

MEGHALAYA POWER LIMITED

Ref: MPL (1 X 8 MW)/LUM/EHS/2022-23/22

Dated: 24/12/2022

To,

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

Subject : Submission of Environmental Monitoring Report for the month of Nov, 2022.

Reference : MPCB/CON-54/2007/2019-2020/80, Dated. Shillong, the 1st November, 2019.

Dear Sir,

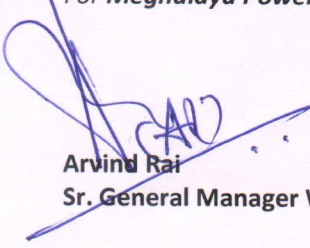
This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission & Water (Ground, Surface, STP & ETP) quality monitoring reports of **M/s Meghalaya Power Limited (8MW)** for the month of **Nov, 2022**.

This is for your kind information record please.

Thanking You,

Yours truly,

For **Meghalaya Power Limited (8 MW)**


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)	Wind Direction (deg)	Wind Speed- (m/s)	Manual Rain (mm)
01-11-2022	958.24	70.24	23.3	347.05	3.22	0
02-11-2022	957.91	71.48	32.29	247.63	1.28	0
03-11-2022	959.47	82.07	35.06	249.74	0.71	0
04-11-2022	962.91	95.86	23.48	269.57	3.22	0
05-11-2022	963.23	96.89	23.71	202.09	1.07	0
06-11-2022	962.5	98.37	23.3	130.42	0.72	0
07-11-2022	963.22	67.35	32.29	172.25	0.93	0
08-11-2022	962.51	50.84	35.06	193.15	1.53	0
09-11-2022	961.8	49.95	35.07	178.3	1.91	0
10-11-2022	960.64	49.32	36.08	202.26	1.61	0
11-11-2022	959.5	48.69	35.68	131.51	1.68	0
12-11-2022	958.99	46.2	35.81	148.8	2.06	0
13-11-2022	958.89	69.95	30.57	319.17	2.58	0
14-11-2022	959.4	74.53	29.55	302.38	3.62	0
15-11-2022	962.5	49.32	23.48	154.44	1.28	0
16-11-2022	963.22	60.25	23.71	82.61	0.71	0
17-11-2022	959.5	48.69	35.68	131.51	1.68	0
18-11-2022	958.99	46.2	35.81	148.8	2.06	0
19-11-2022	958.89	69.95	30.57	319.17	2.58	0
20-11-2022	959.4	74.53	29.55	302.38	3.62	0
21-11-2022	962.5	49.32	23.48	154.44	1.28	0
22-11-2022	963.22	60.25	23.71	82.61	0.71	0
23-11-2022	958.24	70.24	23.3	347.05	3.22	0
24-11-2022	957.91	71.48	32.29	247.63	1.28	0
25-11-2022	959.47	82.07	35.06	249.74	0.71	0
26-11-2022	962.91	95.86	23.48	269.57	3.22	0
27-11-2022	963.23	96.89	23.71	202.09	1.07	0
28-11-2022	962.5	98.37	23.3	130.42	0.72	0
29-11-2022	962.5	49.32	23.48	154.44	1.28	0
30-11-2022	963.22	60.25	23.71	82.61	0.71	0
					Total rain of this month	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/2022-23/08			Date of Rev.	
			01.12.2020	
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)
02.11.2022	46.38	28.40	6.67	10.46
05.11.2022	48.14	26.37	9.81	12.22
07.11.2022	44.60	30.90	8.58	11.23
10.11.2022	46.47	28.40	7.65	14.22
15.11.2022	45.30	29.58	8.13	10.58
17.11.2022	43.45	25.24	6.61	10.26
21.11.2022	44.12	31.90	7.80	10.26
23.11.2022	42.30	29.40	9.77	14.08
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/2022-23/08			Month: November'22	
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)
02.11.2022	44.19	24.90	14.78	15.22
05.11.2022	45.28	23.40	13.48	18.72
07.11.2022	44.26	26.90	11.38	16.58
10.11.2022	43.49	23.90	13.48	19.15
15.11.2022	42.80	26.35	14.13	16.08
17.11.2022	40.48	28.30	11.41	18.12
21.11.2022	40.80	28.90	12.13	20.26
23.11.2022	38.49	27.50	14.77	17.26
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/2022-23/08			Month: November'22	
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)
02.11.2022	47.18	31.90	10.59	14.18
05.11.2022	45.80	26.48	12.13	15.93
07.11.2022	43.49	28.70	11.78	10.93
10.11.2022	45.37	32.38	9.71	13.58
15.11.2022	49.80	28.90	8.78	12.93
17.11.2022	44.15	30.55	9.78	11.58
21.11.2022	44.80	25.55	10.81	16.82
23.11.2022	41.42	24.54	8.13	10.65
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 (43MW) 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 (8MW)/ENV/AAQM/MONTHLY/2022-23/01			Month: November'22	
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)
01.11.2022	43.48	26.70	5.34	9.53
03.11.2022	45.24	24.67	8.48	11.29
08.11.2022	41.70	29.20	7.25	10.30
11.11.2022	43.57	26.70	6.32	13.29
14.11.2022	42.40	27.88	6.80	9.65
16.11.2022	40.55	23.54	5.28	9.33
18.11.2022	41.22	30.20	6.47	9.33
22.11.2022	39.40	27.70	8.44	13.15
