

MEGHALAYA POWER LIMITED

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

Ref: MPL (1 X 8 MW)/LUM/EHS/2022-23/14

Dated: 22/09/2022

To,

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

Subject : Submission of Environmental Monitoring Report for the month of Aug, 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 (Surface, STP & ETP) quality monitoring reports of M/s Meghalaya Power Limited (8MW) for the month of Aug, 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

Arvind Rai



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)
01-08-2022	956.5	90.14	25.23	207.87	0.37	19.8
02-08-2022	956.48	89.94	25.26	198.38	0.8	0.0
03-08-2022	956.39	90.98	25.07	212.02	1.23	4.2
04-08-2022	956.33	92.02	24.88	236.89	1.18	6.2
05-08-2022	956.21	93.11	24.53	207.29	1.24	0.0
06-08-2022	956.18	94	24.29	191.12	1.31	15.6
07-08-2022	956.27	94.71	24.2	185.44	1.25	0.0
08-08-2022	956.29	94.64	24.29	195.31	0.98	0.0
09-08-2022	956.31	93.8	24.46	220.29	0.64	0.0
10-08-2022	956.4	93.01	24.36	200.6	1.04	6.6
11-08-2022	956.5	93.23	24.3	186.6	0.82	0.0
12-08-2022	956.56	93.36	24.3	198.63	1.14	0.0
13-08-2022	956.64	94.08	24.19	296.7	0.86	4.5
14-08-2022	956.82	94.11	24.1	287.39	0.9	0.0
15-08-2022	956.91	94.48	24.03	320.33	0.96	5.0
16-08-2022	957.26	94.95	24	291.62	0.59	9.4
17-08-2022	957.56	94.99	24	235.74	0.68	0.0
18-08-2022	957.8	95.57	23.9	132.99	0.76	0.0
19-08-2022	958.03	96.16	23.9	200.91	1.1	0.0
20-08-2022	958.29	96.02	23.91	161.57	1.14	0.0
21-08-2022	958.64	96.37	23.92	143.62	0.72	0.0
22-08-2022	958.99	96.27	24	207.24	0.52	0.0
23-08-2022	959.27	96.23	23.98	187.07	1.72	4.2
24-08-2022	959.47	95.96	23.71	189.62	1.83	0.0
25-08-2022	959.68	96.21	23.45	135.26	1.14	4.9
26-08-2022	959.69	97.06	23.35	211.9	0.9	0.0
27-08-2022	959.6	97.48	23.4	230.67	0.93	15.2
28-08-2022	959.66	97.72	23.36	186.62	2.27	4.2
29-08-2022	959.76	97.93	23.3	203.92	1.24	7.5
30-08-2022	959.73	98.02	23.3	170.62	0.98	0.0
31-08-2022	959.69	98.1	23.27	174.98	1.8	0.0
					Total rain of this month	107.3

	MEGHALAYA POWER LIMITED (8MW) 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 (8 MW)/ENV/AAQM/MONTHLY/2022-23/11			Month: August'22	
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)
03.08.2022	48.48	28.30	9.04	12.83
05.08.2022	50.24	26.27	12.18	14.59
08.08.2022	46.70	30.80	10.95	13.60
10.08.2022	48.57	28.30	10.02	16.59
16.08.2022	47.40	29.48	10.50	12.95
18.08.2022	45.55	25.14	8.98	12.63
22.08.2022	46.22	31.80	10.17	12.63
24.08.2022	44.40	29.30	12.14	16.45
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
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Rev.	01.12.2020
Reference No.: MPL (8 MW)/ENV/AAQM/MONTHLY/2022-23/12			Month: August'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)
03.08.2022	46.29	24.80	17.15	17.59
05.08.2022	47.38	23.30	15.85	21.09
08.08.2022	46.36	26.80	13.75	18.95
10.08.2022	45.59	23.80	15.85	21.52
16.08.2022	44.90	26.25	16.50	18.45
18.08.2022	42.58	28.20	13.78	20.49
22.08.2022	42.90	28.80	14.50	22.63
24.08.2022	40.59	27.40	17.14	19.63
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
AMBIENT AIR QUALITY MONITORING REPORT			Date of Rev.	01.12.2020
Reference No.: MPL (8 MW)/ENV/AAQM/MONTHLY/2022-23/13			Month: August'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)
03.08.2022	49.28	31.80	12.96	16.55
05.08.2022	47.90	26.38	14.50	18.30
08.08.2022	45.59	28.60	14.15	13.30
10.08.2022	47.47	32.28	12.08	15.95
16.08.2022	51.90	28.80	11.15	15.30
18.08.2022	46.25	30.45	12.15	13.95
22.08.2022	46.90	25.45	13.18	19.19
24.08.2022	43.52	24.44	10.50	13.02
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

