

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 18-36

LAWNDALE AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

THIRD QUARTER 2018

November 2018

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Edward W. Podczerwinski, P.E.
Director of Monitoring and Research

November 26, 2018

Mr. Roger Callaway
Illinois Environmental Protection Agency
Bureau of Water
DWPC Compliance Section #19
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9274

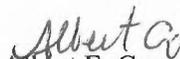
Dear Mr. Callaway:

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 2018

The attached tables contain the monitoring data for the Lawndale Avenue Solids Management Area for July, August, and September 2018 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.

- Table 1 Analysis of Water from Monitoring Wells M-11 through M-15 at the Lawndale Avenue Solids Management Area Sampled on July 12, 2018.
- Table 2 Analysis of Water from Lysimeters L-1N through L-9N at the Lawndale Avenue Solids Management Area Sampled on August 8, 2018.
- Table 3 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During July 2018.
- Table 4 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During August 2018.
- Table 5 Analysis of Biosolids Placed in the Lawndale Avenue Solids Management Area During September 2018.

Very truly yours,


Albert E. Cox

Environmental Monitoring and Research Manager
Monitoring and Research Department

AC:DB:cm
Attachments
cc/att: Mr. J. Patel, IEPA/Records Unit, IEPA
Drs. H. Zhang/G. Tian/D. Brose

Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street Chicago, Illinois 60611-2803 312-751-5600

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Edward W. Podczewinski, Director**

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TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS M-11 THROUGH M-15
 AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA
 SAMPLED ON JULY 12, 2018

Parameter	Monitoring Well No.				
	M-11	M-12	M-13 ¹	M-14	M-15
pH	6.9	7.5	ND	7.7	7.1
	----- mg L ⁻¹ -----				
Cl ⁻	23	15	ND	<5	10
SO ₄ ²⁻	217	373	ND	132	870
NO ₂ +NO ₃ □ N	<0.25	<0.25	ND	<0.25	<0.25

¹Not determined as no sample was collected due to inaccessibility to the well.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-9N AT THE LAWNDALE AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 8, 2018

Parameter	Lysimeter No.							
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N	L-8N	L-9N
pH	7.5	7.5	7.4	7.4	7.4	7.2	7.8	7.5
	----- mg L ⁻¹ -----							
Cl ⁻	14	170	133	16	630	74	341	358
SO ₄ ²⁻	762	147	84	1,256	1,610	NRR ¹	149	211
NO ₂ +NO ₃ -N	<0.25	7.2	<0.25	0.42	1.4	0.43	0.78	<0.25

¹NRR=No reportable results due to instrument calibration failure.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA DURING JULY 2018

Parameter	Analysis ¹
pH	7.4
	---- % ----
Total Solids	10
Total Volatile Solids ²	47

¹Mean of four samples.

²Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA DURING AUGUST 2018

Parameter	Analysis ¹
pH	7.4
	---- % ----
Total Solids	12
Total Volatile Solids ²	46

¹Mean of seven samples.

²Total volatile solids as a percentage of total solids.

TABLE 5: ANALYSIS OF BIOSOLIDS PLACED IN THE LAWNSDALE AVENUE SOLIDS MANAGEMENT AREA DURING SEPTEMBER 2018

Parameter	Analysis ¹
pH	7.7
	---- % ----
Total Solids	13
Total Volatile Solids ²	44

¹Mean of four samples.

²Total volatile solids as a percentage of total solids.