

March 28, 2025

Via Email

Patrick Lennberg Division of Reclamation, Mining and Safety Environmental Protection Specialist 1313 Sherman Street, Room 215 Denver, Colorado 80203

Re: CEMEX Lyons Mine Permit M-1977-208 Technical Revision No. 12, Revised Groundwater Monitoring Plan First Quarter 2025 Monitoring Data

Dear Patrick Lennberg:

This letter transmits the surface water and groundwater data associated with the sampling of the cement kiln dust disposal area (C-Pit). This report includes data from the C-Pit ponded water and related groundwater monitoring for the first quarter of 2025, covering the reporting period from January 1, 2025, to March 31, 2025. Table 1 presents data for the last four quarters.

Groundwater samples were collected on February 11 and 12, 2025 from the CEM-001 and CEM-004 groundwater monitoring wells and from the C-Pit ponded water. The inspection of groundwater monitoring well CEM-005 on February 12, 2025, indicated that there was not enough water volume to collect a representative sample.

The samples collected from C-Pit ponded water and the groundwater monitoring wells were analyzed for pH, chloride, sulfate, total dissolved solids, selenium, and thallium. The reported pH data are based on the pH analyses performed at the time of sample collection in the field (Table 1). The measured pH at groundwater monitoring well CEM-004 and analytical results for chloride, sulfate, total dissolved solids (TDS), selenium and thallium from the February 12, 2025, groundwater sample were within the target levels prescribed by TR-12, as shown in Table 1.

In addition, a Stiff Diagram of the groundwater cation/anion data from CEM-004 compared to the average and 90<sup>th</sup> percentile of the cation/anion concentrations from the last four quarterly samples of C-Pit data is provided in Figure 1 for reference. As shown in Figure 1 and consistent with past reports, the signature for CEM-004 continues to be significantly different from that of C-Pit.

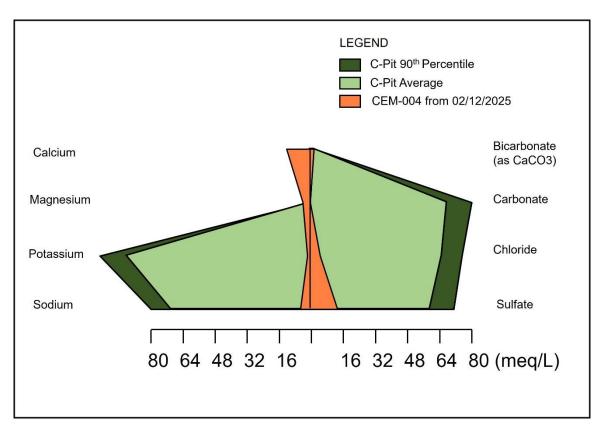


Figure 1: First Quarter of 2025 cation/anion data for CEM-004 compared to C-Pit

Please contact me at 863-602-8024 or by email at <u>robing.simons@cemex.com</u> for any questions or concerns regarding this submittal.

Sincerely,

Robin Simons

Robin G. Simons Environmental Manager

Encs. Y25Q1C-Pit Monitoring Report and associated Stiff Plot (Fig.1), and Summary of Analytical Results (Table 1), Field Notes, and Time Trend Plots (Figs. A, B, C)

Parameter L	Units	C-Pit					CEM-001 CEM-004 CEM-005						CEM-004, CEM-005 Triggers (TR-12)					
		2024 Q2	2024 Q3	2024 Q4	2025 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	
		6/7/2024	8/8/2024	10/30/2024	2/11/2025	6/7/2024	8/8/2024	10/30/2024	2/11/2025	6/7/2024	8/8/2024	10/30/2024	2/12/2025	<sup>a</sup> See dates below	<sup>a</sup> See dates below	<sup>a</sup> See dates below	<sup>a</sup> See dates below	
		value	value	value	value	value	value	value	value	value	value	value	value	value	value	value	value	
pH (On-site)	su	10.71	10.79	7.82	11.34	7.82	7.99	7.98	7.55	7.21	7.71	7.59	7.31	insufficient water to sample		water insufficient water ble to sample	insufficient	6.5-8.5
Chloride	mg/L	2120	2420	2760	1930	1450	150	1510	1370	6.3	3.4	120	181					1,053
Sulfate	mg/L	2370	2870	3630	2620	93	88.7	91.8	129	11	9.2	456	660					2,641
Total Dissolved Solids	mg/L	3170	11000	10200	8460	3840	3320	3960	4200	139	83	976	1260				water to sample	501-10,000 or 1.25 times background
Dissolved Selenium	mg/L	0.482	0.533	0.575	0.362	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0006	0.0009					0.05
Dissolved Thallium	mg/L	0.0023	0.0035	0.0037	0.0021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002					0.002
	Sample	analyzed beyor	nd recommende	d hold time					-			-			-			

