

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 22-04

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FOURTH QUARTER 2021

February 2022

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

February 17, 2022

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 2021

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

Table 1 Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on December 2, 2021.

Table 2 Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on November 19, 2021.

Table 3 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During October and November 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
FOURTH QUARTER 2021

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 2, 2021

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH	7.4	7.7	7.4	7.5	7.4
	-----mg L ⁻¹ -----				
Cl ⁻	20	16	11	10	9
SO ₄ ²⁻	203	371	653	135	846
NO ₂ ⁻ +NO ₃ ⁻ -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 LAWDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON
 NOVEMBER 19, 2021

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
pH	7.6	7.4	7.0	7.0	7.3	7.3	8.0	7.9	7.5
	-----mg L ⁻¹ -----								
Cl ⁻	20	255	134	22	527	71	323	380	337
SO ₄ ²⁻	815	169	52	1,335	1,521	1,114	17	143	167
NO ₂ ⁻ +NO ₃ ⁻ -N	0.33	2.31	0.64	0.27	0.69	<0.25	1.19	0.51	0.36

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA DURING OCTOBER AND NOVEMBER 2021

Parameter	October	November
pH	7.7	7.7
	-----mg L ⁻¹ -----	
Total Solids	16.8	9.2
Total Volatile Solids ¹	43.1	43.3

¹Total volatile solids as a percentage of total solids.