

# MEGHALAYA POWER LIMITED

Corporate Office : Satyam Tower, 3 Alipore Road, 1<sup>st</sup> Floor, Unit No. 9B, Kolkata-700027

Ref: MPL (1 X 43 MW)/LUM/ EHS/2023-24/11

Dated: 14/09/2023

To,

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

**Subject** : Submission of Environmental Monitoring Report for the month of August, 2023.

**Reference** : MPCB/CON-64/2011/2021-2022/145, Dated. Shillong, the 22<sup>nd</sup> September, 2021.

Dear Sir,

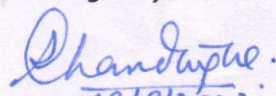
This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission & Water (Ground, Surface, STP & ETP) quality monitoring reports of **Meghalaya Power Limited (43 MW)** for the month of **August, 2023**.

Kindly acknowledge receipt of the same.

Thanking You,

Yours truly,

For **Meghalaya Power Limited (43 MW)**

  
19/9/2023

Sharat Chandra Singha

Asst. General Manager Works

**Enclosed:** As mentioned above

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

Regd. Office & Works: P.O. Lumshnong, East Jaintia Hills District, Meghalaya-793210, E-mail: [ehslums@starcement.co.in](mailto:ehslums@starcement.co.in)

Corporate Office: Century House, 2<sup>nd</sup> Floor, P 15/1, Taratala Road, Kolkata-700088, e-mail: [kolkata@starcement.co.in](mailto:kolkata@starcement.co.in)



CIN : U40108ML2002PL006921



## MEGHALAYA POWER LIMITED

Lumshnong, Meghalaya

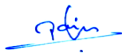
| Date (DD-MM-YYYY) | Pressure (mmHg) | Relative Humidity (%) | Temp. (C) | Manual Rain (mm) |
|-------------------|-----------------|-----------------------|-----------|------------------|
| 01-08-2023        | 764.9           | 68.7                  | 30.4      | 0.0              |
| 02-08-2023        | 762.5           | 75.9                  | 28.6      | 3.0              |
| 03-08-2023        | 763.4           | 76.0                  | 23.0      | 14.5             |
| 04-08-2023        | 761.8           | 85.2                  | 22.0      | 78.8             |
| 05-08-2023        | 763.7           | 83.1                  | 27.3      | 23.0             |
| 06-08-2023        | 760.2           | 89.0                  | 22.0      | 98.0             |
| 07-08-2023        | 762.8           | 85.0                  | 22.5      | 45.0             |
| 08-08-2023        | 763.8           | 84.0                  | 22.0      | 62.0             |
| 09-08-2023        | 761.7           | 80.4                  | 22.4      | 59.5             |
| 10-08-2023        | 761.4           | 87.6                  | 22.0      | 101.9            |
| 11-08-2023        | 762.0           | 90.1                  | 21.0      | 192.7            |
| 12-08-2023        | 763.8           | 89.7                  | 21.0      | 153.0            |
| 13-08-2023        | 761.7           | 75.6                  | 26.4      | 18.8             |
| 14-08-2023        | 760.0           | 70.9                  | 26.7      | 19.8             |
| 15-08-2023        | 761.4           | 62.7                  | 27.9      | 1.1              |
| 16-08-2023        | 763.5           | 60.4                  | 28.4      | 4.2              |
| 17-08-2023        | 760.2           | 59.0                  | 28.6      | 9.6              |
| 18-08-2023        | 762.9           | 60.0                  | 29.0      | 0.0              |
| 19-08-2023        | 761.0           | 76.9                  | 27.8      | 36.2             |
| 20-08-2023        | 762.0           | 67.8                  | 28.4      | 4.6              |
| 21-08-2023        | 765.0           | 78.6                  | 27.9      | 32.2             |
| 22-08-2023        | 761.0           | 75.1                  | 28.4      | 23.2             |
| 23-08-2023        | 763.4           | 79.6                  | 27.1      | 42.2             |
| 24-08-2023        | 761.0           | 78.0                  | 27.6      | 44.2             |
| 25-08-2023        | 762.8           | 72.6                  | 26.4      | 28.2             |
| 26-08-2023        | 761.4           | 90.0                  | 25.6      | 125.8            |
| 27-08-2023        | 761.6           | 85.7                  | 25.0      | 114.4            |
| 28-08-2023        | 762.9           | 79.5                  | 26.7      | 77.8             |
| 29-08-2023        | 763.5           | 68.0                  | 27.6      | 0.0              |
| 30-08-2023        | 761.4           | 62.0                  | 29.7      | 0.0              |
| 31-08-2023        | 762.8           | 63.7                  | 29.7      | 0.0              |
|                   |                 |                       | Total     | 1413.7           |

