

MEGHALAYA POWER LIMITED

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

Ref: MPL (1 X 43 MW)/LUM/ EHS/2023-24/08

Dated: 13/07/2023

To,

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

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

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

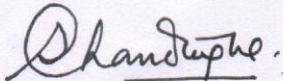
Dear Sir,

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 **M/s Meghalaya Power Limited (43 MW)** for the month of **June, 2023**.

Kindly acknowledge receipt of the same.

Thanking You,

Yours truly,
For **Meghalaya Power Limited (43 MW)**



Sharat Chandra Singha
Asst. 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-790314.



MEGHALAYA POWER LIMITED

Lumshnong, Meghalaya

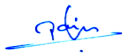
Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-06-2023	762.5	60.1	32.7	0
02-06-2023	762.2	57.9	39.6	0
03-06-2023	761	59.7	40.7	0
04-06-2023	761.5	85.0	25.9	0
05-06-2023	760.9	65.7	29.8	0
06-06-2023	762.5	77.8	31.8	0
07-06-2023	762.2	66.9	33.4	0
08-06-2023	762.5	64.7	39.7	0
09-06-2023	761.4	61.8	32.5	15
10-06-2023	763	86.7	22.6	18.4
11-06-2023	762	75.9	38.9	163.4
12-06-2023	764	79.6	29.7	8.2
13-06-2023	760.6	54.7	37.6	8.4
14-06-2023	762.7	53.4	35.4	201
15-06-2023	764.8	76.1	33.7	304.8
16-06-2023	766	85.2	29.4	105.8
17-06-2023	764	59.7	33.6	138.2
18-06-2023	768	68.6	22.9	182.8
19-06-2023	764	64.9	23.8	180
20-06-2023	763.4	80.1	23.4	28.6
21-06-2023	761	82.6	20.7	89.4
22-06-2023	763.8	75.1	26.4	74.4
23-06-2023	760.9	84.6	25.7	60.6
24-06-2023	762.5	55.1	34.6	0
25-06-2023	762.2	55.0	35.0	8
26-06-2023	763	58.4	25.9	45.2
27-06-2023	761	87.6	22.9	12.6
28-06-2023	760	58.2	31.9	92.4
29-06-2023	762.5	52.9	32.4	96.2
30-06-2023	763	55.0	36.4	58.6
			Total	1892.0

	MEGHALAYA POWER LIMITED (43MW) 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/2023-24/03			Month: June	
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)
01.06.2023	46.33	27.63	11.08	15.21
03.06.2023	48.69	25.60	12.84	16.50
06.06.2023	44.55	30.13	12.22	14.21
08.06.2023	46.42	27.63	14.84	17.20
10.06.2023	45.25	28.81	11.20	14.25
13.06.2023	43.40	24.47	10.88	15.17
-	No Monitoring Due to Heavy Rain fall			
-				
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
	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/2023-24/03			Month: June	
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)
01.06.2023	27.18	20.67	11.37	14.32
03.06.2023	29.18	19.64	12.57	17.82
06.06.2023	30.50	21.97	9.89	10.55
08.06.2023	34.85	23.13	10.51	12.45
10.06.2023	32.47	21.49	11.19	14.32
13.06.2023	30.17	19.95	11.91	12.11
-	No Monitoring Due to Heavy Rain fall			
-				
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
			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/2023-24/03			Month: June	
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)
01.06.2023	46.42	31.63	11.89	14.40
03.06.2023	45.04	26.21	13.43	15.10
06.06.2023	48.68	28.43	13.08	16.37
08.06.2023	50.18	32.11	11.01	18.10
10.06.2023	49.04	28.63	10.08	16.11
13.06.2023	43.39	30.28	11.08	15.21
-	No Monitoring Due to Heavy Rain fall			
-				
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 (43 MW)/ENV/AAQM/MONTHLY/2023-24/03			Month: June	
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)
02.06.2023	42.69	23.88	11.67	14.37
05.06.2023	44.45	21.85	10.64	13.34
07.06.2023	40.91	26.38	12.97	15.67
09.06.2023	42.78	23.88	14.13	16.83
12.06.2023	41.61	25.06	14.67	15.19
24.06.2023	30.21	15.54	10.95	13.65
-	No Monitoring Due to Heavy Rain fall			
-				
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				

