

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 24-34

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT

FOR SECOND QUARTER 2024

September 2024

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

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

Edward W. Podczewinski, P.E.

Director of Monitoring and Research
podczewinski@mwrld.org

September 3, 2024

BOARD OF COMMISSIONERS

Kari K. Steele
President
Patricia Theresa Flynn
Vice President
Marcelino Garcia
Chairman of Finance
Precious Brady-Davis
Yumeka Brown
Cameron Davis
Daniel Pogorzelski
Eira L. Corral Sepúlveda
Mariyana T. Spyropoulos

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section #19
1021 North Grand Avenue East
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. 2020-AO-64903, Monitoring Report for April, May, and June 2024

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for April, May, and June 2024, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2020-AO-64903. During the second quarter of 2024, biosolids were placed in the solids drying area in May and June.

Table 1 Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on May 22, 2024.

Table 2 Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on June 6, 2024.

Table 3 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During May and June 2024.

Very truly yours,

Albert E. Cox, Ph.D.
Environmental Monitoring and Research Manager
Monitoring and Research Department

AC:EE:lf

Attachments

cc: Mr. T. Bennett, IEPA
Mr. B. Fleming, IEPA
Dr. H. Zhang

Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street Chicago, Illinois 60611-2803 (312) 751-5600

**LAWDALE AVENUE SOLIDS MANAGEMENT AREA
MONITORING REPORT
FOR SECOND QUARTER 2024**

By

**Benjamin Morgan
Environmental Soil Scientist**

**Albert Cox
Environmental Monitoring and Research Manager**

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15
 AT THE LAWDALE AVENUE SOLIDS MANAGEMENT AREA
 SAMPLED ON MAY 22, 2024

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH	7.3	7.6	7.5	7.5	7.3
	-----mg L ⁻¹ -----				
Cl ⁻	24	15	11	11	10
SO ₄ ²⁻	198	356	664	131	850
NO ₂ ⁻ +NO ₃ ⁻ -N	NRR ¹	NRR	NRR	NRR	NRR

¹No reportable result due to sample contamination.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-9N AT THE LAWDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON JUNE 6, 2024¹

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
pH	7.4	7.1	7.2	6.9	7.2	6.8	7.9	7.8	7.1
	-----mg L ⁻¹ -----								
Cl ⁻	19	162	144	15	550	84	313	374	347
SO ₄ ²⁻	807	157	42	1,122	1,650	1,416	7.72	129	151
NO ₂ ⁻ +NO ₃ ⁻ -N	1.0	3.1	<0.50	<0.50	2.3	0.56	<0.50	0.53	0.59

¹Lysimeter L-7N did not produce adequate sample volume for analysis on June 6, 2024, and was resampled on June 27, 2024.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA DURING MAY AND JUNE 2024

Parameter	May	June
pH	7.7	7.7
	-----%	
Total Solids	9.8	18.6
Total Volatile Solids ¹	48.4	44.7

¹Total volatile solids as a percentage of total solids.