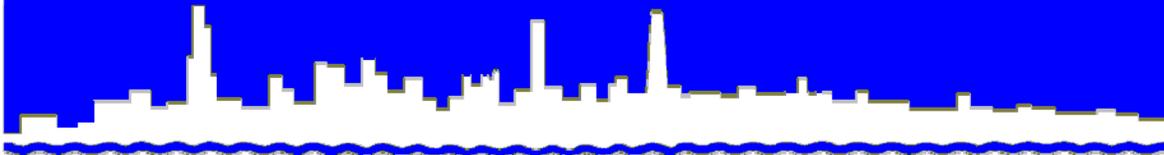


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 15-41

HARLEM AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

THIRD QUARTER 2015

December 2015

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Metropolitan Water Reclamation District of Greater Chicago

**CECIL LUE-HING RESEARCH AND DEVELOPMENT COMPLEX
6001 WEST PERSHING ROAD CICERO, ILLINOIS 60804-4112**

THOMAS C. GRANATO, Ph.D., BCES
Director of Monitoring and Research

November 23, 2015

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 2015

The attached tables contain the monitoring data for the Harlem Avenue Solids Management Area for July, August, and September 2015 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2014-AO-58836. Biosolids were placed in the solids drying area during July, August, and September 2015.

Table 1, Analysis of Water from Lysimeters L-1N1 through L-3N at the Harlem Solids Management Area Sampled on September 2, 2015.

Table 2, Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During July 2015.

Table 3, Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During August 2015.

Table 4, Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During September 2015.

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. L. Hundal/Dr. D. Brose

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N1 THROUGH L-3N
 AT THE HARLEM AVENUE SOLIDS MANAGEMENT AREA SAMPLED
 ON SEPTEMBER 2, 2015

Parameter	Lysimeter No.		
	L-1N1	L-2N	L-3N
pH ¹	7.9	7.6	7.7
	----- mg L ⁻¹ -----		
Cl ⁻	95	32	112
SO ₄ ²⁻	31	1,706	70
NO ₂ +NO ₃ -N	0.32	35	1.4

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF BIOSOLIDS PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT DRYING AREA DURING JULY 2015

Parameter	Analysis ¹
pH	8.3
	---- % ----
Total Solids	26
Total Volatile Solids ²	48

¹Mean of two samples.

²Total volatile solids as a percentage of total solids.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT DRYING AREA DURING AUGUST 2015

Parameter	Analysis ¹
pH	7.9
	---- % ----
Total Solids	16
Total Volatile Solids ²	50

¹Mean of three samples.

²Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT DRYING AREA DURING SEPTEMBER 2015

Parameter	Analysis ¹
pH	7.7
	---- % ----
Total Solids	23
Total Volatile Solids ²	49

¹Mean of six samples.

²Total volatile solids as a percentage of total solids.