

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 14-52

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

THIRD QUARTER 2014

November 2014

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago100 East Erie StreetChicago, Illinois 60611-3154312.751.5190

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November 14, 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 July, August, and September 2014

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

The data reported are as follows:

- <u>Table 1</u>, Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on July 9, 2014
- Table 2,Analysis of Water from Lysimeters L-1N through L-9N at the LawndaleAvenue Solids Management Area Sampled on July 23, 2014
- Table 3, Analysis of Composited Biosolids Placed in the Lawndale AvenueSolids Management Area During July, August, and September2014

Biosolids were placed in the solids drying area during July, August, and September 2014. Based on the requirements of the revised IEPA permit issued on January 27, 2014, and effective Mr. S. Alan Keller

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immediately, 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^{-} , $SO_4^{2^-}$, and NO_2 +NO₃–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

AREA SAMPLED ON JULY 9, 2014								
Parameter	Monitoring Well No.							
	M-11	M-12	M-13	M-14	M-15			
pH^1	7.1	7.6	7.6	7.6	7.4			
			mg L ⁻¹ -					
Cl	18	14	10	10	<10			
SO4 ²⁻	210	381	692	144	878			
NO ₂ +NO ₃ -N	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15			

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON JULY 9, 2014

¹ pH analyzed beyond recommended holding time of 15 minutes.

	Lysimeter No.								
Parameter	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-7N	L-8N	L-9N
рН	7.5	7.4	7.3	7.2	7.4	7.2	7.9	7.7	7.6
					mg L^{-1}				
Cl ⁻ SO ₄ ²⁻ NO ₂ -+NO ₃ -N	14 728 < 0.15	263 249 4.3	136 200 0.16	15 1,236 0.83	,	81 1,451 0.72	337 29 1.4	422 176 < 0.15	325 208 0.58

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-9N AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON JULY 23, 2014

TABLE 3: ANALYSIS OF COMPOSITED BIOSOLIDS PLACED IN THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA DURING JULY, AUGUST, AND SEPTEMBER 2014

Parameter	Analysis ¹
рН	7.4
Total Solids Total Volatile Solids ²	12 43

¹Mean of 36 samples.

²Total volatile solids as a percentage of total solids.