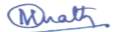
	MEGHALAYA POWER LIMITED (43MW) Lumshnong, Meghalaya		Reference No.	MPL/Env/F – 01
			Issue No.	1
	GROUND LEVEL AMBIENT AIR QUALITY MONITORING REPORT		Date of Issue:	24.08.2013
			Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: MPL (43 MW)/ENV/AAQM/MONTHLY/2023-24/03			Month: June	
Location of 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)
02.06.2023	35.65	23.18	15.57	17.78
05.06.2023	35.95	21.15	14.54	16.75
07.06.2023	37.06	25.68	16.87	19.08
09.06.2023	35.11	23.18	18.03	20.24
12.06.2023	33.62	24.36	16.39	18.60
24.06.2023	32.11	20.02	14.85	17.06
	No Monitoring Due to Heavy Rain fall			
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 (43 MW) 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(43MW)/ENV/STACK/MONTHLY/2023-24/03 Month: June'23				
<u>Analysis Result</u>				
A. General Information About Stack				
1	Stack Identification No			43 MW
2	Stack Connected to			Boiler
3	Material of Construction (Stack/Duct)			RCC
4	Shape of duct			Circular
5	Whether duct is provided with permanent platform & ladder			Yes
B. Physical characteristic of stack				
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 ²)			5.94
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			20.06.2023
2	Ambient Temp (°C)			40
3	Stack Gas Temp (°C)			120
4	Exit Velocity of Gas (m/sec.)			14.2
5	Flow Rate (Nm ³ / sec.)			59.6
6	Quantity of Emission (Nm ³ / Hr)			214600.7
7	Concentration of PM (mg/Nm ³)			24.6
8	Concentration of SO ₂ (mg/Nm ³)			344
9	Concentration of NO _x (mg/Nm ³)			227
10	Oxygen (O ₂) (%)			10.1
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(43MW)/ENV/FUGITIVE/MONTHLY/2023-24/03				
Month - June				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)	
03.06.2023	Coal Storage Section	1275	2000	
 Analyzed By  Checked By  Verified By				

	MEGHALAYA POWER LIMITED (43 MW) Lumshnong, Meghalaya				Document No.	MPL/EHS/Env/F-03			
					Date of Issued	01-05-2019			
					Revision No.	04			
	NOISE LEVEL MONITORING REPORT					Revision Date	01-01-2021		
Ref: MPL(43MW)/ENV/NOISE/MONTHLY/2023-24/003					Date: 01.06.2023				
Month -June									
S. No.	Location	Measured Values dB(A) Day time (6:00am to 10:00pm)			Norms In dB(A)	Measured Values dB(A) Night time (10:00pm to 6:00am)			Norms in dB(A)
		Min.	Max.	Avg.		Min.	Max.	Avg.	
A	Plant								
1	Turbine House Ground Floor	63.6	68.1	65.9	75	59.8	63.7	61.8	70
2	Turbine House 9 Mt.	60.5	70.3	65.4		56.7	65.7	61.2	
3	RO – MCC	64.4	70.8	67.6		60.0	64.8	62.4	
4	Boiler Ground Floor	64.9	70.0	67.5		58.8	64.7	61.8	
5	CHP – MCC	64.4	70.9	67.7		53.0	56.8	54.9	
6	Office Area	58.7	67.9	63.3		50.5	64.0	57.3	
 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/2023-24/03					Date of sample collection: 05.06.2023	
					Date of Analysis: 05.06.2023 to 08.06.2023	
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	-	7.4	7.7	5.5 to 9.0	
2	Colour	Hazen	Colourless	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	86.9	88.6	-	
5	Total Hardness as CaCO ₃	mg/L	48.0	54.0	-	
6	Suspended Solids	mg/L	77	12	100	
7	Total Dissolve Solids	mg/L	344	360	-	
8	Chemical Oxygen Demand	mg/L	110	29	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	32	13	30	
10	Oil & Grease	mg/L	8.6	< 3.0	10	
11	Temperature	° C	25	25	Shall not exceed 5.0°C above the receiving water temperature	
12	Conductivity	µS/cm	550	576	-	
 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/2023-24/03					Date of sample collection: 05.06.2023 Date of Analysis: 05.06.2023 to 08.06.2023
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	-	7.8	5.5 to 9.0	
2	Suspended Solids	mg/L	25	100	
3	Total Dissolve Solids	mg/L	230	-	
4	Chemical Oxygen Demand	mg/L	40	250	
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	18.0	30	
6	Oil & Grease	mg/L	<3.0	10	
 Analysis By  Checked By  Verified By					



WATER TESTING REPORT

Reference No.	MPL/EHS/F-04
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MPL/EHS/F-04

Issue No.	1
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Date of Issue:	24.08.2013
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24.08.2013

Revision No.	3
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3

Date of Rev.	01.06.2019
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01.06.2019

Reference No.: MPL/ENV/WATER/MONTHLY/2023-24/03

Surface Water Analysis Results

Date of sample collection: 14.06.2023

Date of Analysis: 14.06.2023 to 17.06.2023

S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Umso Nalah	Seshympa	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	-	7.7	7.9	7.3	7.8	8.2	7.5	7.8	7.4	7.6	7.5	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	10
3	Odour	-	Unobjectionable										Unobjectionable
4	Chloride	mg/L	25.9	33.7	22.2	28.0	51.4	23.0	40.1	21.3	26.6	28.4	250
5	Total Hardness as CaCO ₃	mg/L	41.7	60.2	79.4	79.4	84.0	40.0	20.2	14.0	16.0	46.0	300
6	Suspended Solids	mg/L	5.2	30.7	4.9	38.9	45.7	6.7	7.4	4.5	3.7	8.3	-
7	Total Dissolve Solids	mg/L	275.0	286.0	231.0	287.0	307.0	92.4	171.0	17.8	29.6	175.0	500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	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	-
10	Temperature	° C	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	-
11	Conductivity	µS/cm	440.0	457.6	396.6	459.2	491.2	147.8	273.6	22.0	47.3	280.0	-
12	Flow	L / Min	151831.8	522386.8	109492.3	203892.3	627482.1	945912.2	-	-	1581.75	-	-