11.2024                                                                                                                             | 52.58                                                                                             | 38.34                                                                                             | 15.12                                | 19.36                                                                                                |
| 15.11.2024                                                                                                                             | 50.28                                                                                             | 36.46                                                                                             | 14.27                                | 19.05                                                                                                |
| 18.11.2024                                                                                                                             | 50.96                                                                                             | 34.52                                                                                             | 14.36                                | 20.58                                                                                                |
| 20.11.2024                                                                                                                             | 47.32                                                                                             | 33.34                                                                                             | 13.68                                | 22.14                                                                                                |
| NAAQS permissible limits for Rural,<br>Industrial, Residential Area                                                                    | 100 (µg/m <sup>3</sup> )                                                                          | 60 (µg/m <sup>3</sup> )                                                                           | 80 (µg/m <sup>3</sup> )              | 80 (µg/m <sup>3</sup> )                                                                              |
| Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009. |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
| <br>Analysed by                                     |                                                                                                   | <br>Checked by |                                      | <br>Verified By |

|                                                                                                                                        |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------|
|                                                       | <b>STAR CEMENT MEGHALAYA LIMITED</b><br><b>THERMAL POWER PLANT (43MW)</b><br>Lumshnong, Meghalaya |                                                                                                   | Reference No.                        | MPL/Env/F – 01                                                                                       |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Issue No.                            | 1                                                                                                    |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Date of Issue:                       | 24.08.2013                                                                                           |
|                                                                                                                                        |                                                                                                   |                                                                                                   | Revision No.                         | 5                                                                                                    |
| GROUND LEVEL AMBIENT AIR QUALITY MONITORING REPORT                                                                                     |                                                                                                   | Date of Rev.                                                                                      | 01.12.2020                           |                                                                                                      |
| Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/20                                                                                 |                                                                                                   |                                                                                                   | Month : November                     |                                                                                                      |
| Location of Sampling: Near ADM Office                                                                                                  |                                                                                                   | GPS Coordinate: 25°10'34"N 92°23'46"E 907 m                                                       |                                      |                                                                                                      |
| Sampling Duration:                                                                                                                     | 24 Hrs.                                                                                           | 24 Hrs.                                                                                           | 24 Hrs.                              | 24 Hrs.                                                                                              |
| Date of Sampling                                                                                                                       | PM <sub>10</sub> (µg/m <sup>3</sup> )                                                             | PM <sub>2.5</sub> (µg/m <sup>3</sup> )                                                            | SO <sub>2</sub> (µg/m <sup>3</sup> ) | NO <sub>2</sub> (µg/m <sup>3</sup> )                                                                 |
| 05.11.2024                                                                                                                             | 42.56                                                                                             | 28.77                                                                                             | 13.55                                | 17.98                                                                                                |
| 07.11.2024                                                                                                                             | 45.42                                                                                             | 26.58                                                                                             | 12.58                                | 16.45                                                                                                |
| 09.11.2024                                                                                                                             | 43.18                                                                                             | 30.59                                                                                             | 14.51                                | 17.24                                                                                                |
| 12.11.2024                                                                                                                             | 44.94                                                                                             | 30.58                                                                                             | 14.72                                | 18.42                                                                                                |
| 14.11.2024                                                                                                                             | 42.56                                                                                             | 31.58                                                                                             | 16.24                                | 18.15                                                                                                |
| 16.11.2024                                                                                                                             | 31.62                                                                                             | 20.08                                                                                             | 12.56                                | 16.34                                                                                                |
| 19.11.2024                                                                                                                             | 41.34                                                                                             | 33.14                                                                                             | 13.24                                | 17.28                                                                                                |
| 21.11.2024                                                                                                                             | 40.24                                                                                             | 27.92                                                                                             | 15.72                                | 18.22                                                                                                |
| NAAQS permissible limits for Rural, Industrial, Residential Area                                                                       | 100 (µg/m <sup>3</sup> )                                                                          | 60 (µg/m <sup>3</sup> )                                                                           | 80 (µg/m <sup>3</sup> )              | 80 (µg/m <sup>3</sup> )                                                                              |
| Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009. |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
| <br>Analysed by                                     |                                                                                                   | <br>Checked by |                                      | <br>Verified By |