STACK EMISSION MONITORING ANALYSIS REPORT

Reference No.	MPL/Env/F-02
Issue No.	1
Date of Issue:	01.05.2019
Revision No.	5
Date of Rev.	01.06.2021

Report No: MPL(8MW)/ENV/STACK/MONTHLY/2022-23/05

Month: August'22

Analysis Result

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	17.08.2022
2	Ambient Temp (°C)	29.00
3	Stack Gas Temp (°C)	105
4	Exit Velocity of Gas (m/sec.)	12.94
5	Flow Rate (Nm ³ / sec.)	32.11
6	Quantity of Emission (Nm ³ / Hr)	115608.52
7	Concentration of PM (mg/Nm ³)	18.67
8	Concentration of SO ₂ (mg/Nm ³)	332.7
9	Concentration of NO _x (mg/Nm ³)	225.5
10	Oxygen (O ₂) (%)	10.58
E. Remarks:		

Standard

PM - 50 mg/Nm ³	SO ₂ - 600 mg/Nm ³	NO _x - 300 mg/Nm ³
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Particulate Matter (PM), Sulphur di-oxide (SO₂), Oxide of Nitrogen (Nox), Electro Static Precipitator (ESP)


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/2022-23/005 Month - August 2022				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)		(in $\mu\text{g}/\text{m}^3$)
04.08.2022	Coal Storage Section	1452	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/2022-23/05					Date of sample collection: - 05.08.2022	
					Date of Analysis: 05.08.2022 to 08.08.2022	
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	-	7.4	7.84	5.5 to 9.0	
2	Colour	Hazen	Colourless	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	47.9	49.6	-	
5	Total Hardness as CaCO ₃	mg/L	92.0	98.0	-	
6	Suspended Solids	mg/L	68.4	3.5	100	
7	Total Dissolve Solids	mg/L	306	278	-	
8	Chemical Oxygen Demand	mg/L	110	30.0	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	72.0	3.0	30	
10	Oil & Grease	mg/L	6.6	< 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	571.0	520	-	
 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/2022-23/05			Date of sample collection: - 05.08.2022 Date of Analysis: 05.08.2022 to 08.08.2022		
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	-	6.9	5.5 to 9.0	
2	Suspended Solids	mg/L	10.4	100	
3	Total Dissolve Solids	mg/L	281	-	
4	Chemical Oxygen Demand	mg/L	25.1	250	
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	7.4	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/2022-23/05

Surface Water Analysis Report
Month: August-2022

Date of sample collection: - 20.08.2022

Date of Analysis: 20.08.2022 to 23.08.2022

S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Lumshnong	Umbadoh	Tongseng	Wahiajer	Standards norms as per IS 2296
			Up Stream	Down Stream	Up Stream	Down Stream	Seasonal Spring / Seasonal Nallah				
1	pH	-	7.80	7.76	7.70	7.80	7.45	7.3	7.5	7.36	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	10
3	Odour	-	Unobjectionable								Unobjectionable
4	Chloride	mg/L	44.3	46.1	35.5	37.2	48.7	46.5	48.9	44.8	250
5	Total Hardness as CaCO ₃	mg/L	70.0	78.0	74.0	80.0	20.0	14.8	20.1	12.5	300
6	Suspended Solids	mg/L	20.0	24.0	23.0	25.0	4.7	2.1	1.0	13.5	-
7	Total Dissolve Solids	mg/L	186	239	176	180	125.8	132.8	118.9	125.4	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	301	395	290.0	298.2	204.0	224.0	210.4	228.7	-
12	Flow	L/sec	3833.5	12016.2	1143.2	7124.1	3690.8	-	-	-	-

Analyzed by

Checked by

Verified by