

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/2023-24/13

Dated: 19/10/2023

To,

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

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

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

Dear Sir,

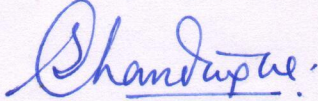
This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality monitoring including meteorological data, Stack Emission, Fugitive Emission & Water (Ground, Surface, STP & ETP) quality monitoring reports of **Meghalaya Power Limited (43 MW)** for the month of **September, 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: The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-790314.



MEGHALAYA POWER LIMITED

Lumshnong, Meghalaya

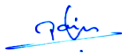
Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-09-2023	761.0	88.7	29.8	11.0
02-09-2023	763.0	86.9	27.5	36.8
03-09-2023	761.7	79.5	30.4	0.0
04-09-2023	762.0	85.2	30.0	0.0
05-09-2023	761.0	85.0	29.7	0.9
06-09-2023	762.4	87.0	28.4	0.0
07-09-2023	761.8	89.0	27.1	9.6
08-09-2023	762.9	79.0	22.0	92.1
09-09-2023	763.8	86.4	23.0	30.0
10-09-2023	761.4	82.5	22.0	0.0
11-09-2023	761.8	75.8	24.0	16.6
12-09-2023	761.5	72.6	23.0	40.0
13-09-2023	764.0	71.7	22.0	24.6
14-09-2023	761.0	73.6	25.7	4.0
15-09-2023	762.0	80.4	27.9	0.0
16-09-2023	762.0	82.5	29.6	0.0
17-09-2023	761.0	84.0	30.0	0.0
18-09-2023	763.0	69.5	31.0	0.0
19-09-2023	764.0	67.5	27.8	2.0
20-09-2023	762.0	67.5	22.0	55.0
21-09-2023	761.0	74.9	23.0	14.4
22-09-2023	763.0	73.4	25.0	14.2
23-09-2023	762.2	78.1	26.0	4.8
24-09-2023	762.0	76.5	30.0	0.0
25-09-2023	763.5	73.4	29.5	0.0
26-09-2023	762.4	69.8	28.7	0.0
27-09-2023	762.8	89.4	29.4	0.0
28-09-2023	761.4	75.6	28.7	0.0
29-09-2023	761.7	71.4	26.4	0.0
30-09-2023	762.4	78.6	30.1	0.0
			Total	356.0