|                                                                                                                                                      |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------|
|                                                                     | <b>STAR CEMENT MEGHALAYA LIMITED</b><br><b>THERMAL POWER PLANT (43MW)</b><br>Lumshnong, Meghalaya |                                                                                                   | Reference No.                        | MPL/Env/F – 01                                                                                       |
|                                                                                                                                                      |                                                                                                   |                                                                                                   | Issue No.                            | 1                                                                                                    |
|                                                                                                                                                      |                                                                                                   |                                                                                                   | Date of Issue:                       | 24.08.2013                                                                                           |
|                                                                                                                                                      |                                                                                                   |                                                                                                   | Revision No.                         | 5                                                                                                    |
| GROUND LEVEL AMBIENT AIR QUALITY MONITORING REPORT                                                                                                   |                                                                                                   |                                                                                                   | Date of Rev.                         | 01.12.2020                                                                                           |
| Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2024-25/20                                                                                               |                                                                                                   |                                                                                                   | Month : November                     |                                                                                                      |
| Location of Sampling: Behind DM Plant                                                                                                                |                                                                                                   | GPS Coordinate: 25°10'43"N 92°23'50"E 348 m                                                       |                                      |                                                                                                      |
| Sampling Duration:                                                                                                                                   | 24 Hrs.                                                                                           | 24 Hrs.                                                                                           | 24 Hrs.                              | 24 Hrs.                                                                                              |
| Date of Sampling                                                                                                                                     | PM <sub>10</sub> (µg/m <sup>3</sup> )                                                             | PM <sub>2.5</sub> (µg/m <sup>3</sup> )                                                            | SO <sub>2</sub> (µg/m <sup>3</sup> ) | NO <sub>2</sub> (µg/m <sup>3</sup> )                                                                 |
| 05.11.2024                                                                                                                                           | 38.28                                                                                             | 29.24                                                                                             | 15.54                                | 17.66                                                                                                |
| 07.11.2024                                                                                                                                           | 40.56                                                                                             | 29.36                                                                                             | 14.94                                | 18.54                                                                                                |
| 09.11.2024                                                                                                                                           | 40.89                                                                                             | 34.53                                                                                             | 15.96                                | 19.24                                                                                                |
| 12.11.2024                                                                                                                                           | 38.38                                                                                             | 31.56                                                                                             | 18.28                                | 18.28                                                                                                |
| 14.11.2024                                                                                                                                           | 35.63                                                                                             | 32.89                                                                                             | 16.02                                | 20.08                                                                                                |
| 16.11.2024                                                                                                                                           | 36.32                                                                                             | 29.48                                                                                             | 15.36                                | 18.22                                                                                                |
| 19.11.2024                                                                                                                                           | 40.21                                                                                             | 38.22                                                                                             | 15.13                                | 14.98                                                                                                |
| 21.11.2024                                                                                                                                           | 34.06                                                                                             | 32.66                                                                                             | 14.67                                | 15.54                                                                                                |
| NAAQS permissible limits for Rural, Industrial, Residential Area                                                                                     | 100 (µg/m <sup>3</sup> )                                                                          | 60 (µg/m <sup>3</sup> )                                                                           | 80 (µg/m <sup>3</sup> )              | 80 (µg/m <sup>3</sup> )                                                                              |
| <p><b>Remarks:</b> All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.</p> |                                                                                                   |                                                                                                   |                                      |                                                                                                      |
| <br>Analysed by                                                   |                                                                                                   | <br>Checked by |                                      | <br>Verified By |

