

Metropolitan Water Reclamation District of Greater Chicago

## MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 15-27

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

SECOND QUARTER 2015

**August 2015** 

# **Protecting Our Water Environment**

#### Metropolitan Water Reclamation District of Greater Chicago

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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 Nos. 2010-AO-0267-1 and 2015-AO-59623, Monitoring Report for April, May, and June 2015

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for April, May, and June 2015 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit Nos. 2010-AO-0267-1 and 2015-AO-59623. Biosolids were placed in the solids drying area during May and June 2015.

- Table 1, Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on April 8, 2015.
- Table 2, Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on June 10, 2015.
- Table 3, Analysis of Composited Biosolids Placed in the Lawndale Avenue Solids Management Drying Area During May and June 2015.

Very truly yours,

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

TCG:DB:cm Attachment cc/att: Mr. J. Patel, IEPA Records Unit, IEPA

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON APRIL 8, 2015

Parameter		Mo	nitoring Well No	Э.	
-	M-11	M-12	M-13	M-14	M-15
pH <sup>1</sup>	7.2	7.6	7.3	7.1	7.5
			mg L <sup>-1</sup>		
Cl <sup>-</sup>	19	14	10	<10	<10
Cl <sup>-</sup> SO <sub>4</sub> <sup>2-</sup>	183	327	601	122	807
NO <sub>2</sub> +NO <sub>3</sub> -N	< 0.15	< 0.15	< 0.15	< 0.15	< 0.1

<sup>&</sup>lt;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 JUNE 10, 2015

		Lysimeter No.							
Parameter	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
pH¹	7.6	7.6	7.7	7.5	7.7	7.1	8.1	7.8	7.9
					mg L				
Cl <sup>-</sup>	19	316	139	50	691	74	443	607	327
$SO_4^{2-}$	660	390	190	1,211	1,674	1,399	20	180	176
NO <sub>2</sub> +NO <sub>3</sub> -N	< 0.15	0.73	0.85	3.0	1.5	0.45	1.8	0.40	0.45

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

### TABLE 3: ANALYSIS OF COMPOSITED BIOSOLIDS PLACED IN THE LAWNDALE AVENUE SOLIDS MANAGEMENT DRYING AREA **DURING MAY AND JUNE 2015**

Parameter	Analysis <sup>1</sup>
рН	7.4
	0/0
Γotal Solids Γotal Volatile Solids²	11 47

<sup>&</sup>lt;sup>1</sup>Mean of 27 samples.
<sup>2</sup>Total volatile solids as a percentage of total solids.