

Metropolitan Water Reclamation District of Greater Chicago

## MONITORING AND RESEARCH DEPARTMENT

**REPORT NO. 16-30** 

HARLEM AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

SECOND QUARTER 2016

August 2016

## Protecting Our Water Environment

## Metropolitan Water Reclamation District of Greater Chicago

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## THOMAS C. GRANATO, Ph.D., BCES

Director of Monitoring and Research

August 23, 2016

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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: Harlem Avenue Solids Management Area - Stickney Water Reclamation Plant,

Illinois Environmental Protection Agency Permit No. 2014-AO-58836, Monitoring

Report for April, May, and June 2016

The attached tables contain the monitoring data for the Harlem Avenue Solids Management Area for April, May, and June 2016 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2014-AO-58836. Biosolids were placed in the solids drying area during April, May, and June 2016.

<u>Table 1</u> Analysis of Water from Lysimeters L-1N1 through L-3N at the Harlem Solids Management Area Sampled on June 1, 2016.

<u>Table 2</u> Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During April 2016.

<u>Table 3</u> Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During May 2016.

<u>Table 4</u> Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During June 2016.

Very truly yours,

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

TCG:HZ:DB:cm Attachment

cc/att: Mr. J. Patel, IEPA Records Unit, IEPA Dr. H. Zhang/Dr. A. Cox

Dr. G. Tian/Dr. D. Brose

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N1 THROUGH L-3N AT THE HARLEM AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON JUNE 1, 2016

	Lysimeter No.		
Parameter	L-1N1	L-2N	L-3N
$pH^1$	7.5	7.4	8.0
		mg L <sup>-1</sup>	
Cl <sup>-</sup>	31	34	189
$SO_4^{2-}$	29	1,758	358
$NO_2+NO_3-N$	< 0.15	25	< 0.15

<sup>&</sup>lt;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 **APRIL 2016** 

Parameter	Analysis <sup>1</sup>
рН	7.5 %
Total Solids Total Volatile Solids <sup>2</sup>	23 57

<sup>&</sup>lt;sup>1</sup>One sample.
<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 MAY 2016

Parameter	Analysis <sup>1</sup>
pН	7.7 %
Total Solids Total Volatile Solids <sup>2</sup>	24 55

<sup>&</sup>lt;sup>1</sup>One sample.
<sup>2</sup>Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT AREA DURING JUNE 2016

Parameter	Analysis <sup>1</sup>
pН	8.5 %
Total Solids Total Volatile Solids <sup>2</sup>	25 50

<sup>&</sup>lt;sup>1</sup>One sample.
<sup>2</sup>Total volatile solids as a percentage of total solids.