

STAR CEMENT LIMITED

Ref: SCL/EHS/LUM/2024-25/15

Dated: 07/12/2024

To,

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

Subject : Submission of Environmental Monitoring Report for the month of November, 2024.

Reference : MPCB/ONLINE-CTO(R-1) EJHD/2021/2023-2024/34-A, Dated Shillong, the 23rd January, 2024.

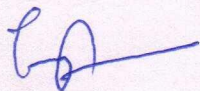
Dear Sir,

This is in reference to above cited subject, we are hereby submitting the monthly Environmental monitoring reports of Ambient Air Quality for plant and ESZ including meteorological data, Stack Emission, Fugitive Emission, Surface water & Waste Water (STP) monitoring reports of **Star Cement Limited (Line-I & Line-II)** for the month of **November, 2024.**

This is for your kind information, record and kindly acknowledge receipt of the same.

Thanking you,

Yours truly,
For **Star Cement Limited**



Laxmaiah Munjala
Unit Head

Enclosed: a/a

Copy To: The Regional Director, Central Pollution Control Board (CPCB), North Eastern Zonal Office, 'TUMSIR', Lower Motinagar, Shillong, Meghalaya-790314.



STAR CEMENT LIMITED

Lumshnong, Meghalaya

Date (DD-MM-YYYY)	Pressure (mmHg)	Relative Humidity (%)	Temp. (C)	Manual Rain (mm)
01-11-2024	720.7	72.8	18.9	0.0
02-11-2024	724.7	71.6	18.2	0.0
03-11-2024	719.3	72.4	19.1	0.0
04-11-2024	722.0	70.7	18.9	0.0
05-11-2024	723.6	70.5	18.8	0.0
06-11-2024	721.3	71.8	18.2	0.0
07-11-2024	721.6	70.6	20.0	0.0
08-11-2024	720.0	70.4	19.0	0.0
09-11-2024	718.4	70.6	18.7	0.0
10-11-2024	716.0	71.7	19.1	0.0
11-11-2024	721.6	74.9	19.2	0.0
12-11-2024	722.1	74.0	20.9	0.0
13-11-2024	719.8	78.2	19.0	0.0
14-11-2024	716.8	75.3	19.1	0.0
15-11-2024	723.5	75.5	20.0	0.0
16-11-2024	721.3	72.7	19.6	0.0
17-11-2024	720.1	79.0	16.8	0.0
18-11-2024	716.8	78.2	15.4	0.0
19-11-2024	723.5	71.2	17.1	0.0
20-11-2024	721.3	64.2	17.0	0.0
21-11-2024	726.4	67.2	18.5	0.0
22-11-2024	720.3	72.0	18.8	0.0
23-11-2024	716.0	71.5	18.9	0.0
24-11-2024	721.6	69.4	20.1	0.0
25-11-2024	722.1	72.1	18.9	0.0
26-11-2024	719.8	68.8	18.1	0.0
27-11-2024	722.0	71.7	18.6	0.0
28-11-2024	723.6	73.1	19.1	0.0
29-11-2024	722.0	75.2	18.4	0.0
30-11-2024	716.8	75.2	18.0	0.0
			Total	0.0

	STAR CEMENT LIMITED Lumshnong, Meghalaya		Reference No.	SCL/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.: SCL/ENV/AAQM/MONTHLY/2024-25/20			Month : November	
Location of Sampling: Near Star Club		GPS Coordinate: 25°10'36"N 92°23'16"E 928 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)
04.11.2024	49.54	39.33	15.25	19.85
06.11.2024	53.58	38.26	16.55	23.54
08.11.2024	45.26	38.56	14.05	16.23
11.11.2024	50.36	40.21	13.95	18.58
13.11.2024	68.52	38.46	14.65	17.29
15.11.2024	48.44	56.01	14.85	16.21
18.11.2024	52.12	43.23	12.25	18.56
20.11.2024	49.36	37.28	14.35	17.58
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	

