

STAR CEMENT LIMITED

Ref: SCL/EHS/LUM/2024-25/10

Dated: 22/07/2024

To,

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

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

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

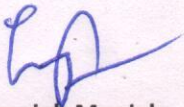
Dear Sir,

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 **June, 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)
01-06-2024	719.9	72.3	18.6	0.0
02-06-2024	717.3	71.1	17.9	11.7
03-06-2024	717.0	71.9	18.8	13.2
04-06-2024	723.2	70.2	18.6	48.8
05-06-2024	720.5	70.0	18.5	5.0
06-06-2024	726.3	71.3	17.9	4.8
07-06-2024	720.9	70.1	20.0	0.0
08-06-2024	723.6	69.9	19.0	0.0
09-06-2024	725.2	70.1	18.4	0.0
10-06-2024	722.9	71.2	18.8	24.2
11-06-2024	720.9	74.4	18.9	0.0
12-06-2024	720.4	73.5	20.6	23.6
13-06-2024	720.8	77.7	18.7	47.4
14-06-2024	723.6	74.8	18.8	9.4
15-06-2024	723.8	75.0	19.7	165.4
16-06-2024	723.2	72.2	19.3	74.6
17-06-2024	721.6	78.5	16.5	118.2
18-06-2024	720.0	77.7	15.1	142.0
19-06-2024	717.6	70.7	16.8	27.8
20-06-2024	723.2	63.7	16.7	0.0
21-06-2024	723.7	66.7	18.2	0.0
22-06-2024	721.4	71.5	18.5	6.8
23-06-2024	723.6	71.0	18.6	0.0
24-06-2024	725.2	68.9	19.8	9.4
25-06-2024	723.6	71.6	18.6	5.2
26-06-2024	718.4	68.3	17.8	0.0
27-06-2024	725.1	71.2	18.3	4.0
28-06-2024	722.9	72.6	18.8	5.4
29-06-2024	721.7	74.7	15.5	57.3
30-06-2024	723.6	71.6	18.6	65.7
			Total	869.9

	STAR CEMENT LIMITED 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/2024-25/15			Month : June	
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)
01.06.2024	46.54	35.15	14.27	20.12
08.06.2024	45.55	34.12	14.33	18.28
20.06.2024	46.55	34.83	12.54	20.03
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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
			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/2024-25/15			Month : June	
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)
01.06.2024	78.89	50.98	16.04	21.87
08.06.2024	73.54	51.86	17.06	22.90
20.06.2024	75.77	52.52	17.52	20.88
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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
			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/2024-25/15			Month : June	
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)
01.06.2024	83.12	51.96	17.10	23.03
08.06.2024	77.77	51.44	18.36	22.66
20.06.2024	80.00	52.10	18.32	22.02
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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 /2024-25/15			Month : June	
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)
11.06.2024	47.29	28.92	13.14	16.42
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/2024-25/15			Month : June	
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)
07.06.2024	65.73	46.53	14.78	19.04
11.06.2024	71.46	47.17	13.53	20.30
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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		

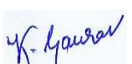
	STAR CEMENT LIMITED LINE II Lumshnong, Meghalaya		Reference No.	SCL/Env/F – 01
			Issue No.	1
	AMBIENT AIR QUALITY MONITORING REPORT		Date of Issue:	24.08.2013
			Revision No.	5
			Date of Rev.	01.12.2020
Reference No.: SCL/ENV/AAQM/MONTHLY/2024-25/15			Month : June	
Location of Sampling: Project North 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)
07.06.2024	66.84	45.62	16.17	23.35
11.06.2024	72.57	46.26	16.27	20.29
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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/2024-25/15			Month : June	
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)
07.06.2024	84.51	53.10	16.02	21.20
11.06.2024	79.16	53.98	17.04	19.78
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall	Rainfall Data Attached			
Heavy Rainfall				
Heavy Rainfall				
Heavy Rainfall				
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/2024-25/15						Month: June			
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	07.06.2024	01.06.2024	01.06.2024	07.06.2024	08.06.2024	08.06.2024	07.06.2024	01.06.2024
2	Ambient Temp (°C)	30	25	31	25	21	21	22	23
3	Stack Gas Temp (°C)	140	77	124	38	31	35	25	24
4	Exit Velocity of Gas (m/sec.)	17.28	14.00	8.00	14.07	12.56	12.11	13.32	12.85
5	Flow Rate (Nm ³ / sec.)	83.48	12.76	35.24	18.40	20.34	10.53	14.05	9.56
6	Quantity of Emission (Nm ³ / Hr)	300511.22	45944.08	126868.65	69597.78	73223.99	37899.73	50591.53	34427.91
7	Concentration of PM (mg/Nm ³)	15.6	25.1	16.5	17.8	25.2	23.0	19.8	21.9
8	Concentration of SO ₂ (mg/Nm ³)	587.0	-	-	-	-	-	-	-
9	Concentration of NO _x (mg/Nm ³)	316.0	-	-	-	-	-	-	-
10	Oxygen (O ₂) (%)	10.0	10.5	8.6	9.1	9.7	9.6	8.7	9.3
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/2024-25/15			
Month - June			
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline
			Limit
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
08.06.2024	Coal Storage Section	1355	2000
08.06.2024	Limestone Storage Section	1408	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/2024-25/15			
Month - June			
Date	Location	Fugitive Emission Results	As per CPCB/BIS Guideline
			Limit
		(in $\mu\text{g}/\text{m}^3$)	(in $\mu\text{g}/\text{m}^3$)
07.06.2024	Coal Storage Section	1169	2000
07.06.2024	Limestone Storage Section	1210	5000
 Analyzed By  Checked by  Verified By			

