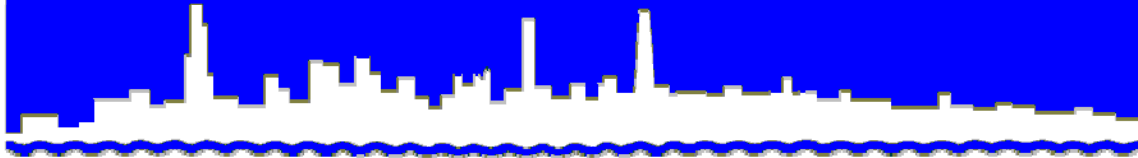


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 13-15

HARLEM AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FIRST QUARTER 2013

MAY 2013

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street

Chicago, Illinois 60611-3154

312.751.5190

THOMAS C. GRANATO, Ph.D.

Director of Monitoring and Research

312.751.5190 f: 312.751.5194

thomas.granato@mwr.org

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May 24, 2013

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. 2009-AO-2715-1, Monitoring Report for January, February, and March 2013

The attached four tables contain the monitoring data for the Harlem Avenue Solids Management Area for January, February, and March 2013 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2009-AO-2715-1.

The data reported are as follows:

Table 1, Analysis of Water from Lysimeters L-1N1 Through L-3N at the Harlem Avenue Solids Management Area Sampled on March 20, 2013

Table 2, Analysis of Monthly Compositied Biosolids Placed in the Harlem Avenue Solids Management Drying Area During January 2013

Table 3, Analysis of Monthly Compositied Biosolids Placed in the Harlem Avenue Solids Management Drying Area During February 2013

Table 4, Analysis of Monthly Compositied Biosolids Placed in the Harlem Avenue Solids Management Drying Area During March 2013

Mr. S. Alan Keller

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May 24, 2013

Subject: Harlem Avenue Solids Management Area - Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2009-AO-2715-1, Monitoring Report for January, February, and March 2013

Biosolids were placed in the solids drying area during January, February, and March 2013. No biosolids were removed from the site during the first quarter of 2013.

Very truly yours,

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

TCG:PL:cm

Attachments

cc w/att: Mr. Patel, IEPA
Records Unit, IEPA

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N1
THROUGH L-3N AT THE HARLEM AVENUE SOLIDS MANAGEMENT
AREA SAMPLED ON MARCH 20, 2013

Parameter	Unit	Lysimeter No.		
		L-1N1	L-2N	L-3N
pH ¹		8.0	7.8	8.1
EC	mS/m	251	321	185
Total Dissolved Solids	mg/L	1,806	3,524	1,478
Total Dissolved Organic Carbon	"	37	5	17
Cl ⁻	"	100	38	109
SO ₄ ⁼	"	126	1,756	10
TKN	"	7	< 1	2
NH ₃ -N	"	6	0.2	1
NO ₂ + NO ₃ -N	"	0.42	0.18	0.20
Total P	"	< 0.20	< 0.20	< 0.20
Alkalinity as CaCO ₃	"	205	432	1,076
Al	"	< 1.0	< 1.0	< 1.0
Ca	"	298	591	268
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	2	0.2	15
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	6	2	< 1
Mg	"	216	204	132
Mn	"	0.262	2.62	0.774
Na	"	68	34	44
Ni	"	< 0.005	< 0.005	< 0.005
Pb	"	< 0.02	< 0.02	< 0.02
Zn	"	< 0.01	0.04	< 0.01

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF MONTHLY COMPOSITED BIOSOLIDS
 PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT DRYING AREA
 DURING JANUARY 2013

Parameter	Unit	Concentration ¹
pH		8.0
Total Solids	%	22.5
Total Volatile Solids ²	"	65.2

¹Values are for one sample.

²Total volatile solids as a percentage of total solids.

TABLE 3: ANALYSIS OF MONTHLY COMPOSITED BIOSOLIDS
 PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT DRYING AREA
 DURING FEBRUARY 2013

Parameter	Unit	Concentration ¹
pH		8.3
Total Solids	%	22.4
Total Volatile Solids ²	"	64.6

¹Values are for one sample.

²Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF MONTHLY COMPOSITED BIOSOLIDS
 PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT DRYING AREA
 DURING MARCH 2013

Parameter	Unit	Concentration ¹
pH		8.2
Total Solids	%	24.5
Total Volatile Solids ²	"	63.0

¹Values are for one sample.

²Total volatile solids as a percentage of total solids.