|                                                                                                                          |                                                                                                          |                                                                                                          |                 |                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------|
|                                         | <b>STAR CEMENT MEGHALAYA LIMITED</b><br><b>THERMAL POWER PLANT (43MW)</b><br><b>Lumshnong, Meghalaya</b> |                                                                                                          | Reference No.   | MPL/Env/F-02                                                                                                         |
|                                                                                                                          |                                                                                                          |                                                                                                          | Issue No.       | 1                                                                                                                    |
|                                                                                                                          |                                                                                                          |                                                                                                          | Date of Issue:  | 01.05.2019                                                                                                           |
|                                                                                                                          |                                                                                                          |                                                                                                          | Revision No.    | 5                                                                                                                    |
| STACK EMISSION MONITORING ANALYSIS REPORT                                                                                |                                                                                                          | Date of Rev.                                                                                             | 01.06.2021      |                                                                                                                      |
| Report No: MPL(43MW)/ENV/STACK/MONTHLY/2024-25/20                                                                        |                                                                                                          |                                                                                                          | Month: November |                                                                                                                      |
| <b><u>Analysis Result</u></b>                                                                                            |                                                                                                          |                                                                                                          |                 |                                                                                                                      |
| <b>A.</b>                                                                                                                | <b>General Information About Stack</b>                                                                   |                                                                                                          |                 |                                                                                                                      |
| 1                                                                                                                        | Stack Identification No                                                                                  | 43 MW                                                                                                    |                 |                                                                                                                      |
| 2                                                                                                                        | Stack Connected to                                                                                       | Boiler                                                                                                   |                 |                                                                                                                      |
| 3                                                                                                                        | Material of Construction (Stack/Duct)                                                                    | RCC                                                                                                      |                 |                                                                                                                      |
| 4                                                                                                                        | Shape of duct                                                                                            | Circular                                                                                                 |                 |                                                                                                                      |
| 5                                                                                                                        | Whether duct is provided with permanent platform & ladder                                                | Yes                                                                                                      |                 |                                                                                                                      |
| <b>B.</b>                                                                                                                | <b>Physical characteristic of stack</b>                                                                  |                                                                                                          |                 |                                                                                                                      |
| 1                                                                                                                        | Stack Height from ground level (meter)                                                                   | 81.0                                                                                                     |                 |                                                                                                                      |
| 2                                                                                                                        | Duct diameter at sampling point (meter)                                                                  | 2.75                                                                                                     |                 |                                                                                                                      |
| 3                                                                                                                        | Sampling height point from ground level (meter)                                                          | 45.5                                                                                                     |                 |                                                                                                                      |
| 4                                                                                                                        | Cross sectional area of Duct/Stack (m <sup>2</sup> )                                                     | 5.94                                                                                                     |                 |                                                                                                                      |
| <b>C.</b>                                                                                                                | <b>Pollution Control Device</b>                                                                          |                                                                                                          |                 |                                                                                                                      |
| 1                                                                                                                        | Details of pollution control device attached to stack                                                    | ESP                                                                                                      |                 |                                                                                                                      |
| <b>D.</b>                                                                                                                | <b>Result of Sampling &amp; Analysis of Gaseous Emission</b>                                             |                                                                                                          |                 |                                                                                                                      |
| 1                                                                                                                        | Date of Sampling                                                                                         | 25-11-2024                                                                                               |                 |                                                                                                                      |
| 2                                                                                                                        | Ambient Temp (°C)                                                                                        | 32                                                                                                       |                 |                                                                                                                      |
| 3                                                                                                                        | Stack Gas Temp (°C)                                                                                      | 127                                                                                                      |                 |                                                                                                                      |
| 4                                                                                                                        | Exit Velocity of Gas (m/sec.)                                                                            | 15.8                                                                                                     |                 |                                                                                                                      |
| 5                                                                                                                        | Flow Rate (Nm <sup>3</sup> / sec.)                                                                       | 65.1                                                                                                     |                 |                                                                                                                      |
| 6                                                                                                                        | Quantity of Emission (Nm <sup>3</sup> / Hr)                                                              | 234183.6                                                                                                 |                 |                                                                                                                      |
| 7                                                                                                                        | Concentration of PM (mg/Nm <sup>3</sup> )                                                                | 34.2                                                                                                     |                 |                                                                                                                      |
| 8                                                                                                                        | Concentration of SO <sub>2</sub> (mg/Nm <sup>3</sup> )                                                   | 498                                                                                                      |                 |                                                                                                                      |
| 9                                                                                                                        | Concentration of NO <sub>x</sub> (mg/Nm <sup>3</sup> )                                                   | 248                                                                                                      |                 |                                                                                                                      |
| 10                                                                                                                       | Oxygen (O <sub>2</sub> ) (%)                                                                             | 10.1                                                                                                     |                 |                                                                                                                      |
| <b>E.</b>                                                                                                                | <b>Remarks:</b>                                                                                          |                                                                                                          |                 |                                                                                                                      |
| <b>Standard</b>                                                                                                          |                                                                                                          |                                                                                                          |                 |                                                                                                                      |
| PM - 50 mg/Nm <sup>3</sup>                                                                                               |                                                                                                          | SO <sub>2</sub> - 600 mg/Nm <sup>3</sup>                                                                 |                 | NO <sub>x</sub> - 300 mg/Nm <sup>3</sup>                                                                             |
| Particulate Matter (PM), Sulphur di-oxide (SO <sub>2</sub> ), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP) |                                                                                                          |                                                                                                          |                 |                                                                                                                      |
| <br><b>Analysis by</b>                |                                                                                                          | <br><b>Checked by</b> |                 | <br><b>Authorized Signatory</b> |

