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/2022-23/31 **Dated: 21/03/2023**

To,

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

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

Kindly acknowledge receipt of the same.

Thanking You,

Yours truly,
*For **Meghalaya Power Limited (43 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-790314.

MEGHALAYA POWER LIMITED

Lumshnong, Meghalaya

Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-02-2023	762.8	38.0	19.0	0
02-02-2023	765.4	38.5	16.0	0
03-02-2023	770.7	38.3	25.0	0
04-02-2023	770.5	39.3	22.0	0
05-02-2023	770	42.3	18.0	0
06-02-2023	769.2	65.0	17.0	0
07-02-2023	768.4	75.0	20.0	0
08-02-2023	767.9	80.4	27.0	0
09-02-2023	770.7	85.0	25.0	0
10-02-2023	770.5	89.4	18.0	0
11-02-2023	770	90.0	22.0	0
12-02-2023	769.2	38.0	23.0	0
13-02-2023	768.4	38.5	17.1	0
14-02-2023	767.9	38.3	15.1	0
15-02-2023	767.7	39.3	23.2	0
16-02-2023	767.9	42.3	23.0	0
17-02-2023	768.2	65.0	17.1	0
18-02-2023	768.5	75.0	15.1	0
19-02-2023	768.9	80.4	23.3	0
20-02-2023	769.2	85.0	23.5	0
21-02-2023	769.7	80.6	18.2	0
22-02-2023	767.7	90.0	10.6	23.6
23-02-2023	767.9	92.0	12.6	20.4
24-02-2023	768.2	39.3	19.2	0
25-02-2023	768.5	42.3	21.1	0
26-02-2023	768.9	39.0	23.3	0
27-02-2023	769.2	38.4	23.5	0
28-02-2023	760.8	35.7	23.0	0
			Total	44

STAR CEMENT Solid Setting	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/2022-23/11 | **Month: February**

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/m³)**	**$PM_{2.5}$(µg/m³)**	**SO_2 (µg/m³)**	**NO_2 (µg/m³)**
01.02.2023	47.29	29.83	11.38	14.03
03.02.2023	49.05	27.80	13.14	14.83
06.02.2023	45.51	32.33	12.15	14.07
11.02.2023	47.38	29.83	15.14	17.00
14.02.2023	46.21	31.01	11.50	14.03
16.02.2023	44.36	26.67	11.18	12.68
18.02.2023	45.03	33.33	12.17	14.88
20.02.2023	43.21	30.83	10.72	13.79
NAAQS permissible limits for Rural, Industrial, Residential Area	**100 (µg/m³)**	**60 (µg/m³)**	**80 (µg/m³)**	**80 (µg/m³)**

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**

STAR CEMENT Solid Setting	**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/2022-23/11 — **Month: February**

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/m³)**	**$PM_{2.5}$(µg/m³)**	**SO_2 (µg/m³)**	**NO_2 (µg/m³)**
01.02.2023	29.01	23.13	10.65	15.12
03.02.2023	31.01	22.10	9.21	18.62
06.02.2023	32.33	24.43	8.58	11.35
11.02.2023	36.68	25.59	11.48	13.25
14.02.2023	34.30	23.95	9.67	15.12
16.02.2023	32.00	22.41	12.28	12.91
18.02.2023	36.23	19.94	11.84	14.15
20.02.2023	34.52	18.11	10.46	12.16
NAAQS permissible limits for Rural, Industrial, Residential Area	**100 (µg/m³)**	**60 (µg/m³)**	**80 (µg/m³)**	**80 (µg/m³)**

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**

STAR CEMENT Solid Setting	**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/2022-23/11 — **Month: February**

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/m³)**	**$PM_{2.5}$(µg/m³)**	**SO_2 (µg/m³)**	**NO_2 (µg/m³)**
01.02.2023	48.09	33.33	10.96	15.96
03.02.2023	46.71	27.91	12.50	17.71
06.02.2023	50.35	30.13	12.15	12.71
11.02.2023	51.85	33.81	10.08	15.36
14.02.2023	50.71	30.33	9.15	14.71
16.02.2023	45.06	31.98	10.15	13.36
18.02.2023	45.71	26.98	11.18	18.60
20.02.2023	42.33	25.97	8.50	12.43
NAAQS permissible limits for Rural, Industrial, Residential Area	**100 (µg/m³)**	**60 (µg/m³)**	**80 (µg/m³)**	**80 (µg/m³)**

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**

STAR CEMENT Solid Setting	**MEGHALAYA POWER LIMITED (43MW)** **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 (43 MW)/ENV/AAQM/MONTHLY/2022-23/04 — **Month: February**

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/m³)**	**$PM_{2.5}$(µg/m³)**	**SO_2 (µg/m³)**	**NO_2 (µg/m³)**
01.02.2023	45.19	26.67	10.17	13.73
03.02.2023	46.95	24.64	9.14	12.70
06.02.2023	43.41	29.17	11.47	15.03
11.02.2023	45.28	26.67	12.63	16.19
14.02.2023	44.11	27.85	13.17	14.55
16.02.2023	42.26	23.51	9.45	13.01
18.02.2023	42.93	30.17	10.74	13.74
20.02.2023	41.11	27.67	12.18	14.07
NAAQS permissible limits for Rural, Industrial, Residential Area	**100 (µg/m³)**	**60 (µg/m³)**	**80 (µg/m³)**	**80 (µg/m³)**

