

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 15-3

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FOURTH QUARTER 2014

February 2015

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February 5, 2015

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. 2010-AO-0267-1, Monitoring Report for October, November, and December 2014

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for October, November, and December 2014 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2010-AO-0267-1.

Biosolids were placed in the solids drying area during October, November, and December 2014. The data reported are as follows:

Table 1, Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on October 15, 2014.

Table 2, Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on November 5, 2014.

Table 3, Analysis of Compositated Biosolids Placed in the Lawndale Avenue Solids Management Area During October, November, and December 2014.

Very truly yours,

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

TCG:DB:cm

Attachment

cc w/att: Mr. J. Patel, IEPA
Records Unit, IEPA

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15
 AT THE LAWNSDALE AVENUE SOLIDS MANAGEMENT
 AREA SAMPLED ON OCTOBER 15, 2014

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH ¹	7.9	7.8	8.1	7.8	7.3
	----- mg L ⁻¹ -----				
Cl ⁻	17	14	<10	<10	<10
SO ₄ ²⁻	188	265	476	107	570
NO ₂ +NO ₃ -N	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15

¹ pH 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
NOVEMBER 5, 2014

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
pH ¹	7.7	7.6	7.3	7.4	7.3	7.1	8.0	7.8	7.6
	----- mg L ⁻¹ -----								
Cl ⁻	20	287	138	24	804	71	386	444	331
SO ₄ ²⁻	718	360	180	1,079	1,703	1,353	26	253	200
NO ₂ -+NO ₃ -N	< 0.15	2.6	0.18	0.50	0.45	0.42	1.2	< 0.15	0.36

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 3: ANALYSIS OF COMPOSITED BIOSOLIDS PLACED IN THE
LAWNDALE AVENUE SOLIDS MANAGEMENT AREA DURING
OCTOBER, NOVEMBER, AND DECEMBER 2014

Parameter	Analysis ¹
pH	7.3
	---- % ----
Total Solids	12
Total Volatile Solids ²	41

¹Mean of 38 samples.

²Total volatile solids as a percentage of total solids.