|                                                                                                                                                                                                                                                                | <b>STAR CEMENT MEGHALAYA LIMITED</b><br><b>THERMAL POWER PLANT (43MW)</b><br><b>Lumshnong, Meghalaya</b> |                                | Document No.              | MPL/EHS/Env/F-04               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|--------------------------------|
|                                                                                                                                                                                                                                                                                                                                                 |                                                                                                          |                                | Date of Issued            | 01-05-2019                     |
|                                                                                                                                                                                                                                                                                                                                                 |                                                                                                          |                                | Revision No.              | 2                              |
|                                                                                                                                                                                                                                                                                                                                                 | FUGITIVE EMISSION MONITORING REPORT                                                                      |                                | Revision Date             | 01-01-2021                     |
| Ref: MPL(43MW)/ENV/FUGITIVE/MONTHLY/2024-25/20                                                                                                                                                                                                                                                                                                  |                                                                                                          |                                |                           |                                |
| Month - November                                                                                                                                                                                                                                                                                                                                |                                                                                                          |                                |                           |                                |
| Date                                                                                                                                                                                                                                                                                                                                            | Location                                                                                                 | Fugitive Emission Results      | As per CPCB/BIS Guideline |                                |
|                                                                                                                                                                                                                                                                                                                                                 |                                                                                                          |                                | Limit                     |                                |
|                                                                                                                                                                                                                                                                                                                                                 |                                                                                                          | (in $\mu\text{g}/\text{m}^3$ ) |                           | (in $\mu\text{g}/\text{m}^3$ ) |
| 25.11.2024                                                                                                                                                                                                                                                                                                                                      | Coal Storage Section                                                                                     | 1486                           | 2000                      |                                |
| <div>    </div> <div> <b>Analyzed By</b> <b>Checked By</b> <b>Verified By</b> </div> |                                                                                                          |                                |                           |                                |

