

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 23-47

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT

FOR THIRD QUARTER 2023

December 2023

Protecting Our Water Environment

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Edward W. Podczewski, P.E.
Director of Monitoring and Research

November 27, 2023

Ms. Catherine Siders
Illinois Environmental Protection Agency
Bureau of Water
DWPC Compliance Section #19
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9274

Dear Ms. Siders:

Subject: Lawndale Avenue Solids Management Area - Stickney Water Reclamation Plant,
Illinois Environmental Protection Agency Permit No. 2020-AO-64903,
Monitoring Report for July, August, and September 2023

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for July, August, and September 2023, as required by Illinois Environmental Protection Agency Operating Permit No. 2020-AO-64903. Biosolids were placed in the solids drying area in July, August, and September 2023.

Table 1: Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on September 18, 2023.

Table 2: Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on August 1, 2023.

Table 3: Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During July, August, and September 2023.

Very truly yours,



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

AC:BM:lf
Attachment
Mr. J. Patel, IEPA
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

**LAWNDALE AVENUE SOLIDS MANAGEMENT AREA
MONITORING REPORT
FOR THIRD QUARTER 2023**

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 LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON
 SEPTEMBER 18, 2023

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH	7.0	7.6	7.5	7.5	7.3
	-----mg L ⁻¹ -----				
Cl ⁻	25	15	10	10	9
SO ₄ ²⁻	190	349	655	128	814
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
AUGUST 1, 2023

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
pH	7.3	7.3	7.2	7.0	7.1	7.5	7.7	7.6	7.3
	-----mg L ⁻¹ -----								
Cl ⁻	19	193	140	18	534	89	317	528	310
SO ₄ ²⁻	813	184	46	1,214	1,613	1,396	<1.0	180	147
NO ₂ ⁻ +NO ₃ ⁻ -N	0.61	1.2	0.73	0.63	<0.50	0.82	1.1	0.75	<0.50

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA DURING JULY, AUGUST, AND SEPTEMBER 2023

Parameter	July	August	September
pH	7.7	7.8	7.6
	-----%		
Total Solids	13.3	10.7	16.0
Total Volatile Solids ¹	44.0	43.5	41.7

¹Total volatile solids as a percentage of total solids.