

MEGHALAYA POWER LIMITED

Ref: MPL (1 X 8 MW)/LUM/EHS/2022-23/28

Dated: 27/02/2023

To,

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

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

Reference : MPCB/CON-54/2007/2022-2023/85, Dated. Shillong, the 5th December, 2022.

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 **M/s Meghalaya Power Limited (8MW)** for the month of **January, 2023**.

This is for your kind information record please.

Thanking You,

Yours truly,
For **Meghalaya Power Limited (8 MW)**

For, *Shamiruphe.*

Arvind Rai
Sr. General Manager Works

Enclosed: As mentioned above

- Copy To:**
- 1) The Deputy Director General of Forest (Central), Ministry of Environment Forest & Climate Change, Govt. of India, Regional Office, Shillong, Meghalaya-793021.
 - 2) The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-793 014.
 - 3) The Member Secretary, State Environment Impact Assessment Authority (SEIAA), 'Silviculture Building' Lower Lachumiere, Shillong – 793001, Meghalaya



MEGHALAYA POWER LIMITED
Lumshnong, Meghalaya

Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-01-2023	769.4	95.2	10.4	0
02-01-2023	769.2	95.3	9.2	0
03-01-2023	768.9	95.2	9.5	0
04-01-2023	768.7	95.0	9.1	0
05-01-2023	768.5	93.3	8.3	0
06-01-2023	768.9	93.4	7.2	0
07-01-2023	769.2	94.2	7.1	0
08-01-2023	769.7	94.0	8.4	0
09-01-2023	770.7	59.1	16.6	0
10-01-2023	770.5	49.2	19.2	0
11-01-2023	770	44.0	21.1	0
12-01-2023	769.2	38.0	23.3	0
13-01-2023	768.4	38.5	23.5	0
14-01-2023	767.9	38.3	23.0	0
15-01-2023	767.7	39.3	23.2	0
16-01-2023	767.9	42.3	23.0	0
17-01-2023	768.2	65.0	17.1	0
18-01-2023	768.5	75.0	15.1	0
19-01-2023	768.9	80.4	13.5	0
20-01-2023	769.2	85.0	12.5	0
21-01-2023	769.7	89.4	12.2	0
22-01-2023	770.7	90.0	12.0	0
23-01-2023	770.5	92.0	12.3	0
24-01-2023	770	38.0	19.2	0
25-01-2023	769.2	38.5	21.1	0
26-01-2023	768.4	38.3	23.3	0
27-01-2023	767.9	39.3	23.5	0
28-01-2023	767.7	42.3	23.0	0
29-01-2023	769.2	93.3	23.2	0
30-01-2023	768.9	93.3	17.1	0
31-01-2023	768.7	93.4	15.5	0
				0

	MEGHALAYA POWER LIMITED (8MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Issue:	24.08.2013
			Revision No.	5
Reference No.: MPL (8MW)/ENV/AAQM/MONTHLY/2022-23/10			Date of Rev.	
			01.12.2020	
			Month: January	
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 ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
01.01.2023	45.34	26.78	7.75	12.24
03.01.2023	47.10	24.75	10.89	14.00
05.01.2023	43.56	29.28	9.66	13.01
07.01.2023	45.43	26.78	8.73	16.00
09.01.2023	44.26	27.96	9.21	12.36
11.01.2023	42.41	23.62	7.69	12.04
13.01.2023	43.08	30.28	8.88	11.68
16.01.2023	41.26	27.78	10.85	15.86
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by		 Checked by		 Verified By

	MEGHALAYA POWER LIMITED (8MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Issue:	24.08.2013
			Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: MPL (8 MW)/ENV/AAQM/MONTHLY/2022-23/10			Month: January	
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 ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
01.01.2023	27.41	19.95	9.82	15.06
03.01.2023	29.41	18.92	8.38	18.56
05.01.2023	30.73	21.25	7.75	11.29
07.01.2023	35.08	22.41	10.65	13.19
09.01.2023	32.70	20.77	8.84	15.06
11.01.2023	30.40	19.23	11.45	12.85
13.01.2023	34.63	16.76	11.01	14.09
16.01.2023	32.92	14.93	9.63	12.10
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by		 Checked by		 Verified By