U Detection limit is estimated

UJ Estimated low

Х Data may not be representative due to nonstandard field sampling protocol

NA

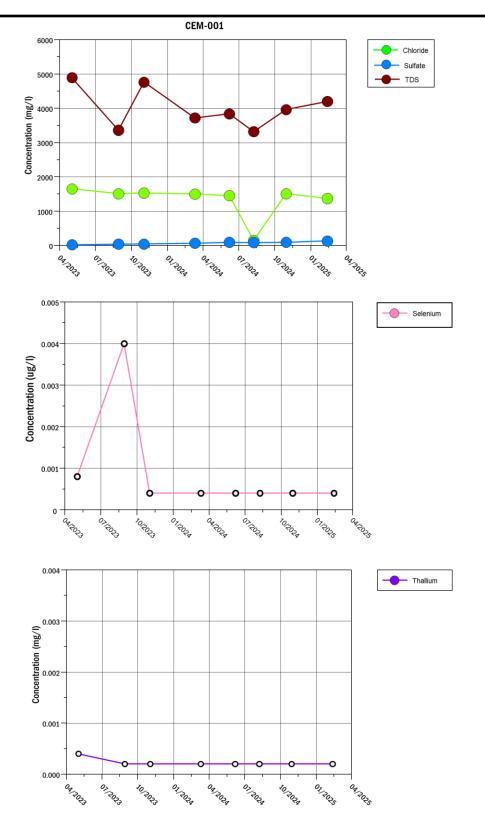
Not analyzed. Exceeds trigger value

a CEM 005 Y24 Q2 Well Sounding: 6/7/2024

a CEM 005 Y24 Q3 Well Sounding: 8/8/2024

a CEM 005 Y24 Q4 Well Sounding: 10/30/2024

a CEM 005 Y25 Q1 Well Sounding: 02/12/2025

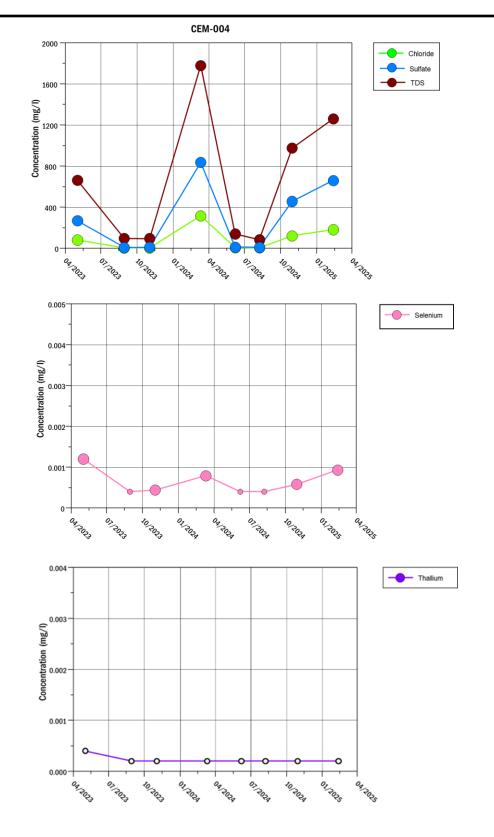


Note: Concentrations reported below the detection limit are plotted as open symbols