|                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |                                                       |      |      |                   |                                                         |                  |            |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------|------|------|-------------------|---------------------------------------------------------|------------------|------------|-------------------|
|                                                                                                                                                                                                                                                                 | STAR CEMENT MEGHALAYA LIMITED<br>THERMAL POWER PLANT (43MW)<br>Lumshnong, Meghalaya |                                                       |      |      | Document No.      |                                                         | MPL/EHS/Env/F-03 |            |                   |
|                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |                                                       |      |      | Date of Issued    |                                                         | 01-05-2019       |            |                   |
|                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |                                                       |      |      | Revision No.      |                                                         | 04               |            |                   |
|                                                                                                                                                                                                                                                                                                                                                  | NOISE LEVEL MONITORING REPORT                                                       |                                                       |      |      |                   | Revision Date                                           |                  | 01-01-2021 |                   |
| Ref: MPL(43MW)/ENV/NOISE/MONTHLY/2024-25/20                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                       |      |      | Date: 11.11.2024  |                                                         |                  |            |                   |
| Month - November                                                                                                                                                                                                                                                                                                                                 |                                                                                     |                                                       |      |      |                   |                                                         |                  |            |                   |
| 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                                                                                                                                                                                                                                                                                                                                                | Turbine House Ground Floor                                                          | 60.5                                                  | 65.0 | 62.8 | 75                | 56.7                                                    | 60.6             | 58.7       | 70                |
| 2                                                                                                                                                                                                                                                                                                                                                | Turbine House 9 Mt.                                                                 | 57.6                                                  | 67.4 | 62.5 |                   | 53.8                                                    | 62.8             | 58.3       |                   |
| 3                                                                                                                                                                                                                                                                                                                                                | RO – MCC                                                                            | 61.6                                                  | 68.0 | 64.8 |                   | 57.2                                                    | 62.0             | 59.6       |                   |
| 4                                                                                                                                                                                                                                                                                                                                                | Boiler Ground Floor                                                                 | 60.7                                                  | 65.8 | 63.3 |                   | 54.6                                                    | 60.5             | 57.6       |                   |
| 5                                                                                                                                                                                                                                                                                                                                                | CHP – MCC                                                                           | 60.0                                                  | 66.5 | 63.3 |                   | 48.6                                                    | 52.4             | 50.5       |                   |
| 6                                                                                                                                                                                                                                                                                                                                                | Office Area                                                                         | 55.9                                                  | 65.1 | 60.5 |                   | 47.7                                                    | 61.2             | 54.5       |                   |
| <div><div><br/>Analyzed by</div><div><br/>Checked By</div><div><br/>Verified By</div></div> |                                                                                     |                                                       |      |      |                   |                                                         |                  |            |                   |

