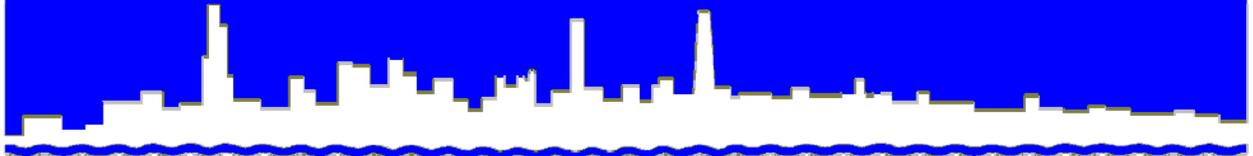


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 16-28

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

SECOND QUARTER 2016

August 2016

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THOMAS C. GRANATO, Ph.D., BCES

Director of Monitoring and Research

August 23, 2016

thomas.granato@mwrdd.org

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 2016

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for April, May, and June 2016 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 2016.

- Table 1 Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on April 6, 2016.
- Table 2 Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on June 1, 2016.
- Table 3 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During May 2016.
- Table 4 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During June 2016.

Very truly yours,

Thomas C. Granato, Ph.D., BCES
Director
Monitoring and Research

TCG:HZ:DB:cm

Attachments

cc/att: Mr. J. Patel, IEPA/Records Unit, IEPA
Drs. H. Zhang/A. Cox/G. Tian/D. Brose

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15
 AT THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA
 SAMPLED ON APRIL 6, 2016

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH ¹	8.1	8.2	8.2	7.7	8.1
	----- mg L ⁻¹ -----				
Cl ⁻	20	14	14	<10	<10
SO ₄ ²⁻	199	357	631	131	866
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 JUNE 1, 2016

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
pH ¹	7.6	7.6	7.5	7.5	7.5	7.8	8.3	7.7	7.2
	----- mg L ⁻¹ -----								
Cl ⁻	16	202	141	17	664	82	610	624	343
SO ₄ ²⁻	678	186	112	1,178	1,617	1,422	<5.0	201	196
NO ₂ +NO ₃ -N	<0.15	5.7	0.84	3.9	1.7	0.52	0.37	0.19	0.49

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE
 AVENUE SOLIDS MANAGEMENT AREA
 DURING MAY 2016

Parameter	Analysis ¹
pH	7.3
	---- % ----
Total Solids	12
Total Volatile Solids ²	43

¹Mean of 17 samples.

²Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE
AVENUE SOLIDS MANAGEMENT AREA
DURING JUNE 2016

Parameter	Analysis ¹
pH	7.4
	---- % ----
Total Solids	11
Total Volatile Solids ²	43

¹Mean of six samples.

²Total volatile solids as a percentage of total solids.