

*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***MONITORING AND RESEARCH  
DEPARTMENT***

***REPORT NO. 21-41***

***LAWNDALE AVENUE SOLIDS MANAGEMENT AREA***

***MONITORING REPORT FOR***

***THIRD QUARTER 2021***

***November 2021***

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

November 22, 2021

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 2021

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for July, August, and September 2021 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2020-AO-64903. Biosolids were placed in the solids drying area in July, August, and September 2021.

Table 1 Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on September 17, 2021.

Table 2 Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on August 17, 2021.

Table 3 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During July, August, and September 2021.

Very truly yours,



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

AC:lf

Attachment

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

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**LAWNDALE AVENUE SOLIDS MANAGEMENT AREA**  
**MONITORING REPORT FOR**  
**THIRD QUARTER 2021**

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15  
 AT THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA  
 SAMPLED ON SEPTEMBER 17, 2021

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH	7.5	7.6	7.4	7.5	7.3
	-----mg L <sup>-1</sup> -----				
Cl <sup>-</sup>	22	14	10	9	9
SO <sub>4</sub> <sup>2-</sup>	194	345	623	120	793
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	<0.25	<0.25	<0.25	<0.25	<0.25

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-9N AT THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 17, 2021

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N <sup>1</sup>	L-8N	L-9N
pH	7.2	7.1	7.0	6.8	6.9	6.7	7.8	7.7	7.0
	-----mg L <sup>-1</sup> -----								
Cl <sup>-</sup>	18	240	135	22	550	84	325	365	349
SO <sub>4</sub> <sup>2-</sup>	786	194	52	1,358	1,580	1,342	34	140	175
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	0.37	3.11	0.38	<0.25	1.08	0.30	0.51	0.69	<0.25

<sup>1</sup>Lysimeter L-7N did not produce adequate sample volume for analysis on August 17, and was re-sampled on August 24, 2021.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA DURING JULY, AUGUST, AND SEPTEMBER 2021

Parameter	July	August	September
pH	7.8	7.7	7.7
		-----%	
Total Solids	16.4	16.0	10.0
Total Volatile Solids <sup>1</sup>	43.0	42.5	43.8

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