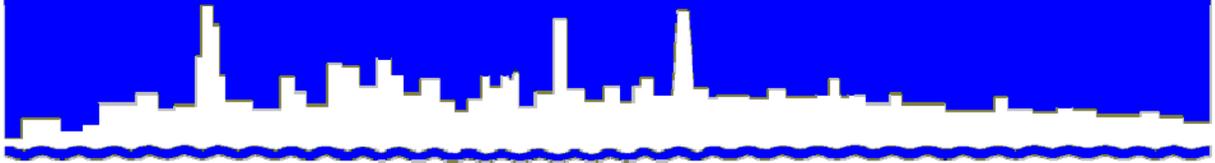


*Protecting Our Water Environment*



***Metropolitan Water Reclamation District of Greater Chicago***

*MONITORING AND RESEARCH  
DEPARTMENT*

***REPORT NO. 15-40***

***LAWNDALE AVENUE SOLIDS MANAGEMENT AREA***

***MONITORING REPORT FOR***

***THIRD QUARTER 2015***

***December 2015***

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**THOMAS C. GRANATO, Ph.D., BCES**

Director of Monitoring and Research

November 23, 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. 2015-AO-59623, Monitoring Report for July, August, and September 2015

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

Table 1, Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on July 15, 2015.

Table 2, Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on September 2, 2015.

Table 3, Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Drying Area During July 2015.

Table 4, Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Drying Area During August 2015.

Table 5, Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Drying Area During September 2015.

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

Dr. H. Zhang/Dr. A. Cox/Dr. L. Hundal

Dr. D. Brose

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15  
 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA  
 SAMPLED ON JULY 15, 2015

Parameter	Monitoring Well No.				
	M-11	M-12	M-13	M-14	M-15
pH <sup>1</sup>	7.5	7.7	8.0	8.1	8.0
	----- mg L <sup>-1</sup> -----				
Cl <sup>-</sup>	20	15	16	10	<10
SO <sub>4</sub> <sup>2-</sup>	205	381	662	130	878
NO <sub>2</sub> +NO <sub>3</sub> -N	<0.15	<0.15	<0.15	<0.15	<0.15

<sup>1</sup>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  
SEPTEMBER 2, 2015

Parameter	Lysimeter No.								
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
pH <sup>1</sup>	7.8	7.8	7.6	7.6	7.6	6.9	8.2	7.9	7.8
	----- mg L <sup>-1</sup> -----								
Cl <sup>-</sup>	18	231	136	20	714	73	73	584	341
SO <sub>4</sub> <sup>2-</sup>	687	249	159	1,182	1,611	1,410	8.6	189	194
NO <sub>2</sub> +NO <sub>3</sub> -N	<0.15	2.9	0.21	0.85	0.51	0.36	1.4	0.63	0.37

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT DRYING AREA DURING JULY 2015

Parameter	Analysis <sup>1</sup>
pH	7.6
	---- % ----
Total Solids	10
Total Volatile Solids <sup>2</sup>	51

<sup>1</sup>Mean of 12 samples.

<sup>2</sup>Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT DRYING AREA DURING AUGUST 2015

Parameter	Analysis <sup>1</sup>
pH	7.7
	---- % ----
Total Solids	9.2
Total Volatile Solids <sup>2</sup>	51

<sup>1</sup>Mean of 20 samples.

<sup>2</sup>Total volatile solids as a percentage of total solids.

TABLE 5: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT DRYING AREA DURING SEPTEMBER 2015

Parameter	Analysis <sup>1</sup>
pH	7.7
	---- % ----
Total Solids	12
Total Volatile Solids <sup>2</sup>	50

<sup>1</sup>Mean of 23 samples.

<sup>2</sup>Total volatile solids as a percentage of total solids.