	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/2024-25/015						Date:		11.06.2024	
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	Kiln	53.0	60.8	56.9	75	51.1	58.9	55.0	70
2	Raw Mill	50.8	60.3	55.6		48.9	58.4	53.7	
3	Raw Mill WF	54.0	61.4	57.7		52.1	59.5	55.8	
4	Coal Mill	52.3	59.6	56.0		50.4	57.7	54.1	
5	Cement Mill	52.7	59.4	56.1		50.8	57.5	54.2	
6	Cement Mill WF	54.3	60.9	57.6		52.4	59.0	55.7	
7	Primary Crusher (Dump Hopper)	50.8	59.8	55.3		48.9	57.9	53.4	
8	Primary Crusher (Near BC-1)	53.3	61.6	57.5		51.4	59.7	55.6	
9	Secondary Crusher	50.8	62.0	56.4		48.9	60.1	54.5	
B.	DG House								
1	Control Room	50.3	63.0	56.7	75	48.4	61.1	54.8	70
2	Office	51.8	50.8	51.3		49.9	48.9	49.4	
C.	Offices								
1	CCR	40.8	51.3	46.1	75	44.5	55.0	49.8	70
2	Meeting Room	42.3	50.9	46.6		46.0	54.6	50.3	
3	VP'S Room	36.1	40.5	38.3		39.8	44.2	42.0	
4	Inst. Shift Room	41.3	44.1	42.7		45.0	47.8	46.4	
5	Drawing Office	40.8	50.3	45.6		44.5	54.0	49.3	
6	QC Department								
	a) Chemical Lab	51.9	54.0	52.9		47.9	50.0	48.9	
	b) Physical Lab	50.9	55.4	53.2		46.9	51.4	49.2	
	c) Shift Lab	46.1	50.8	48.5		42.1	46.8	44.5	
	d) Sample Preparation Room	43.2	50.7	46.9	39.2	46.7	42.9		
D.	Residential								
1	Bachelor Hostel	35.8	40.5	38.2	55	33.9	38.6	36.3	45
2	HOD'S Quater's	31.8	42.8	37.3		29.9	40.9	35.4	
3	650 Quater's	33.7	42.5	38.1		31.8	40.6	36.2	
4	250 Quater's	34.1	40.8	37.5		32.2	38.9	35.6	
5	Hut	33.1	41.2	37.2		31.2	39.3	35.3	
E.	Dispensary	32.8	39.8	36.3		30.9	37.9	34.4	
 Analyzed by  Checked By  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/2024-25/015						Date:		08.06.2024		
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	Kiln	61.2	69.0	65.1	75	58.1	65.9	62.0	70	
2	Raw Mill	59.0	68.5	63.8		55.9	65.4	60.7		
3	Coal Mill	62.2	69.6	65.9		59.1	66.5	62.8		
4	Cement Mill	60.9	67.6	64.3		57.8	64.5	61.2		
5	Primary Crusher	62.5	69.1	65.8		59.4	66.0	62.7		
6	Secondary Crusher	61.5	69.8	65.7		58.4	66.7	62.6		
C.	Residential									
1	Line II colony	40.0	41.9	41.0	55	36.9	40.8	38.9	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/2024-25/15

