

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 14-24

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

SECOND QUARTER 2014

AUGUST 2014

Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street

Chicago, Illinois 60611-3154

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August 13, 2014

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 April, May, and June 2014

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

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 April 14, 2014
- <u>Table 2</u>, Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on May 14, 2014
- Table 3, Analysis of Composited Biosolids Placed in the Lawndale Avenue Solids Management Drying Area During May and June 2014

Biosolids were placed in the solids drying area during May and June 2014. Based on the requirements of the revised IEPA permit issued on January 27, 2014, and effective immediately, Subject: Lawndale Avenue Solids Management Area - Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2010-AO-0267-1, Monitoring Report for April, May, and June

2014

analysis of biosolids removed from this site will no longer be reported under this permit. The list of parameters for lysimeter samples has also been modified to include only pH, Cl^- , $\text{SO}_4^{2^-}$, and $\text{NO}_2+\text{NO}_3-\text{N}$.

Very truly yours,

Thomas C. Granato, Ph.D. 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 LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON APRIL 14, 2014

Parameter	Monitoring Well No.							
-	M-11	M-12	M-13	M-14	M-15			
pH ¹	7.4	7.4	7.6	7.6	7.3			
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Cl	17	14	<10	<10	<10			
SO_4^{2-}	209	364	642	131	842			
NO ₂ +NO ₃ -N	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15			

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 MAY 14, 2014

	Lysimeter No.								
Parameter	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
рН	8.1	7.9	7.7	7.8	7.4	7.6	8.2	8.1	8.0
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Cl	14	262	148	21	714	75	296	425	321
SO_4^{2-}	682	278	146	1,303	1,621	1,380	12	174	217
NO_2 -+ NO_3 -N	< 0.15	5.1	0.38	0.51	1.3	0.57	1.4	< 0.15	0.70

TABLE 3: ANALYSIS OF COMPOSITED BIOSOLIDS PLACED IN THE LAWNDALE AVENUE SOLIDS MANAGEMENT DRYING AREA DURING MAY AND JUNE 2014

Parameter	Analysis ¹
рН	7.5
	%
Total Solids Total Volatile Solids ²	9.0 45

¹Mean of 34 samples.
²Total volatile solids as a percentage of total solids.