

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 25-14

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FOURTH QUARTER 2024

Metropolitan Water Reclamation District of Greater Chicago

CECIL LUE-HING RESEARCH AND DEVELOPMENT COMPLEX 6001 WEST PERSHING ROAD CICERO, ILLINOIS 60804-4112

February 21, 2025

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Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section, Mail Code #19 2520 W. Iles Ave. P.O. Box 19276 Springfield, Illinois 62794-9274

Dear Sir or Madam:

Subject: Lawndale Avenue Solids Management Area – Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2024-AO-71558, Monitoring Report for October, November, and December 2024

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for October, November, and December 2024, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2024-AO-71558. Biosolids were placed in the solids drying area in October, and November 2024.

<u>Table 1</u>: Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on October 23, 2024.

<u>Table 2</u>: Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on November 5, 2024.

<u>Table 3</u>: Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During October and November 2024.

Very truly yours,

Albert Cox, Ph.D.

Environmental Monitoring and Research Manager Monitoring and Research Department

AC:lf Attachment

cc: Mr. T. Bennett, IEPA/Mr. B. Fleming, IEPA

Dr. H. Zhang

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LAWNDALE AVENUE SOLIDS MANAGEMENT AREA MONITORING REPORT FOR FOURTH QUARTER 2024	
$\mathbf{B}\mathbf{y}$	
Benjamin Morgan Environmental Soil Scientist	
Albert Cox Environmental Monitoring and Research Manager	
and Research Department Podczerwinski, Director	May 2025

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON OCTOBER 23, 2024

		M	Ionitoring Well N	lo.	
Parameter	M-11	M-12	M-13	M-14	M-15
рН	7.3	7.5	7.4	7.5	7.1
			mg L ⁻¹		
Cl-	26	15	10	11	9
SO_4^{2-}	197	345	629	129	788
NO_2 ⁻ $+NO_3$ ⁻ $-N$	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-9N AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON NOVEMBER 5, 2024

	Lysimeter No.								
Parameter	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
рН	7.3	7.3	7.2	7.4	7.1	6.9	7.6	7.4	7.2
					mg L ⁻¹				
Cl ⁻	21	114	144	18	536	84	359	472	338
SO_4^{2-}	846	105	32	1270	1553	1370	<1.0	160	145
NO_2 - $+NO_3$ - N	0.62	0.96	0.76	3.80	1.70	0.60	1.10	0.74	1.70

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA DURING OCTOBER AND NOVEMBER 2024

Parameter	October	November
рН	7.6	7.9
		0/0
Total Solids	21.1	7.6
Total Volatile Solids ¹	44.9	47.9

¹Total volatile solids as a percentage of total solids.