

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 21-05

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FOURTH QUARTER 2020

February 2021

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Edward W. Podczewski, P.E.

Director of Monitoring and Research

February 10, 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 October, November, and December 2020

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for October, November, and December 2020 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.

Table 1 Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on November 17, 2020.

Table 2 Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on November 17, 2020.

Table 3 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During October and November 2020.

Very truly yours,



Albert E. Cox
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 Greater Chicago
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**LAWNDALE AVENUE SOLIDS MANAGEMENT AREA
MONITORING REPORT FOR
FOURTH QUARTER 2020**

Monitoring and Research Department
Edward W. Podczewinski, Director

February 2021

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15
 AT THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA
 SAMPLED ON NOVEMBER 17, 2020

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH	7.2	7.3	7.4	7.4	7.1
	----- mg L ⁻¹ -----				
Cl ⁻	22	15	10	10	9
SO ₄ ²⁻	202	354	631	129	823
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 LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON NOVEMBER 17, 2020

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N ^{1,2}	L-9N
pH	7.6	7.5	7.7	7.4	7.6	6.8	7.6	8.1	6.9
	----- mg L ⁻¹ -----								
Cl ⁻	18	137	133	22	524	79	351	95	365
SO ₄ ²⁻	765	139	61	1,452	1,502	1,361	31	67	187
NO ₂ ⁻ +NO ₃ ⁻ -N	0.37	0.99	0.57	<0.25	0.91	0.40	1.03	<1.29	0.45

¹Lysimeter L-8N was dry on November 17, 2020 and was re-sampled on December 8.

²Lysimeter L-8N did not produce adequate sample volume for all analyses and was diluted prior to analysis. Results are presented after adjusting for dilution factor.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA DURING OCTOBER AND NOVEMBER 2020

Parameter	October	November
pH	8.1	7.9
	----- % -----	
Total Solids	15.6	15.5
Total Volatile Solids ¹	47.5	45.5

¹Total volatile solids as a percentage of total solids.