

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 17-37

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

SECOND QUARTER 2017

August 2017

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Edward W. Podczewski, P.E.
Acting Director of Monitoring and Research

August 17, 2017

Mr. S. Alan Keller, P.E.
Manager, Permit Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794 - 9276

Dear Mr. Keller:

Subject: Lawndale Avenue Solids Management Area - Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2015-AO-59623, Monitoring Report for April, May, and June 2017

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for April, May, and June 2017 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2015-AO-59623. Biosolids were placed in the solids drying area during May and June 2017.

Table 1 Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on June 5, 2017.

Table 2 Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on May 31, 2017.

Table 3 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During May 2017.

Table 4 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During June 2017.

Very truly yours,

Albert E. Cox
Environmental Monitoring and Research Manager
Monitoring and Research Department

AC:DB:cm
Attachments
cc/att: Mr. J. Patel, IEPA/Records Unit, IEPA
Drs. H. Zhang/G. Tian/D. Brose

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
SECOND QUARTER 2017**

Monitoring and Research Department
Edward W. Podczewinski, Acting Director

August 2017

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15
 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA
 SAMPLED ON JUNE 5, 2017

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH ¹	7.5	7.7	7.7	7.5	7.3
	----- mg L ⁻¹ -----				
Cl ⁻	24	16	13	11	13
SO ₄ ²⁻	185	363	647	137	859
NO ₂ +NO ₃ -N	<0.15	<0.15	<0.15	<0.15	<0.15

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-9N
 AT THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA
 SAMPLED ON MAY 31, 2017

Parameter	Lysimeter No.							
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-8N	L-9N
pH ¹	7.9	7.7	7.6	7.6	7.5	7.4	7.8	7.6
	----- mg L ⁻¹ -----							
Cl ⁻	13	218	133	10	627	63	520	347
SO ₄ ²⁻	727	208	90	1,207	1,653	1,365	194	205
NO ₂ +NO ₃ -N	<0.15	5.4	0.16	0.32	0.23	0.27	<0.15	<0.15

¹pH analyzed beyond recommended holding time of five minutes.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE
LAWNDALE AVENUE SOLIDS MANAGEMENT DRYING
AREA DURING MAY 2017

Parameter	Analysis ¹
pH	7.4
Total Solids	12
Total Volatile Solids ²	41

¹Mean of six samples.

²Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE
LAWNDALE AVENUE SOLIDS MANAGEMENT DRYING
AREA DURING JUNE 2017

Parameter	Analysis ¹
pH	7.5
	---- % ----
Total Solids	12
Total Volatile Solids ²	44

¹Mean of six samples.

²Total volatile solids as a percentage of total solids.