|                                                                                                                                        |                                                               |                                                                                                   |                                      |                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------|
|                                                       | <b>MEGHALAYA POWER LIMITED (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/2023-24/05                                                                                 |                                                               |                                                                                                   | Month: August                        |                                                                                                      |
| 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> )                                                                 |
| 01.08.2023                                                                                                                             | 40.64                                                         | 22.17                                                                                             | 13.54                                | 16.89                                                                                                |
| 03.08.2023                                                                                                                             | 43.00                                                         | 20.14                                                                                             | 15.30                                | 18.18                                                                                                |
| 14.08.2023                                                                                                                             | 38.86                                                         | 24.67                                                                                             | 14.68                                | 15.89                                                                                                |
| 16.08.2023                                                                                                                             | 40.73                                                         | 22.17                                                                                             | 17.30                                | 18.88                                                                                                |
| 18.08.2023                                                                                                                             | 39.56                                                         | 23.35                                                                                             | 13.66                                | 15.93                                                                                                |
| 30.08.2023                                                                                                                             | 37.71                                                         | 19.01                                                                                             | 13.34                                | 16.85                                                                                                |
| No Monitoring Due to Heavy Rain fall                                                                                                   |                                                               |                                                                                                   |                                      |                                                                                                      |
| 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>MEGHALAYA POWER LIMITED (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/2023-24/05                                                                                 |                                                               |                                                                                                   | Month: August                        |                                                                                                      |
| 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> )                                                                 |
| 01.08.2023                                                                                                                             | 22.01                                                         | 17.13                                                                                             | 13.90                                | 18.41                                                                                                |
| 03.08.2023                                                                                                                             | 24.01                                                         | 16.10                                                                                             | 15.10                                | 21.91                                                                                                |
| 14.08.2023                                                                                                                             | 25.33                                                         | 18.43                                                                                             | 12.42                                | 14.64                                                                                                |
| 16.08.2023                                                                                                                             | 29.68                                                         | 19.59                                                                                             | 13.04                                | 16.54                                                                                                |
| 18.08.2023                                                                                                                             | 27.30                                                         | 17.95                                                                                             | 13.72                                | 18.41                                                                                                |
| 30.08.2023                                                                                                                             | 25.00                                                         | 16.41                                                                                             | 14.44                                | 16.20                                                                                                |
| No Monitoring Due to Heavy Rain fall                                                                                                   |                                                               |                                                                                                   |                                      |                                                                                                      |
| 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>MEGHALAYA POWER LIMITED (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/2023-24/05                                                                                 |                                                               |                                                                                                   | Month: August                        |                                                                                                      |
| 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> )                                                                 |
| 01.08.2023                                                                                                                             | 43.37                                                         | 28.61                                                                                             | 13.24                                | 17.72                                                                                                |
| 03.08.2023                                                                                                                             | 41.99                                                         | 23.19                                                                                             | 14.78                                | 16.52                                                                                                |
| 14.08.2023                                                                                                                             | 45.63                                                         | 25.41                                                                                             | 14.43                                | 18.51                                                                                                |
| 16.08.2023                                                                                                                             | 47.13                                                         | 29.09                                                                                             | 12.36                                | 17.38                                                                                                |
| 18.08.2023                                                                                                                             | 45.99                                                         | 25.61                                                                                             | 11.43                                | 18.02                                                                                                |
| 30.08.2023                                                                                                                             | 40.34                                                         | 27.26                                                                                             | 12.43                                | 16.98                                                                                                |
| No Monitoring Due to Heavy Rain fall                                                                                                   |                                                               |                                                                                                   |                                      |                                                                                                      |