	STAR CEMENT LIMITED Lumshnong, Meghalaya		Reference No.	SCL/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.: SCL/ENV/AAQM/MONTHLY/2024-25/20			Month : November	
Location of Sampling: Near Pump House		GPS Coordinate: 25°10'42"N 92°23'32"E 919 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)
04.11.2024	69.52	51.78	19.59	17.98
06.11.2024	65.52	52.84	18.26	18.74
08.11.2024	63.57	50.24	18.63	18.26
11.11.2024	68.33	46.78	19.78	17.56
13.11.2024	65.69	50.25	18.52	16.64
15.11.2024	65.21	47.57	16.36	15.82
18.11.2024	69.54	55.26	18.22	19.26
20.11.2024	68.59	53.56	19.48	17.06
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		

	STAR CEMENT LIMITED Lumshnong, Meghalaya		Reference No.	SCL/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.: SCL/ENV/AAQM/MONTHLY/2024-25/20			Month : November	
Location of Sampling: Near Security Gate - 3		GPS Coordinate: 25°10'27"N 92°23'37"E 944 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)
04.11.2024	69.55	44.65	15.24	18.55
06.11.2024	68.44	42.87	15.36	19.24
08.11.2024	65.81	43.23	16.28	19.34
11.11.2024	69.28	48.82	18.72	19.46
13.11.2024	66.57	40.36	15.66	17.23
15.11.2024	70.26	46.28	13.29	15.88
18.11.2024	70.12	43.86	18.05	18.55
20.11.2024	64.21	47.32	15.23	16.98
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		

	STAR CEMENT LIMITED Lumshnong, Meghalaya		Reference No.	SCL/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.: Tongseng Village /2024-25/17			Month : November	
Location of Sampling: Tongseng Village		GPS Coordinate: 25°10'08"N 92°24'17"E 756 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)
07.11.2024	33.87	25.14	11.02	14.25
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				

	STAR CEMENT LIMITED LINE II Lumshnong, Meghalaya		Reference No.	SCL/Env/F – 01
			Issue No.	1
			Date of Issue:	24.08.2013
	AMBIENT AIR QUALITY MONITORING REPORT		Revision No.	5
Date of Rev.			01.12.2020	
Reference No.: SCL/ENV/AAQM/MONTHLY/2024-25/20			Month : November	
Location of Sampling: Project South Direction		GPS Coordinate: 25°10'26"N 92°23'22"E 931 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)
05.11.2024	65.11	48.26	15.56	16.24
07.11.2024	72.33	50.24	14.21	19.11
09.11.2024	65.30	49.35	13.25	15.32
12.11.2024	64.00	51.33	13.24	15.96
14.11.2024	68.56	49.52	15.00	19.26
16.11.2024	70.56	48.56	14.21	15.21
19.11.2024	71.21	51.24	13.28	16.17
21.11.2024	70.65	54.36	14.11	16.95
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				

	STAR CEMENT LIMITED LINE II Lumshnong, Meghalaya		Reference No.	SCL/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.: SCL/ENV/AAQM/MONTHLY/2024-25/20			Month : November	
Location of Sampling: Project North Direction		GPS Coordinate: 25°10'25"N 92°23'20"E 935 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)
05.11.2024	54.26	40.22	16.53	23.56
07.11.2024	60.24	41.21	17.11	18.54
09.11.2024	56.00	42.26	14.25	18.45
12.11.2024	32.28	45.58	14.69	19.21
14.11.2024	65.21	40.26	14.83	22.47
16.11.2024	62.01	40.12	15.38	21.59
19.11.2024	61.88	43.25	15.78	24.01
21.11.2024	60.98	39.56	16.35	16.29
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				

	STAR CEMENT LIMITED LINE II Lumshnong, Meghalaya		Reference No.	SCL/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.: SCL/ENV/AAQM/MONTHLY/2024-25/20			Month : November	
Location of Sampling: Approach Road		GPS Coordinate: 25°10'30"N 92°23'21"E 928 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)
05.11.2024	68.21	54.32	17.64	18.98
07.11.2024	70.02	46.38	15.36	16.34
09.11.2024	64.29	50.96	18.34	20.84
12.11.2024	56.25	53.27	14.38	16.32
14.11.2024	64.56	52.38	16.24	18.35
16.11.2024	70.23	51.28	16.64	19.56
19.11.2024	65.89	59.02	17.56	19.62
21.11.2024	71.22	55.34	17.20	18.36
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				