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**

STAR CEMENT Solid Setting	**MEGHALAYA POWER LIMITED (43MW)** **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 (43 MW)/ENV/AAQM/MONTHLY/2022-23/04 — **Month: February**

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/m³)**	**$PM_{2.5}$(µg/m³)**	**SO_2 (µg/m³)**	**NO_2 (µg/m³)**
01.02.2023	39.10	25.63	15.81	18.31
03.02.2023	39.40	23.60	14.78	17.28
06.02.2023	40.51	28.13	17.11	19.61
11.02.2023	38.56	25.63	18.27	20.77
14.02.2023	37.07	26.81	16.63	19.13
16.02.2023	39.36	22.47	15.09	17.59
18.02.2023	37.08	29.13	11.16	15.12
20.02.2023	38.21	26.63	10.79	13.29
NAAQS permissible limits for Rural, Industrial, Residential Area	**100 (µg/m³)**	**60 (µg/m³)**	**80 (µg/m³)**	**80 (µg/m³)**

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**

STAR CEMENT Solid Setting	**MEGHALAYA POWER LIMITED (43 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(43MW)/ENV/STACK/MONTHLY/2022-23/11 **Month: February'23**

Analysis Result

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	01.02.2023
2	Ambient Temp (°C)	40.00
3	Stack Gas Temp (°C)	120.00
4	Exit Velocity of Gas (m/sec.)	15.29
5	Flow Rate (Nm^3/ sec.)	64.27
6	Quantity of Emission (Nm^3/ Hr)	231373.32
7	Concentration of PM (mg/Nm^3)	24.1
8	Concentration of SO_2 (mg/Nm^3)	351
9	Concentration of NOx (mg/Nm^3)	232
10	Oxygen (O_2) (%)	9.1
E.	**Remarks:**	

Standard		
PM - 50 mg/Nm^3	**SO_2 - 600 mg/Nm^3**	**NOx - 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**

STAR CEMENT Solid Setting	**MEGHALAYA POWER LIMITED** Lumshnong, Meghalaya	Document No.	MPL/EHS/Env/F-04
		Date of Issued	01-05-2019
		Revision No.	2
	FUJITIVE EMISSION MONITORING REPORT	Revision Date	01-01-2021

Ref: MPL(43MW)/ENV/FUGITIVE/MONTHLY/2022-23/11

Month - February 2023

Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline
			Limit
		(in µg/m^3)	(in µg/m^3)
09.02.2023	**Coal Storage Section**	1647	**2000**

Analyzed By **Checked By** **Verified By**

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

Reference No.: MPL/ENV/WATER/MONTHLY/2022-23/11

Date of sample collection: 01.02.2023
Date of Analysis: 01.02.2023 to 04.02.2023

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	7.8	**5.5 to 9.0**
2	Colour	Hazen	Colourless	Colourless	-
3	Odour	-	Odourless	Odourless	-
4	Chloride	mg/L	35	38	-
5	Total Hardness as $CaCO_3$	mg/L	83	84.0	-
6	Suspended Solids	mg/L	70	8	**100**
7	Total Dissolve Solids	mg/L	288	409	-
8	Chemical Oxygen Demand	mg/L	120	28	**250**
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	54	6.9	**30**
10	Oil & Grease	mg/L	9	< 3.0	**10**
11	Temperature	° C	25	25	**Shall not exceed 5.0°C above the receiving water temperature**
12	Conductivity	µS/cm	509	723	-

Analysis By

Checked By

Verified By

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

Reference No.: MPL/ENV/WATER/MONTHLY/2022-23/11

Date of sample collection: 01.02.2023
Date of Analysis: 01.02.2023 to 04.02.2023

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	-	7.3	**5.5 to 9.0**
2	Suspended Solids	mg/L	16	**100**
3	Total Dissolve Solids	mg/L	230	**-**
4	Chemical Oxygen Demand	mg/L	32	**250**
5	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	14	**30**
6	Oil & Grease	mg/L	<3.0	**10**

Analysis By **Checked By** **Verified By**

STAR CEMENT Solid Setting	**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/2022-23/11

Surface Water Analysis Results

Month: February

Date of sample collection: 01.02.2023

Date of Analysis: 01.02.2023 to 04.02.2023

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	-	7.7	Water Source not found			7.5	7.8	7.9	Water Source not found		6.5 - 8.5
2	Colour	Hazen	Colourless				Colourless	Colourless	Colourless			10
3	Odour	-	Unobjectionable				Unobjectionable					Unobjectionable
4	Chloride	mg/L	41.0				42.3	24.0	26.7			250
5	Total Hardness as $CaCO_3$	mg/L	67.1				81.2	70.0	40.2			300
6	Suspended Solids	mg/L	1.5				4.2	6.1	5.0			-
7	Total Dissolve Solids	mg/L	220				215	162	82.0			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	330				323	243	123			-
12	Flow	L / Min	-				-	-	-			-

Analyzed by | **Checked by** | **Verified by**