	MEGHALAYA POWER LIMITED (8MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Issue:	24.08.2013
			Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: MPL (8MW)/ENV/AAQM/MONTHLY/2022-23/10			Month: January	
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 ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
01.01.2023	46.14	30.28	11.67	15.96
03.01.2023	44.76	24.86	13.21	17.71
05.01.2023	42.45	27.08	12.86	11.95
07.01.2023	44.33	30.76	10.79	15.36
09.01.2023	48.76	27.28	9.86	14.35
11.01.2023	43.11	28.93	10.86	13.36
13.01.2023	43.76	23.93	11.89	18.60
16.01.2023	40.38	22.92	9.21	12.43
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by		 Checked by		 Verified By

	MEGHALAYA POWER LIMITED (8MW) 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 (8MW)/ENV/AAQM/MONTHLY/2022-23/03			Month: January	
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 ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
02.01.2023	43.24	23.62	10.88	13.73
04.01.2023	45.00	21.59	9.85	12.70
06.01.2023	41.46	26.12	12.18	15.03
10.01.2023	43.33	23.62	13.34	16.19
12.01.2023	42.16	24.80	11.70	14.55
17.01.2023	40.31	20.46	10.16	13.01
19.01.2023	40.98	27.12	6.23	10.54
21.01.2023	39.16	24.62	5.86	8.71
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by		 Checked by		 Verified By

	MEGHALAYA POWER LIMITED (8MW) 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 (8MW)/ENV/AAQM/MONTHLY/2022-23/03			Month: January	
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 ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
02.01.2023	40.34	22.58	12.67	15.37
04.01.2023	42.10	20.55	11.64	14.34
06.01.2023	38.56	25.08	13.97	16.67
10.01.2023	40.43	22.58	15.13	17.83
12.01.2023	39.26	23.76	13.49	16.19
17.01.2023	37.41	19.42	11.95	14.65
19.01.2023	38.08	26.08	8.02	12.18
21.01.2023	36.26	23.58	7.65	10.35
NAAQS permissible limits for Rural, Industrial, Residential Area	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)
Remarks: All the analyzed parameters are well within the permissible limits of NAAQ Standards , Notification dated 18th November 2009.				
 Analysed by		 Checked by		 Verified By

	MEGHALAYA POWER LIMITED (8MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F-02
			Issue No.	1
	STACK EMISSION MONITORING ANALYSIS REPORT		Date of Issue:	01.05.2019
			Revision No.	5
			Date of Rev.	01.06.2021
Report No: MPL(8MW)/ENV/STACK/MONTHLY/2022-23/10			Month: January'23	
<u>Analysis Result</u>				
A. General Information About Stack				
1	Stack Identification No			8 MW
2	Stack Connected to			Boiler
3	Material of Construction (Stack/Duct)			Mild Steel
4	Shape of duct			Circular
5	Whether duct is provided with permanent platform & ladder			Yes
B. Physical characteristic of stack				
1	Stack Height from ground level (meter)			45
2	Duct diameter at sampling point (meter)			2.08
3	Sampling height point from ground level (meter)			11
4	Cross sectional area of Duct/Stack (m ²)			3.4
C. Pollution Control Device				
1	Details of pollution control device attached to stack			ESP
D. Result of Sampling & Analysis of Gaseous Emission				
1	Date of Sampling			27.01.2023
2	Ambient Temp (°C)			39.00
3	Stack Gas Temp (°C)			103
4	Exit Velocity of Gas (m/sec.)			13.93
5	Flow Rate (Nm ³ / sec.)			34.77
6	Quantity of Emission (Nm ³ / Hr)			125181.18
7	Concentration of PM (mg/Nm ³)			25.4
8	Concentration of SO ₂ (mg/Nm ³)			398.0
9	Concentration of NO _x (mg/Nm ³)			258.0
10	Oxygen (O ₂) (%)			10.2
E. Remarks:				
Standard				
PM - 50 mg/Nm ³		SO ₂ - 600 mg/Nm ³		NO _x - 300 mg/Nm ³
<i>Particulate Matter (PM), Sulphur di-oxide (SO₂), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP)</i>				
 Analysis by		 Checked by		 Authorized Signatory

	MEGHALAYA POWER LIMITED 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(8MW)/ENV/FUGITIVE/MONTHLY/2022-23/10				
Month - January 2023				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
			(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
10.01.2023	Coal Storage Section	1538	2000	
 Analyzed By  Checked By  Verified By				