Date of sample collection: 12.06.2024
 Date of Analysis: 12.06.2024 to 14.06.2024

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	-	7.6	7.5	5.5 to 9.0
2	Colour	Hazen	Yellowish	Colourless	-
3	Odour	-	Odourless	Odourless	-
4	Chloride	mg/L	82.0	67.5	-
5	Total Hardness as CaCO ₃	mg/L	56.1	53.4	-
6	Suspended Solids	mg/L	80	40.0	100
7	Total Dissolve Solids	mg/L	314	312	-
8	Chemical Oxygen Demand	mg/L	224	45	250
9	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	80	10.3	30
10	Oil & Grease	mg/L	5.6	< 3.0	10
11	Temperature	° C	26	25	Shall not exceed 5.0°C above the receiving water temperature
12	Conductivity	µS/cm	526	510	-


 Analysis By


 Checked By


 Verified By

STAR CEMENT Solid Setting	STAR CEMENT LIMITED 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/ENV/WATER/MONTHLY/2024-25/15															
Surface Water Analysis Results															
Date of sample collection: 12.06.2024															
Date of Analysis: 12.06.2024 to 14.06.2024															
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	-	7.6	7.7	7.2	7.3	7.8	7.6	7.8	7.8	7.6	7.7	7.8	7.7	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Yellowish	Colourless	Yellowish	Yellowish	Yellowish	Yellowish	10
3	Odour	-	Unobjectionable												
4	Chloride	mg/L	28.4	32.2	33.4	30.4	33.5	30.5	45.7	22.5	23.5	24.8	26.4	25.9	250
5	Total Hardness as CaCO ₃	mg/L	56.5	65.4	77.7	76.5	72.1	69.9	67.1	64.3	61.5	46.5	47.6	42.1	300
6	Suspended Solids	mg/L	1.2	1.1	1.3	1.5	1.8	2.0	1.8	2.6	2.1	1.5	1.6	1.4	-
7	Total Dissolve Solids	mg/L	204.5	214.0	226.5	387.4	356.5	150.4	187.6	80.4	85.2	70.2	66.4	215.3	500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	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	ND	ND	-
10	Temperature	° C	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	-
11	Conductivity	µS/cm	180.5	210.5	315.3	440.0	351.2	254.6	287.6	115.7	148.6	124.6	110.3	452.4	-
12	Flow	L / Min	1452.3	1878.6	356.4	665.4	1025.6	7845.6	484857.0	3641582.0	321458.0	284587.0	356895.0	-	
Analized by Checked by Verified by															

	STAR CEMENT LIMITED LINE II Lumshnong, Meghalaya											Reference No.		SCL/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.: SCL(II)/ENV/WATER/MONTHLY/2024-25/15											Date of sample collection: 20.06.2024				
Surface Water Analysis Results											Date of Analysis: 20.06.2024 to 22.06.2024				
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	-	7.6	7.7	7.2	7.3	7.8	7.6	7.8	7.8	7.6	7.7	7.8	7.7	6.5 - 8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Yellowish	Colourless	Yellowish	Yellowish	Yellowish	Yellowish	10
3	Odour	-	Unobjectionable												
4	Chloride	mg/L	28.4	32.2	33.4	30.4	33.5	30.5	45.7	22.5	23.5	24.8	26.4	25.9	250
5	Total Hardness as CaCO ₃	mg/L	56.5	65.4	77.7	76.5	72.1	69.9	67.1	64.3	61.5	46.5	47.6	42.1	300
6	Suspended Solids	mg/L	1.2	1.1	1.3	1.5	1.8	2.0	1.8	2.6	2.1	1.5	1.6	1.4	-
7	Total Dissolve Solids	mg/L	204.5	214.0	226.5	387.4	356.5	150.4	187.6	80.4	85.2	70.2	66.4	215.3	500
8	Biochemical Oxygen Demand (For 3 days at 27 °C)	mg/L	ND	ND	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	ND	ND	-
10	Temperature	° C	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	-
11	Conductivity	µS/cm	180.5	210.5	315.3	440.0	351.2	254.6	287.6	115.7	148.6	124.6	110.3	452.4	-
12	Flow	L / Min	1452.3	1878.6	356.4	665.4	1025.6	7845.6	484857.0	3641582.0	321458.0	284587.0	356895.0	-	
 Analyzed by  Checked by  Verified by															