	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/2023-24/06			Month : September	
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)
04.09.2023	43.58	24.95	15.23	19.36
06.09.2023	45.94	22.92	16.99	20.65
11.09.2023	41.80	27.45	16.37	18.36
14.09.2023	43.67	24.95	18.99	21.35
16.09.2023	42.50	26.13	15.35	18.40
19.09.2023	40.65	21.79	15.03	19.32
22.09.2023	41.32	28.45	16.02	20.15
25.09.2023	39.50	25.95	14.57	19.29
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/2023-24/06			Month : September	
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)
04.09.2023	24.95	19.91	15.59	20.88
06.09.2023	26.95	18.88	16.79	24.38
11.09.2023	28.27	21.21	14.11	17.01
14.09.2023	32.62	22.37	14.73	19.01
16.09.2023	30.24	20.73	15.41	20.88
19.09.2023	27.94	19.19	16.13	18.67
22.09.2023	32.17	16.72	15.41	19.91
25.09.2023	30.46	14.89	14.46	17.92
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/2023-24/06			Month : September	
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)
04.09.2023	46.31	31.39	14.93	20.19
06.09.2023	44.93	25.97	16.47	18.99
11.09.2023	48.57	28.19	16.12	20.98
14.09.2023	50.07	31.87	14.05	19.85
16.09.2023	48.93	28.39	13.12	20.49
19.09.2023	43.28	30.04	14.12	19.45
22.09.2023	43.93	25.04	15.15	20.88
25.09.2023	40.55	24.03	12.47	20.97
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/2023-24/06			Month : September	
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)
01.09.2023	37.98	20.51	13.12	16.53
05.09.2023	39.74	18.48	12.09	15.50
07.09.2023	36.20	23.01	14.42	17.83
13.09.2023	38.07	20.51	15.58	18.99
15.09.2023	36.90	21.69	16.12	17.35
18.09.2023	25.50	12.17	12.40	15.81
21.09.2023	35.72	24.01	13.69	16.54
23.09.2023	33.90	21.51	15.13	16.87
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/2023-24/06			Month : September	
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)
01.09.2023	33.74	22.72	15.59	18.61
05.09.2023	34.04	20.69	14.56	17.58
07.09.2023	35.15	25.22	16.89	19.91
13.09.2023	33.20	22.72	18.05	21.07
15.09.2023	31.71	23.90	16.41	19.43
18.09.2023	30.20	19.56	14.87	17.89
21.09.2023	31.72	26.22	10.94	15.42
23.09.2023	28.92	23.72	10.57	13.59
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/2023-24/06			Month: September	
<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	14.09.2023		
2	Ambient Temp (°C)	41		
3	Stack Gas Temp (°C)	120		
4	Exit Velocity of Gas (m/sec.)	14.8		
5	Flow Rate (Nm ³ / sec.)	61.9		
6	Quantity of Emission (Nm ³ / Hr)	222818.4		
7	Concentration of PM (mg/Nm ³)	26.7		
8	Concentration of SO ₂ (mg/Nm ³)	308		
9	Concentration of NO _x (mg/Nm ³)	89		
10	Oxygen (O ₂) (%)	11.0		
E.	Remarks:			
Standard				
PM - 50 mg/Nm ³		SO ₂ - 600 mg/Nm ³		NO _x - 300 mg/Nm ³
Particulate Matter (PM), Sulphur di-oxide (SO ₂), 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
			Revision No.	2
	FUGITIVE EMISSION MONITORING REPORT		Revision Date	01-01-2021
Ref: MPL(43MW)/ENV/FUGITIVE/MONTHLY/2023-24/06				
Month - September				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)	
13.09.2023	Coal Storage Section	1205	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/2023-24/006					Date: 11.09.2023				
Month - September									
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	61.9	66.4	64.2	75	58.1	62.0	60.1	70
2	Turbine House 9 Mt.	58.8	68.6	63.7		55.0	64.0	59.5	
3	RO – MCC	62.7	69.1	65.9		58.3	63.1	60.7	
4	Boiler Ground Floor	63.2	68.3	65.8		57.1	63.0	60.1	
5	CHP – MCC	62.7	69.2	66.0		51.3	55.1	53.2	
6	Office Area	57.0	66.2	61.6		48.8	62.3	55.6	
 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/2023-24/06					Date of sample collection: 11.09.2023	
					Date of Analysis: 11.09.2023 to 14.09.2023	
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	7.5	5.5 to 9.0	
2	Colour	Hazen	Colourless	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	70.9	72.7	-	
5	Total Hardness as CaCO ₃	mg/L	48.2	50.0	-	
6	Suspended Solids	mg/L	70	15	100	
7	Total Dissolve Solids	mg/L	277	283	-	
8	Chemical Oxygen Demand	mg/L	133	38	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	71	18	30	
10	Oil & Grease	mg/L	0.2	< 3.0	10	
11	Temperature	° C	25	25	Shall not exceed 5.0°C above the receiving water temperature	
12	Conductivity	µS/cm	507	532	-	
 Analysis By  Checked By  Verified By						

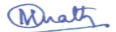
	MEGHALAYA POWER LIMITED Lumshnong, Meghalaya			Reference No.	MPL/EHS/F-04
				Issue No.	1
	WATER TESTING REPORT			Date of Issue:	24.08.2013
				Revision No.	3
			Date of Rev.	01.06.2019	

Reference No.: MPL/ENV/WATER/MONTHLY/2023-24/06				Date of sample collection: 11.09.2023	
				Date of Analysis: 11.09.2023 to 14.09.2023	

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	-	7.1	5.5 to 9.0
2	Suspended Solids	mg/L	30	100
3	Total Dissolve Solids	mg/L	301	-
4	Chemical Oxygen Demand	mg/L	42	250
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	15	30
6	Oil & Grease	mg/L	<3.0	10


 Analysis By


 Checked By


 Verified By