| 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>MEGHALAYA POWER LIMITED (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/2023-24/05                                                                                 |                                                               |                                                                                                   | Month: August                        |                                                                                                      |
| 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> )                                                                 |
| 02.08.2023                                                                                                                             | 35.04                                                         | 17.73                                                                                             | 11.43                                | 14.06                                                                                                |
| 05.08.2023                                                                                                                             | 36.80                                                         | 15.70                                                                                             | 10.40                                | 13.03                                                                                                |
| 17.08.2023                                                                                                                             | 33.26                                                         | 20.23                                                                                             | 12.73                                | 15.36                                                                                                |
| 29.08.2023                                                                                                                             | 35.13                                                         | 17.73                                                                                             | 13.89                                | 16.52                                                                                                |
| 31.08.2023                                                                                                                             | 33.96                                                         | 18.91                                                                                             | 14.43                                | 14.88                                                                                                |
| No Monitoring Due to Heavy Rain fall                                                                                                   |                                                               |                                                                                                   |                                      |                                                                                                      |
| 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>MEGHALAYA POWER LIMITED (43MW)</b><br>Lumshnong, Meghalaya |                                                                                                   | Reference No.                        | MPL/Env/F – 01                                                                                       |
|                                                                                                                                        |                                                               |                                                                                                   | Issue No.                            | 1                                                                                                    |
|                                                                                                                                        | GROUND LEVEL AMBIENT AIR QUALITY MONITORING REPORT            |                                                                                                   | Date of Issue:                       | 24.08.2013                                                                                           |
|                                                                                                                                        |                                                               |                                                                                                   | Revision No.                         | 5                                                                                                    |
|                                                                                                                                        |                                                               |                                                                                                   | Date of Rev.                         | 01.12.2020                                                                                           |
| Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2023-24/05                                                                                 |                                                               |                                                                                                   | Month: August                        |                                                                                                      |
| Location of Sampling: Near 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> )                                                                 |
| 02.08.2023                                                                                                                             | 30.80                                                         | 19.94                                                                                             | 13.90                                | 16.14                                                                                                |
| 05.08.2023                                                                                                                             | 31.10                                                         | 17.91                                                                                             | 12.87                                | 15.11                                                                                                |
| 17.08.2023                                                                                                                             | 32.21                                                         | 22.44                                                                                             | 15.20                                | 17.44                                                                                                |
| 29.08.2023                                                                                                                             | 30.26                                                         | 19.94                                                                                             | 16.36                                | 18.60                                                                                                |
| 31.08.2023                                                                                                                             | 28.77                                                         | 21.12                                                                                             | 14.72                                | 16.96                                                                                                |
| No Monitoring Due to Heavy Rain fall                                                                                                   |                                                               |                                                                                                   |                                      |                                                                                                      |
| 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>MEGHALAYA POWER LIMITED (43 MW)</b><br>Lumshnong, Meghalaya |                                          | Reference No.           | MPL/Env/F-02                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                |                                          | Issue No.               | 1                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>STACK EMISSION MONITORING ANALYSIS REPORT</b>               |                                          | Date of Issue:          | 01.05.2019                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                |                                          | Revision No.            | 5                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                | Date of Rev.                             | 01.06.2021              |                                          |
| <b>Report No: MPL(43MW)/ENV/STACK/MONTHLY/2023-24/05</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                |                                          | <b>Month: August'23</b> |                                          |
| <b><u>Analysis Result</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                |                                          |                         |                                          |
| <b>A. General Information About Stack</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                |                                          |                         |                                          |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Stack Identification No                                        |                                          |                         | <b>43 MW</b>                             |
| 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. 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. Pollution Control Device</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                |                                          |                         |                                          |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Details of pollution control device attached to stack          |                                          |                         | ESP                                      |
| <b>D. Result of Sampling &amp; Analysis of Gaseous Emission</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                |                                          |                         |                                          |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Date of Sampling                                               |                                          |                         | 03.08.2023                               |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Ambient Temp (°C)                                              |                                          |                         | 40                                       |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Stack Gas Temp (°C)                                            |                                          |                         | 125                                      |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Exit Velocity of Gas (m/sec.)                                  |                                          |                         | 15.4                                     |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Flow Rate (Nm <sup>3</sup> / sec.)                             |                                          |                         | 63.7                                     |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Quantity of Emission (Nm <sup>3</sup> / Hr)                    |                                          |                         | 229289.7                                 |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Concentration of PM (mg/Nm <sup>3</sup> )                      |                                          |                         | 27.2                                     |
