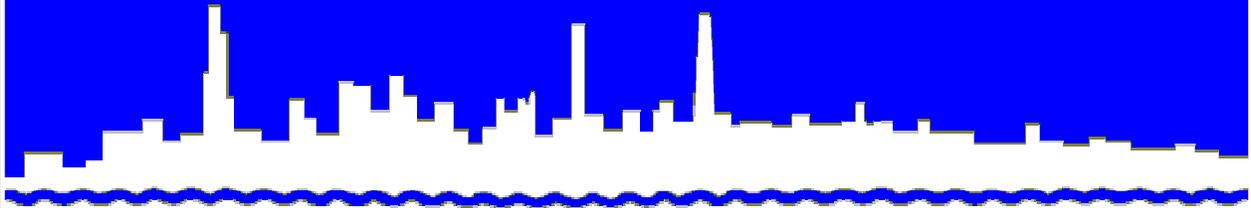


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 18-27

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

SECOND QUARTER 2018

October 2018

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

August 27, 2018

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 April, May, and June 2018

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for April, May, and June 2018 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2015-AO-59623. Biosolids were placed in the solids drying area during April, May, and June.

Table 1 Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on May 10, 2018.

Table 2 Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on May 16, 2018.

Table 3 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During April 2018.

Table 4 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During May 2018.

Table 5 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During June 2018.

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
Dr. H. Zhang/Dr. G. Tian/Dr. 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 2018**

Monitoring and Research Department
Edward W. Podczewinski, Director

October 2018

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15
 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA
 SAMPLED ON MAY 10, 2018

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH ¹	6.4	7.1	7.5	7.4	7.5
	----- mg L ⁻¹ -----				
Cl ⁻	24	15	12	10	11
SO ₄ ²⁻	218	379	692	881	137
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 LAWNDALE AVENUE SOLIDS MANAGEMENT AREA
 SAMPLED ON MAY 16, 2018

Parameter	Lysimeter No.							
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-8N	L-9N
pH ¹	7.6	7.7	7.6	7.6	7.7	7.5	8.1	7.6
	----- mg L ⁻¹ -----							
Cl ⁻	15	190	137	18	613	71	416	370
SO ₄ ²⁻	777	203	84	1,298	1,637	1,484	NRR ²	206
NO ₂ +NO ₃ -N	0.15	5.9	0.17	0.40	1.7	0.16	0.84	<0.15

¹pH analyzed beyond recommended holding time of 15 minutes.

²NRR=no reportable results; sample could not be analyzed due to instrument calibration failure.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE
LAWNDALE AVENUE SOLIDS MANAGEMENT
AREA DURING APRIL 2018

Parameter	Analysis ¹
pH	NRR ²
	----- % -----
Total Solids	22
Total Volatile Solids ³	41

¹One sample.

²NRR=no reportable results; sample received beyond holding time.

³Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE
LAWNDALE AVENUE SOLIDS MANAGEMENT AREA
DURING MAY 2018

Parameter	Analysis ¹
pH	7.7
	----- % -----
Total Solids	23
Total Volatile Solids ²	45

¹Mean of seven samples.

²Total volatile solids as a percentage of total solids.

TABLE 5: ANALYSIS OF BIOSOLIDS PLACED IN THE
LAWNDALE AVENUE SOLIDS MANAGEMENT
AREA DURING JUNE 2018

Parameter	Analysis ¹
pH	7.6
	----- % -----
Total Solids	28
Total Volatile Solids ²	44

¹Mean of five samples.

²Total volatile solids as a percentage of total solids.