|                                                                                                                                                                                                                                                                                                                                                        |                                                                              |       |           |            |                                                                                                                                                                                                         |              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------|-----------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                                                                                                                                                                                                                                       | STAR CEMENT MEGHALAYA LIMITED<br>THERMAL POWER PLANT<br>Lumshnong, Meghalaya |       |           |            | Reference No.                                                                                                                                                                                           | MPL/EHS/F-04 |
|                                                                                                                                                                                                                                                                                                                                                        |                                                                              |       |           |            | Issue No.                                                                                                                                                                                               | 1            |
|                                                                                                                                                                                                                                                                                                                                                        |                                                                              |       |           |            | Date of Issue:                                                                                                                                                                                          | 24.08.2013   |
|                                                                                                                                                                                                                                                                                                                                                        | WATER TESTING REPORT                                                         |       |           |            | Revision No.                                                                                                                                                                                            | 3            |
|                                                                                                                                                                                                                                                                                                                                                        |                                                                              |       |           |            | Date of Rev.                                                                                                                                                                                            | 01.06.2019   |
| Reference No.: MPL/ENV/WATER/MONTHLY/2024-25/20                                                                                                                                                                                                                                                                                                        |                                                                              |       |           |            | Date of sample collection: 05.11.2024<br>Date of Analysis: 05.11.2024 to 08.11.2024                                                                                                                     |              |
| Sl.No.                                                                                                                                                                                                                                                                                                                                                 | Parameter                                                                    | Unit  | STP Inlet | STP 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                                                                           | -     | 7.3       | 7.2        | 5.5 to 9.0                                                                                                                                                                                              |              |
| 2                                                                                                                                                                                                                                                                                                                                                      | Colour                                                                       | Hazen | Yellowish | Colourless | -                                                                                                                                                                                                       |              |
| 3                                                                                                                                                                                                                                                                                                                                                      | Odour                                                                        | -     | Odourless | Odourless  | -                                                                                                                                                                                                       |              |
| 4                                                                                                                                                                                                                                                                                                                                                      | Chloride                                                                     | mg/L  | 82.2      | 70.5       | -                                                                                                                                                                                                       |              |
| 5                                                                                                                                                                                                                                                                                                                                                      | Total Hardness as CaCO <sub>3</sub>                                          | mg/L  | 59.7      | 57.5       | -                                                                                                                                                                                                       |              |
| 6                                                                                                                                                                                                                                                                                                                                                      | Suspended Solids                                                             | mg/L  | 85        | 46.8       | 100                                                                                                                                                                                                     |              |
| 7                                                                                                                                                                                                                                                                                                                                                      | Total Dissolve Solids                                                        | mg/L  | 310       | 312        | -                                                                                                                                                                                                       |              |
| 8                                                                                                                                                                                                                                                                                                                                                      | Chemical Oxygen Demand                                                       | mg/L  | 230       | 48         | 250                                                                                                                                                                                                     |              |
| 9                                                                                                                                                                                                                                                                                                                                                      | Biochemical Oxygen Demand<br>(For 3 days at 27 °C)                           | mg/L  | 69        | 13         | 30                                                                                                                                                                                                      |              |
| 10                                                                                                                                                                                                                                                                                                                                                     | Oil & Grease                                                                 | mg/L  | 6.2       | < 3.0      | 10                                                                                                                                                                                                      |              |
| 11                                                                                                                                                                                                                                                                                                                                                     | Temperature                                                                  | ° C   | 25        | 18         | Shall not exceed 5.0°C above the receiving water temperature                                                                                                                                            |              |
| 12                                                                                                                                                                                                                                                                                                                                                     | Conductivity                                                                 | µS/cm | 521       | 504        | -                                                                                                                                                                                                       |              |
| <div><div><br/>Analysis By</div><div><br/>Checked By</div><div><br/>Verified By</div></div> |                                                                              |       |           |            |                                                                                                                                                                                                         |              |

|                                                                                   |                                                                              |  |              |                |              |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------|--|--------------|----------------|--------------|
|  | STAR CEMENT MEGHALAYA LIMITED<br>THERMAL POWER PLANT<br>Lumshnong, Meghalaya |  |              | Reference No.  | MPL/EHS/F-04 |
|                                                                                   |                                                                              |  |              | Issue No.      | 1            |
|                                                                                   | WATER TESTING REPORT                                                         |  |              | Date of Issue: | 24.08.2013   |
|                                                                                   |                                                                              |  |              | Revision No.   | 3            |
|                                                                                   |                                                                              |  | Date of Rev. | 01.06.2019     |              |

Reference No.: MPL/ENV/WATER/MONTHLY/2024-25/20

Date of sample collection: 05.11.2024

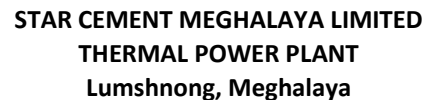
Date of Analysis: 05.11.2024 to 08.11.2024

| Sl.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                                                 | -    | 7.3        | 5.5 to 9.0                                                                                                                                                                                               |
| 2      | Suspended Solids                                   | mg/L | 29         | 100                                                                                                                                                                                                      |
| 3      | Total Dissolve Solids                              | mg/L | 387        | -                                                                                                                                                                                                        |
| 4      | Chemical Oxygen Demand                             | mg/L | 42         | 250                                                                                                                                                                                                      |
| 5      | Biochemical Oxygen Demand<br>(For 3 days at 27 °C) | mg/L | 14         | 30                                                                                                                                                                                                       |
| 6      | Oil & Grease                                       | mg/L | <3.0       | 10                                                                                                                                                                                                       |

  
Analysis By

  
Checked By

  
Verified By



Reference No.