	STAR CEMENT LIMITED Lumshnong, Meghalaya						Reference No.	SCL/Env/F-02	
							Issue No.	1	
	STACK EMISSION MONITORING ANALYSIS REPORT						Date of Issue	01.05.2019	
							Revision No.	5	
Report No: SCL/ENV/STACK/MONTHLY/2024-25/20						Date of Rev.			01.06.2021
Month: November									
Analysis Result									
A. General Information About Stack									
1	Stack Identification No	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8
2	Stack Connected to	Kiln/Raw Mill	Coal Mill	Cooler	Roller Press	Cement Mill	Packing Plant	Primary Crusher	Secondary Crusher
3	Material of Construction (Stack/Duct)	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel
4	Shape of duct	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Circular
5	Whether duct is provided with permanent platform & ladder	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
B. Physical characteristic of stack									
1	Stack Height from ground level (meter)	45.4	37	30.4	24	30	28	21	17
2	Duct diameter at sampling point (meter)	3	1.2	2.8	1.4	1.5	1.1	1.2	1.0
3	Sampling height point from ground level (meter)	-	-	-	-	-	-	-	-
4	Cross sectional area of Duct/Stack (m ²)	7.07	1.13	6.15	1.54	1.77	0.95	1.13	0.79
C. Pollution Control Device									
1	Details of pollution control device attached to stack	Reverse Air Bag House	Bag Filter	ESP	Bag Filter	Bag Filter	Bag Filter	Bag Filter	Bag Filter
D. Result of Sampling & Analysis of Gaseous Emission									
1	Date of Sampling	05-11-2024	07-11-2024	06-11-2024	04-11-2024	14-11-2024	08-11-2024	13-11-2024	12-11-2024
2	Ambient Temp (°C)	23	26	27	25	26	23	27	26
3	Stack Gas Temp (°C)	128	73	113	40	33	35	24	23
4	Exit Velocity of Gas (m/sec.)	17.96	13.56	9.14	14.53	13.28	13.05	13.84	12.24
5	Flow Rate (Nm ³ / sec.)	87.21	13.05	36.22	17.87	20.63	10.89	13.56	10.01
6	Quantity of Emission (Nm ³ / Hr)	324144.70	45278.76	150245.78	72105.58	77421.54	40975.06	52566.58	32793.59
7	Concentration of PM (mg/Nm ³)	16.2	22.5	21.5	18.5	25.1	24.9	19.2	21.9
8	Concentration of SO ₂ (mg/Nm ³)	492.3	-	-	-	-	-	-	-
9	Concentration of NO _x (mg/Nm ³)	431.5	-	-	-	-	-	-	-
10	Oxygen (O ₂) (%)	10.5	8.4	8.6	9.8	9.2	8.9	9.1	8.4
E. Remarks									
Standard									
PM - 30 mg/Nm ³			SO ₂ - 1000 mg/Nm ³			NO _x - 800 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 LIMITED Lumshnong, Meghalaya	Document No.	SCL/EHS/Env/F-04
		Date of Issued	01-05-2019
		Revision No.	2
	FUGITIVE EMISSION MONITORING REPORT	Revision Date	01-01-2021
Ref: SCL/ENV/FUGITIVE/MONTHLY/2024-25/20			
Month - November			
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline
			Limit
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
06.11.2024	Coal Storage Section	1421	2000
06.11.2024	Limestone Storage Section	1244	5000
 Analyzed By  Checked by  Verified By			

	STAR CEMENT LIMITED LINE II Lumshnong, Meghalaya		Document No.	SCL/EHS/Env/F-04
			Date of Issued	01-05-2019
			Revision No.	2
	FUGITIVE EMISSION MONITORING REPORT		Revision Date	01-01-2021
Ref: SCL(II)/ENV/FUGITIVE/MONTHLY/2024-25/20				
Month - November				
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline	
			Limit	
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)	
07.11.2024	Coal Storage Section	1193	2000	
07.11.2024	Limestone Storage Section	2106	5000	
 Analyzed By  Checked by  Verified By				

STAR CEMENT Solid Setting	STAR CEMENT LIMITED Lumshnong, Meghalaya				Document No.		SCL/EHS/Env/F-03	
					Effective Date		01-05-2019	
					Revision No.		04	
	NOISE LEVEL MONITORING REPORT					Revision Date		01-01-2021

