MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 16-44

HARLEM AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

THIRD QUARTER 2016

December 2016

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

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December 16, 2016

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 2016

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

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

Table 2 Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During July 2016.

Table 3 Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During August 2016.

Table 4 Analysis of Biosolids Placed in the Harlem Avenue Solids Management Area During September 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
Mr. E. Podczerwinski/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 AUGUST 3, 2016

Parameter	Lysimeter No. L-1N1	L-2N	L-3N
pH[1]	7.6	7.4	7.7
	---------- mg L^{-1} ----------		
Cl^-	88	30	170
SO_4^{2-}	18	1,795	369
NO_2+NO_3-N	<0.15	59	0.20

[1]pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF BIOSOLIDS PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT AREA DURING JULY 2016

Parameter	Analysis[1]
pH	7.9
	---- % ----
Total Solids	25
Total Volatile Solids[2]	48

[1]One sample.
[2]Total volatile solids as a percentage of total solids.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT AREA DURING AUGUST 2016

Parameter	Analysis[1]
pH	8.2
	---- % ----
Total Solids	27
Total Volatile Solids[2]	46

[1]One sample.
[2]Total volatile solids as a percentage of total solids.

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

Parameter	Analysis[1]
pH	7.6
	---- % ----
Total Solids	25
Total Volatile Solids[2]	47

[1]One sample.
[2]Total volatile solids as a percentage of total solids.