

*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***MONITORING AND RESEARCH  
DEPARTMENT***

***REPORT NO. 24-08***

***LAWNDALE AVENUE SOLIDS MANAGEMENT AREA***

***MONITORING REPORT***

***FOR FOURTH QUARTER 2023***

***March 2024***

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

**Metropolitan Water Reclamation District of Greater Chicago**

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

**Edward W. Podczerwinski, P.E.**  
Director of Monitoring and Research

February 26, 2024

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 October, November, and December 2023

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

Table 1: Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on December 4, 2023.

Table 2: Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on November 3, 2023.

Table 3: Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During October, November, and December 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 FOURTH 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  
 DECEMBER 4, 2023

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH	7.4	7.7	7.5	7.5	7.3
	-----mg L <sup>-1</sup> -----				
Cl <sup>-</sup>	18	15	10	10	9.3
SO <sub>4</sub> <sup>2-</sup>	211	350	658	129	839
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -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 3, 2023

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
pH	7.4	7.3	7.3	7.2	7.3	7.0	NS <sup>1</sup>	8.1	7.2
	-----mg L <sup>-1</sup> -----								
Cl <sup>-</sup>	18	135	141	17	543	82	NS	497	344
SO <sub>4</sub> <sup>2-</sup>	796	104	52	1,214	1,571	1,371	NS	175	157
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	0.56	2.5	<0.50	<0.50	1.4	0.73	NS	0.73	<0.50

<sup>1</sup>No sample available for analysis due to Lysimeter L-7N being dry during sampling on November 3, 9, and 22, 2023.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA DURING OCTOBER, NOVEMBER, AND DECEMBER 2023

Parameter	October	November	December
pH	7.6	7.6	7.5
	-----%		
Total Solids	13.2	20.8	8.1
Total Volatile Solids <sup>1</sup>	41.3	42.2	48.4

<sup>1</sup>Total volatile solids as a percentage of total solids.