| 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Concentration of SO <sub>2</sub> (mg/Nm <sup>3</sup> )         |                                          |                         | 362                                      |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Concentration of NO <sub>x</sub> (mg/Nm <sup>3</sup> )         |                                          |                         | 78                                       |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Oxygen (O <sub>2</sub> ) (%)                                   |                                          |                         | 10.0                                     |
| <b>E. 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> |
| <i>Particulate Matter (PM), Sulphur di-oxide (SO<sub>2</sub>), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                |                                          |                         |                                          |
| <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;"> <br/> <b>Analysis by</b> </div> <div style="text-align: center;"> <br/> <b>Checked by</b> </div> <div style="text-align: center;"> <br/> <b>Authorized Signatory</b> </div> </div> |                                                                |                                          |                         |                                          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                        |                                |                                |                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------|--------------------------------|------------------|
|                                                                                                                                                                                                                                                                                                                                                                                     | <b>MEGHALAYA POWER LIMITED</b><br>Lumshnong, Meghalaya |                                | 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/2023-24/05                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                        |                                |                                |                  |
| Month - August                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                        |                                |                                |                  |
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Location                                               | Fugitive Emission Results      | As per CPCB/BIS Guideline      |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                        |                                | Limit                          |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                        | (in $\mu\text{g}/\text{m}^3$ ) | (in $\mu\text{g}/\text{m}^3$ ) |                  |
| 03.08.2023                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Coal Storage Section                                   | 1147                           | 2000                           |                  |
| <div style="display: flex; justify-content: space-between; align-items: flex-end; margin-top: 100px;"> <div> <br/> Analyzed By </div> <div> <br/> Checked By </div> <div> <br/> Verified By </div> </div> |                                                        |                                |                                |                  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>MEGHALAYA POWER LIMITED</b><br>Lumshnong, Meghalaya |       |            |              | Reference No.                                                                                                                                                                                           | MPL/EHS/F-04 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------|------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                        |       |            |              | Issue No.                                                                                                                                                                                               | 1            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>WATER TESTING REPORT</b>                            |       |            |              | Date of Issue:                                                                                                                                                                                          | 24.08.2013   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                        |       |            |              | Revision No.                                                                                                                                                                                            | 3            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                        |       |            | Date of Rev. | 01.06.2019                                                                                                                                                                                              |              |
| Reference No.: MPL/ENV/WATER/MONTHLY/2023-24/05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                        |       |            |              | Date of sample collection: 11.08.2023                                                                                                                                                                   |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                        |       |            |              | Date of Analysis: 11.08.2023 to 14.08.2023                                                                                                                                                              |              |
| 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        | 7.5          | 5.5 to 9.0                                                                                                                                                                                              |              |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Colour                                                 | Hazen | Colourless | Colourless   | -                                                                                                                                                                                                       |              |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Odour                                                  | -     | Odourless  | Odourless    | -                                                                                                                                                                                                       |              |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Chloride                                               | mg/L  | 80.1       | 82.9         | -                                                                                                                                                                                                       |              |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Total Hardness as CaCO <sub>3</sub>                    | mg/L  | 49.6       | 52.0         | -                                                                                                                                                                                                       |              |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Suspended Solids                                       | mg/L  | 76         | 18           | 100                                                                                                                                                                                                     |              |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Total Dissolve Solids                                  | mg/L  | 313        | 322          | -                                                                                                                                                                                                       |              |
| 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Chemical Oxygen Demand                                 | mg/L  | 131        | 32           | 250                                                                                                                                                                                                     |              |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Biochemical Oxygen Demand (For 3 days at 27 °C)        | mg/L  | 42         | 12           | 30                                                                                                                                                                                                      |              |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Oil & Grease                                           | mg/L  | 8.5        | < 3.0        | 10                                                                                                                                                                                                      |              |
| 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Temperature                                            | ° C   | 25         | 25           | Shall not exceed 5.0°C above the receiving water temperature                                                                                                                                            |              |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Conductivity                                           | µS/cm | 483        | 492          | -                                                                                                                                                                                                       |              |
| <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;"> <br/>           Analysis By         </div> <div style="text-align: center;"> <br/>           Checked By         </div> <div style="text-align: center;"> <br/>           Verified By         </div> </div> |                                                        |       |            |              |                                                                                                                                                                                                         |              |