Figure A Time trend plots for CEM-001

CEMEX Construction Materials South, LLC Mining Permit M1977-208 Lyons Quarry

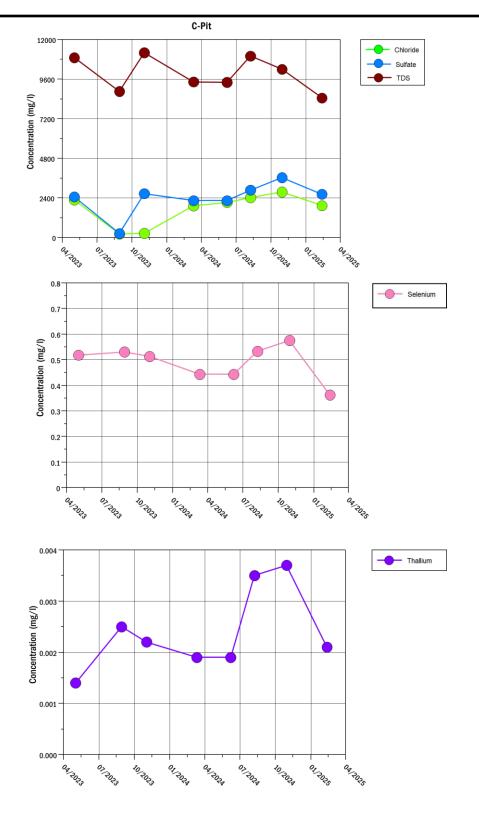


Note: Concentrations reported below the detection limit are plotted as open symbols



Figure B Time trend plots for CEM-004

CEMEX Construction Materials South, LLC Mining Permit M1977-208 Lyons Quarry



Note: Concentrations reported below the detection limit are plotted as open symbols



Figure C Time trend plots for C-Pit

CEMEX Construction Materials South, LLC Mining Permit M1977-208 Lyons Quarry

## **CEMEX Lyons Quarterly Groundwater Monitoring**

Date:	2/11	125	5 - c	2/12/	Field D	ata Sheet Proje	ct Number:	230	0135
Personn Location		Time	рH	D Temp (°C)	Cond (mS/cm)	DO (mg/L)	Total Depth (fbtoc)	Depth to Water (ft)	Notes
	2/11	ROO	Be	gin	Purg	e		· • /	
CEM-001	2/11	1220	Er	d	Purg Purg 6.331	e	143 (3.5' from		
CEM-OOT	2/11	1240	8.67	112	6.331	5.64	top of casing to ground)		
	2/11	1330	8.44	4.1	1.9 <b>4</b> 4 1.753	14 55	23.5	12.4	13:30 Begin Purge Statice 12.7
	2/11	1335	7.55	54	1.753	12.91		12.4 12.6	
CEM-004									@ A gallon s pump Railed due to temps
									to See Second Sheet for return
	2/11	1040					400 (2.62' from top of casing to	399.53 -2.63	= 396.61
				15.3	5.819			399 89 -2.62	= 397.2120
CEM-005	2/12	1140						399 75	
							ground)		Unable to sample
A - Pit	2/11	1125	8.72	0	2.105	11.90	N/A		
C - Pit	2/11	12.25	11.34	7.2	14.954	1320	N/A		

## **CEMEX Lyons Quarterly Groundwater Monitoring**

Date: Personne	2	12, Rol	125 ker	De	noedir	Proje	ct Number:	230	135
Location	Date	Time	рН	Temp (°C)	Cond (mS/cm)	D0 (mg/L)	Totał Depth (fbtoc)	Depth to Water (ft)	Notes
		4							
EM-001							143 (3.5' from top of		
							casing to ground)		
	2/12	1030	834	40	1.845	9.25	23.5	1991 11.19	10:25 Beer Static @ It.
EM-004	2/2	1042	737	3-1	1.864	5-91		11.08 5001	Static @ ft.
EM-004	2/2	1051	7.46	29	1.866	6.73		4.3al 11.66	
	2/12	1115	7.31	3.3	1.845 1.864 1.866 1.866	2.93		11.061391	
CEM-005							400 (2.62' from top of casing to ground)		
A - Pit							N/A		
C - Pit							N/A		