Ref: SCL/ENV/NOISE/MONTHLY/2024-25/20						Date: 11.11.2024			
Month - November									
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	Kiln	51.2	59.0	55.1	75	49.7	57.5	53.6	70
2	Raw Mill	49.0	58.5	53.8		47.5	57.0	52.3	
3	Raw Mill WF	52.2	59.6	55.9		50.7	58.1	54.4	
4	Coal Mill	50.5	57.8	54.2		49.0	56.3	52.7	
5	Cement Mill	50.9	57.6	54.3		49.4	56.1	52.8	
6	Cement Mill WF	52.5	59.1	55.8		51.0	57.6	54.3	
7	Primary Crusher (Dump Hopper)	49.0	58.0	53.5		47.5	56.5	52.0	
8	Primary Crusher (Near BC-1)	51.5	59.8	55.7		50.0	58.3	54.2	
9	Secondary Crusher	49.0	60.2	54.6		47.5	58.7	53.1	
B.	DG House								
1	Control Room	48.5	61.2	54.9	75	47.0	59.7	53.4	70
2	Office	50.0	49.0	49.5		48.5	47.5	48.0	
C.	Offices								
1	CCR	39.0	49.5	44.3	75	44.5	55.0	49.8	70
2	Meeting Room	40.5	49.1	44.8		46.0	54.6	50.3	
3	VP'S Room	34.3	38.7	36.5		39.8	44.2	42.0	
4	Inst. Shift Room	39.5	42.3	40.9		45.0	47.8	46.4	
5	Drawing Office	39.0	48.5	43.8		44.5	54.0	49.3	
6	QC Department								
	a) Chemical Lab	50.1	52.2	51.1		46.5	48.6	47.5	
	b) Physical Lab	49.1	53.6	51.4		45.5	50.0	47.8	
	c) Shift Lab	44.3	49.0	46.7		40.7	45.4	43.1	
	d) Sample Preparation Room	41.4	48.9	45.2		37.8	45.3	41.5	
D.	Residential								
1	Bachelor Hostel	34.0	38.7	36.4	55	32.5	37.2	34.9	45
2	HOD'S Quater's	30.0	41.0	35.5		28.5	39.5	34.0	
3	650 Quater's	31.9	40.7	36.3		30.4	39.2	34.8	
4	250 Quater's	32.3	39.0	35.7		30.8	37.5	34.2	
5	Hut	31.3	39.4	35.4		29.8	37.9	33.9	
E.	Dispensery	31.0	38.0	34.5		29.5	36.5	33.0	

Signature Analyzed by	Signature Checked By	Signature Verified By
---	--	---

	STAR CEMENT LIMITED Line II Lumshnong, Meghalaya				Document No.	SCL/EHS/Env/F-03			
					Effective Date	01-05-2019			
					Revision No.	04			
	NOISE LEVEL MONITORING REPORT				Revision Date	01-01-2021			
Ref: SCL/ENV/NOISE/MONTHLY/2024-25/10						Date: 11.11.2024			
Month - November									
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	Kiln	59.7	67.5	63.6	75	56.1	63.9	60.0	70
2	Raw Mill	56.9	66.4	61.7		53.8	63.3	58.6	
3	Coal Mill	60.5	67.9	64.2		56.8	64.2	60.5	
4	Cement Mill	58.7	65.4	62.1		56.1	62.8	59.5	
5	Primary Crusher	59.7	66.3	63.0		57.5	64.1	60.8	
6	Secondary Crusher	60.7	69.0	64.9		55.7	64.0	59.9	
C.	Residential								
1	Line II colony	38.6	40.5	39.6	55	34.5	38.4	36.5	45
   Analyzed by Checked By Verified By									

	STAR CEMENT LIMITED Lumshnong, Meghalaya				Reference No.	SCL/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.: SCL/ENV/WATER/MONTHLY/2024-25/20					Date of sample collection: 05.11.2024 Date of Analysis: 05.11.2024 to 08.11.2024	
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	7.2	5.5 to 9.0	
2	Colour	Hazen	Yellowish	Colourless	-	
3	Odour	-	Odourless	Odourless	-	
4	Chloride	mg/L	82.2	70.5	-	
5	Total Hardness as CaCO ₃	mg/L	59.7	57.5	-	
6	Suspended Solids	mg/L	85	46.8	100	
7	Total Dissolve Solids	mg/L	310	312	-	
8	Chemical Oxygen Demand	mg/L	230	48	250	
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	69	13	30	
10	Oil & Grease	mg/L	6.2	< 3.0	10	
11	Temperature	° C	25	18	Shall not exceed 5.0°C above the receiving water temperature	
12	Conductivity	µS/cm	521	504	-	
 Analysis By  Checked By  Verified By						