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 (43MW) 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 (8MW)/ENV/AAQM/MONTHLY/2022-23/01			Month: November'22	
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)
01.11.2022	45.58	28.30	6.34	8.68
03.11.2022	47.34	26.27	9.48	10.44
08.11.2022	43.80	30.80	8.25	9.45
11.11.2022	45.67	28.30	7.32	12.44
14.11.2022	44.50	29.48	7.80	8.80
16.11.2022	42.65	25.14	6.28	8.48
18.11.2022	43.32	31.80	7.47	8.48
22.11.2022	41.50	29.30	9.44	12.30
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 (8 MW) Lumshnong, Meghalaya	Reference No.	MPL/Env/F-02
		Issue No.	1
		Date of Issue:	01.05.2019
		Revision No.	5
STACK EMISSION MONITORING ANALYSIS REPORT		Date of Rev.	01.06.2021
Report No: MPL(8MW)/Env/Stack/Monthly/2022-23/08		Month: November'22	
<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	-	
2	Ambient Temp (°C)	-	
3	Stack Gas Temp (°C)	-	
4	Exit Velocity of Gas (m/sec.)	-	
5	Flow Rate (Nm ³ / sec.)	-	
6	Quantity of Emission (Nm ³ / Hr)	-	
7	Concentration of PM (mg/Nm ³)	-	
8	Concentration of SO ₂ (mg/Nm ³)	-	
9	Concentration of NOx (mg/Nm ³)	-	
10	Oxygen (O ₂) (%)	-	
E.	Remarks: Monitoring of 8MW Boiler stack has not carried out due to shut down.		
Standard			
PM - 50 mg/Nm ³		SO ₂ - 600 mg/Nm ³	NOx - 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
	FUGITIVE EMISSION MONITORING REPORT		Revision No.	2
			Revision Date	01-01-2021
Ref: MPL(8MW)/ENV/FUGITIVE/MONTHLY/2022-23/008				
Month - Novemeber 2022				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)		(in $\mu\text{g}/\text{m}^3$)
15.11.2022	Coal Storage Section	1387	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/2022-23/08					Date of sample collection: - 09.11.2022	
					Date of Analysis: 09.11.2022 to 12.11.2022	
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	-	7.2	7.9	5.5 to 9.0	
2	Colour	Hazen	Colourless	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	38.0	41.0	-	
5	Total Hardness as CaCO ₃	mg/L	83.0	86.0	-	
6	Suspended Solids	mg/L	61.0	5.6	100	
7	Total Dissolve Solids	mg/L	262.0	325.0	-	
8	Chemical Oxygen Demand	mg/L	136.0	22.0	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	65.0	6.0	30	
10	Oil & Grease	mg/L	9.0	< 3.0	10	
11	Temperature	° C	25.0	25.0	Shall not exceed 5.0°C above the receiving water temperature	
12	Conductivity	µS/cm	455.0	559.0	-	
 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/2022-23/08					Date of sample collection: - 05.11.2022 Date of Analysis: 05.11.2022 to 08.11.2022
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	-	7.2	5.5 to 9.0	
2	Suspended Solids	mg/L	14	100	
3	Total Dissolve Solids	mg/L	249	-	
4	Chemical Oxygen Demand	mg/L	37	250	
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	8.7	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	
	WATER TESTING REPORT										Date of Rev.	01.06.2019	
Reference No.: MPL/ENV/WATER/MONTHLY/2022-23/08										Surface Water Analysis Results Month: November-2022		Date of sample collection: - 18.11.2022 Date of Analysis: 18.11.2022 to 21.11.2022	
S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Umso Nalah	Seshysmpa	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	-	7.70	7.50	7.50	7.90	8.00	7.2	8.0	7.9	Water Source not found		6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless			10
3	Odour	-	Unobjectionable										Unobjectionable
4	Chloride	mg/L	43.1	45.0	38.2	39.9	49.5	22.8	20.1	27.4			250
5	Total Hardness as CaCO ₃	mg/L	66.4	70.3	73.6	75.4	78.9	42.6	71.6	40.3			300
6	Suspended Solids	mg/L	10.0	12.0	13.5	16.0	17.1	5.6	6.0	3.4			-
7	Total Dissolve Solids	mg/L	241	238	185	189	197	93.0	158.8	75.0			500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	ND	ND	ND	ND	ND	ND			2.0
9	Oil & Grease	mg/L	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			-
11	Conductivity	μS/cm	361.5	357.0	277.0	285.0	295.0	138.0	237.0	112.8			-
12	Flow	L / Min	2074.0	2840.3	918.0	1921.0	3189.63	95045.50	-	-			-
   Analyzed by Checked by Verified by													