MPL/EHS/F-04

Issue No.

**1**

Date of Issue:

24.08.2013

Revision No.

3

Date of Rev.

01.06.2019

Reference No.: MPL/ENV/WATER/MONTHLY/2024-25/20

## Surface Water Analysis Results

Date of sample collection: 05.11.2024

Date of Analysis: 05.11.2024 to 08.11.2024

| S.No. | Parameter                                          | Unit    | Umtyrngai Nallah |             | Umutha Nallah |             | Umso Nalah  | Seshympa | Lunar | Lukha | Umbadoh                           | Tongseng  | Lumshnong | Wahiajer  | Standards norms<br>as per IS 2296 |
|-------|----------------------------------------------------|---------|------------------|-------------|---------------|-------------|-------------|----------|-------|-------|-----------------------------------|-----------|-----------|-----------|-----------------------------------|
|       |                                                    |         | Up Stream        | Down Stream | Up Stream     | Down Stream | Down Stream |          |       |       | Seasonal Spring / Seasonal Nallah |           |           |           |                                   |
| 1     | pH                                                 | -       | 7.4              | 7.2         | 8.1           | 7.4         | 7.9         | -        | -     | -     | 7.5                               | 7.3       | 8.0       | 8.1       | 6.5 - 8.5                         |
| 2     | Colour                                             | Hazen   | Colourless       | Colourless  | Colourless    | Colourless  | Colourless  | -        | -     | -     | Yellowish                         | Yellowish | Yellowish | Yellowish | 10                                |
| 3     | Odour                                              | -       | Unobjectionable  |             |               |             |             |          |       |       |                                   |           |           |           |                                   |
| 4     | Chloride                                           | mg/L    | 27.0             | 32.4        | 34.2          | 28.9        | 34.3        | -        | -     | -     | 24.3                              | 24.8      | 24.9      | 25.1      | 250                               |
| 5     | Total Hardness as CaCO <sub>3</sub>                | mg/L    | 53.2             | 62.7        | 74.4          | 75.7        | 72.8        | -        | -     | -     | 61.2                              | 46.4      | 47.3      | 41.9      | 300                               |
| 6     | Suspended Solids                                   | mg/L    | 39.4             | 53.2        | 44.2          | 53.3        | 61.2        | -        | -     | -     | 46.7                              | 39.4      | 34.5      | 31.2      | -                                 |
| 7     | Total Dissolve Solids                              | mg/L    | 200.3            | 223.5       | 219.7         | 381.3       | 341.9       | -        | -     | -     | 79.5                              | 70.1      | 64.1      | 211.0     | 500                               |
| 8     | Biochemical Oxygen Demand<br>(For 3 days at 27 °C) | mg/L    | ND               | ND          | ND            | ND          | ND          | -        | -     | -     | ND                                | ND        | ND        | ND        | 2.0                               |
| 9     | Oil & Grease                                       | mg/L    | ND               | ND          | ND            | ND          | ND          | -        | -     | -     | ND                                | ND        | ND        | ND        | -                                 |
| 10    | Temperature                                        | ° C     | 23.0             | 23.0        | 23.0          | 23.0        | 23.0        | -        | -     | -     | 23.0                              | 23.0      | 23.0      | 23.0      | -                                 |
| 11    | Conductivity                                       | µS/cm   | 184.1            | 206.8       | 311.8         | 409.1       | 355.6       | -        | -     | -     | 159.3                             | 135.2     | 123.7     | 437.2     | -                                 |
| 12    | Flow                                               | L / Min | 1491.1           | 1502.4      | 296.2         | 456.2       | 2645.2      | -        | -     | -     | 1656.4                            | 1234.6    | 1592.9    | 1410.4    | -                                 |