	MEGHALAYA POWER LIMITED Lumshnong, Meghalaya				Reference No.	MPL/EHS/F-04
					Issue No.	1
	WATER TESTING REPORT				Date of Issue:	24.08.2013
					Revision No.	3
				Date of Rev.	01.06.2019	
Reference No.: MPL/ENV/WATER/MONTHLY/2022-23/10					Date of sample collection: 02.01.2023	
					Date of Analysis: 02.01.2023 to 05.01.2023	
Sl.No.	Parameter	Unit	STP Inlet	STP Outlet	Standard Norms For Discharge of Environment Pollution (Notification Date: - 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014- 2015/34 - dated Shillong, the 3rd Sep,2014	
1	pH	-	7.3	7.9	5.5 to 9.0	
2	Colour	Hazen	Colourless	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	36	39	-	
5	Total Hardness as CaCO ₃	mg/L	82	83.6	-	
6	Suspended Solids	mg/L	74	9	100	
7	Total Dissolve Solids	mg/L	335	400	-	
8	Chemical Oxygen Demand	mg/L	135	29	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	68	8.5	30	
10	Oil & Grease	mg/L	8	< 3.0	10	
11	Temperature	° C	25	25	Shall not exceed 5.0°C above the receiving water temperature	
12	Conductivity	µS/cm	575	688	-	
 Analysis By  Checked By  Verified By						

	MEGHALAYA POWER LIMITED Lumshnong, Meghalaya			Reference No.	MPL/EHS/F-04
				Issue No.	1
	WATER TESTING REPORT			Date of Issue:	24.08.2013
				Revision No.	3
			Date of Rev.	01.06.2019	
Reference No.: MPL/ENV/WATER/MONTHLY/2022-23/10					Date of sample collection: 02.01.2023 Date of Analysis: 02.01.2023 to 05.01.2023
Sl.No.	Parameter	Unit	ETP Outlet	Standard Norms For Discharge of Environment Pollution (Notification Date:- 19th May 1993) & Consent To Operate vide letter no. MPCB/TB-900 (Pt-II)/2014-2015/34 – dated Shillong, the 3rd SEP, 2014.	
1	pH	-	7.4	5.5 to 9.0	
2	Suspended Solids	mg/L	14.5	100	
3	Total Dissolve Solids	mg/L	246	-	
4	Chemical Oxygen Demand	mg/L	37	250	
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	12.0	30	
6	Oil & Grease	mg/L	<3.0	10	
 Analysis By  Checked By  Verified By					



MEGHALAYA POWER LIMITED
Lumshnong, Meghalaya

Reference No.	MPL/EHS/F-04
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	3
Date of Rev.	01.06.2019

WATER TESTING REPORT

Reference No.: MPL/ENV/WATER/MONTHLY/2022-23/10

Surface Water Analysis Results

Date of sample collection: 02.01.2023

Month: January

Date of Analysis: 02.01.2023 to 05.01.2023

S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Umso Nalah	Umbadoh	Tongseng	Lumshnong	Wahiajer	Standards norms as per IS 2296			
			Up Stream	Down Stream	Up Stream	Down Stream	Down Stream	Seasonal Spring / Seasonal Nallah							
1	pH	-	7.8	Water Source not found				7.7	7.6	7.8	Water Source not found		6.5 - 8.5		
2	Colour	Hazen	Colourless					Colourless	Colourless	10					
3	Odour	-	Unobjectionable					Unobjectionable					Unobjectionable		
4	Chloride	mg/L	40.0					42.8	23.5	26.0			250		
5	Total Hardness as CaCO ₃	mg/L	66.7					80.5	69.8	39.0			300		
6	Suspended Solids	mg/L	2.0					5.0	7.0	5.7			-		
7	Total Dissolve Solids	mg/L	247					205	160.0	75.0			500		
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND					ND	ND	ND			2.0		
9	Oil & Grease	mg/L	ND					ND	ND	ND			-		
10	Temperature	* C	25.0					25.0	25.0	25.0			-		
11	Conductivity	µS/cm	359					328	256	113			-		
12	Flow	L / Min	-					10.8	-	-			-		

Analyzed by

Checked by

Verified by