WATER TESTING REPORT

Reference No.	SCL/EHS/F-04
Issue No.	1
Date of Issue:	24.08.2013
Revision No.	3
Date of Rev.	01.06.2019

Reference No.: SCL/ENV/WATER/MONTHLY/2024-25/20

Surface Water Analysis Results

Date of sample collection: 05.11.2024

Date of Analysis: 05.11.2024 to 08.11.2024

S.No.	Parameter	Unit	Umytngai Nallah		Umutha Nallah		Umso Nalah	Seshympa	Lunar	Lukha	Umbadogh	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	-	7.4	7.2	8.1	7.4	7.9	-	-	-	7.5	7.3	8.0	8.1	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	-	-	-	Yellowish	Yellowish	Yellowish	Yellowish	10
3	Odour	-	Unobjectionable												
4	Chloride	mg/L	27.0	32.4	34.2	28.9	34.3	-	-	-	24.3	24.8	24.9	25.1	250
5	Total Hardness as CaCO ₃	mg/L	53.2	62.7	74.4	75.7	72.8	-	-	-	61.2	46.4	47.3	41.9	300
6	Suspended Solids	mg/L	39.4	53.2	44.2	53.3	61.2	-	-	-	46.7	39.4	34.5	31.2	-
7	Total Dissolve Solids	mg/L	200.3	223.5	219.7	381.3	341.9	-	-	-	79.5	70.1	64.1	211.0	500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	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	-
10	Temperature	° C	23.0	23.0	23.0	23.0	23.0	-	-	-	23.0	23.0	23.0	23.0	-
11	Conductivity	µS/cm	184.1	206.8	311.8	409.1	355.6	-	-	-	159.3	135.2	123.7	437.2	-
12	Flow	L / Min	1491.1	1502.4	296.2	456.2	2645.2	-	-	-	1656.4	1234.6	1592.9	1410.4	-

Analyzed by

4K. Gaurav

Checked by

Verified

	STAR CEMENT LIMITED LINE II Lumshnong, Meghalaya												Reference No.	SCL/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.: SCL(II)/ENV/WATER/MONTHLY/2024-25/20												Date of sample collection: 05.11.2024			
Surface Water Analysis Results												Date of Analysis: 05.11.2024 to 08.11.2024			
S.No.	Parameter	Unit	Umtyrngai Nallah		Umutha Nallah		Umso Nalah	Seshympa	Lunar	Lukha	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	-	7.4	7.2	8.1	7.4	7.9	-	-	-	7.5	7.3	8.0	8.1	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	-	-	-	Yellowish	Yellowish	Yellowish	Yellowish	10
3	Odour	-	Unobjectionable												
4	Chloride	mg/L	27.0	32.4	34.2	28.9	34.3	-	-	-	24.3	24.8	24.9	25.1	250
5	Total Hardness as CaCO ₃	mg/L	53.2	62.7	74.4	75.7	72.8	-	-	-	61.2	46.4	47.3	41.9	300
6	Suspended Solids	mg/L	39.4	53.2	44.2	53.3	61.2	-	-	-	46.7	39.4	34.5	31.2	-
7	Total Dissolve Solids	mg/L	200.3	223.5	219.7	381.3	341.9	-	-	-	79.5	70.1	64.1	211.0	500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	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	-
10	Temperature	° C	23.0	23.0	23.0	23.0	23.0	-	-	-	23.0	23.0	23.0	23.0	-
11	Conductivity	µS/cm	184.1	206.8	311.8	409.1	355.6	-	-	-	159.3	135.2	123.7	437.2	-
12	Flow	L / Min	1491.1	1502.4	296.2	456.2	2645.2	-	-	-	1656.4	1234.6	1592.9	1410.4	-
   Analyzed by Checked by Verified by															