

*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***MONITORING AND RESEARCH  
DEPARTMENT***

*REPORT NO. 17-46*

*HARLEM AVENUE SOLIDS MANAGEMENT AREA*

*MONITORING REPORT FOR*

*THIRD QUARTER 2017*

*November 2017*

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**Edward W. Podczerwinski, P.E.**

Director of Monitoring and Research

November 16, 2017

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: Harlem Avenue Solids Management Area - Stickney Water Reclamation Plant,  
Illinois Environmental Protection Agency Permit No. 2014-AO-58836,  
Monitoring Report for July, August, and September 2017

The attached tables contain the monitoring data for the Harlem Avenue Solids Management Area for July, August, and September 2017 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2014-AO-58836. Biosolids were placed in the solids drying area during August and September 2017.

- Table 1 Analysis of Water from Lysimeters L-1N1 Through L-3N at the Harlem Avenue Solids Management Area Sampled on August 16, 2017.
- Table 2 Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During August 2017.
- Table 3 Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During September 2017.

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  
Mr. E. Podczerwinski  
Dr. H. Zhang/Dr. G. Tian  
Dr. D. Brose

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**HARLEM AVENUE SOLIDS MANAGEMENT AREA  
MONITORING REPORT FOR  
THIRD QUARTER 2017**

**Monitoring and Research Department**  
**Edward W. Podczewinski, Director**

**November 2017**

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N1 THROUGH L-3N  
 AT THE HARLEM AVENUE SOLIDS MANAGEMENT AREA SAMPLED  
 ON AUGUST 16, 2017

Parameter	Lysimeter No.		
	L-1N1	L-2N	L-3N
pH <sup>1</sup>	7.8	7.7	8.0
	----- mg L <sup>-1</sup> -----		
Cl <sup>-</sup>	88	29	126
SO <sub>4</sub> <sup>2-</sup>	20	1,660	381
NO <sub>2</sub> +NO <sub>3</sub> -N	<0.15	20	<0.15

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

TABLE 2: ANALYSIS OF BIOSOLIDS PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT AREA DURING AUGUST 2017

Parameter	Analysis <sup>1</sup>
pH	8.2
	---- % ----
Total Solids	26
Total Volatile Solids <sup>2</sup>	48

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

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

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT AREA DURING SEPTEMBER 2017

Parameter	Analysis <sup>1</sup>
pH	7.9
	---- % ----
Total Solids	24
Total Volatile Solids <sup>2</sup>	51

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

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