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

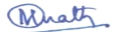
Reference No.: MPL/ENV/WATER/MONTHLY/2023-24/05

Date of sample collection: 11.08.2023  
Date of Analysis: 11.08.2023 to 14.08.2023

| 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                                                 | -    | 7.4        | 5.5 to 9.0                                                                                                                                                                                              |
| 2      | Suspended Solids                                   | mg/L | 29         | 100                                                                                                                                                                                                     |
| 3      | Total Dissolve Solids                              | mg/L | 284        | -                                                                                                                                                                                                       |
| 4      | Chemical Oxygen Demand                             | mg/L | 47         | 250                                                                                                                                                                                                     |
| 5      | Biochemical Oxygen Demand<br>(For 3 days at 27 °C) | mg/L | 16         | 30                                                                                                                                                                                                      |
| 6      | Oil & Grease                                       | mg/L | <3.0       | 10                                                                                                                                                                                                      |

  
 Analysis By

  
 Checked By

  
 Verified By



## WATER TESTING REPORT

|                |              |
|----------------|--------------|
| 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/2023-24/05**

## Surface Water Analysis Results

**Date of sample collection:11.08.2023**  
**Date of Analysis: 11.08.2023 to 14.08.2023**

| S.No. | Parameter                                          | Unit    | Umtyrngai Nallah |             | Umutha Nallah |             | Umso Nalah  | Lunar              | Lukha      | Seshympa   | 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              | 7.6         | 7.3           | 8.0         | 8.0         | 7.0                | 6.9        | 7.3        | 8.0                               | 7.4        | 7.0        | 7.4        | 6.5 - 8.5                         |
| 2     | Colour                                             | Hazen   | Colourless       | Colourless  | Colourless    | Colourless  | Colourless  | Slightly Yellowish | Colourless | Colourless | Colourless                        | Colourless | Colourless | Colourless | 10                                |
| 3     | Odour                                              | -       | Unobjectionable  |             |               |             |             |                    |            |            |                                   |            |            |            | Unobjectionable                   |
| 4     | Chloride                                           | mg/L    | 17.7             | 21.3        | 19.5          | 19.9        | 23.0        | 42.0               | 14.7       | 20.2       | 28.4                              | 19.3       | 21.3       | 21.6       | 250                               |
| 5     | Total Hardness as CaCO <sub>3</sub>                | mg/L    | 40.0             | 62.0        | 70.0          | 76.0        | 78.0        | 103.0              | 20.0       | 40.0       | 14.0                              | 16.0       | 24.0       | 38.0       | 300                               |
| 6     | Suspended Solids                                   | mg/L    | 4.1              | 15.2        | 10.9          | 42.0        | 48.1        | 62.4               | 7.0        | 10.0       | 6.0                               | 6.0        | 8.6        | 8.3        | -                                 |
| 7     | Total Dissolve Solids                              | mg/L    | 268.4            | 275.8       | 225.9         | 285.0       | 301.0       | 215.0              | 60.0       | 95.0       | 167.0                             | 20.0       | 30.0       | 172.0      | 500                               |
| 8     | Biochemical Oxygen Demand<br>(For 3 days at 27 °C) | mg/L    | ND               | ND          | ND            | 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                                | ND         | ND         | ND         | -                                 |
| 10    | Temperature                                        | ° C     | 25.0             | 25.0        | 25.0          | 25.0        | 25.0        | 25.0               | 25.0       | 25.0       | 25.0                              | 25.0       | 25.0       | 25.0       | -                                 |
| 11    | Conductivity                                       | µS/cm   | 428.6            | 443.7       | 367.9         | 461.0       | 482.0       | 341.0              | 95.0       | 153.0      | 275.0                             | 35.7       | 49.3       | 281.0      | -                                 |
| 12    | Flow                                               | L / Min | 212562.2         | 531747.6    | 172808.0      | 545275.0    | 1116900.0   | 5221550.0          | 4985080.0  | 4941900.0  | -                                 | -          | 3586.9     | -          | -                                 |

Analyzed by

Checked by

Mnath  
Verified by