

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 19-30

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

THIRD QUARTER 2019

November 2019

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

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

November 8, 2019

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Mr. Roger Callaway 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 Mr. Callaway:

Subject: Lawndale Avenue Solids Management Area - Stickney Water Reclamation

Plant, Illinois Environmental Protection Agency Permit No. 2015-AO-59623,

Monitoring Report for July, August, and September 2019

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for July, August, and September 2019 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2015-AO-59623. Biosolids were placed in the solids drying area in July, August, and September.

Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled in September, 2019.

Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Table 2 Solids Management Area Sampled on August 7, 2019.

Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area Table 3 During July, August, and September 2019.

Very truly yours,

Environmental Monitoring and Research Manager

Monitoring and Research Department

AC:BM:cm Attachments

cc/att: Mr. J. Patel, IEPA/Records Unit, IEPA

Dr. H. Zhang

Metropolitan Water Reclamation District of Gr	
100 East Erie Street Chicago, Illinois 60611-2803 31	2-751-5600
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TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED IN SEPTEMBER, 2019

Parameter		Jo.			
	M-11	M-12	M-13	M-14 ¹	M-15
рН	7.3	7.5	7.5	7.8	7.4
			mg L ⁻¹		
Cl-	23	15	10	10	9
SO ₄ ² -	200	349	633	129	819
NO_2 - $+NO_3$ - $-N$	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25

¹Well M-14 was sampled on September 14. All other wells were sampled on September 10.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-9N AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 7, 2019

				Lysin	neter No.			
Parameter	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-8N	L-9N
рН	7.6	7.4	7.1	7.0	7.1	6.9	7.5	7.1
				m	g L ⁻¹			
Cl ⁻	17	257	142	24	586	77	348	369
SO ₄ ²⁻	738	148	68 1	1,142	1,524	1,330	121	192
NO_2 - $+NO_3$ - $-N$	0.37	5.30	< 0.25	0.37	0.98	0.71	0.61	0.29

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA DURING JULY, AUGUST, AND SEPTEMBER 2019

Parameter	July	August	September
рН	7.8	7.7	7.8
•		%	
Total Solids	16.0	13.9	15.3
Total Volatile Solids ¹	42.9	46.2	45.1

¹Total volatile solids as a percentage of total solids.