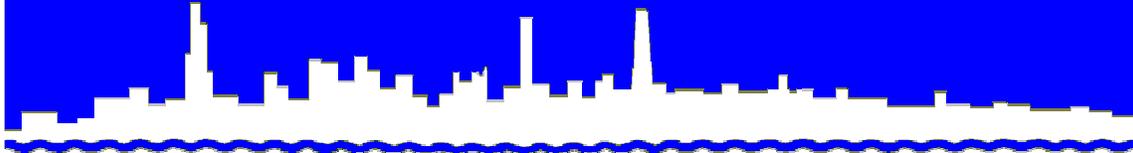


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 11-35

HARLEM AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FIRST QUARTER 2011

JUNE 2011

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Thomas C. Granato, Ph.D.
Acting Director of Monitoring and Research
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June 6, 2011

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 2011

The attached four tables contain the monitoring data for the Harlem Avenue Solids Management Area for January, February, and March 2011 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 2, 2011

Table 2, Analysis of Monthly Compositated Biosolids Placed in the Harlem Avenue Solids Management Drying Area During January 2011

Table 3, Analysis of Monthly Compositated Biosolids Placed in the Harlem Avenue Solids Management Drying Area During February 2011

Table 4, Analysis of Monthly Compositated Biosolids Placed in the Harlem Avenue Solids Management Drying Area During March 2011

Mr. S. Alan Keller

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June 6, 2011

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 2011

Biosolids were placed in the solids drying area during January, February, and March 2011. No biosolids were removed from the site during the first quarter of 2011.

Very truly yours,

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

TCG:PL:cm

Attachments

cc w/att: Mr. Sulski, IEPA
Records Unit, IEPA
Granato/O'Connor

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N1 THROUGH L-3N AT THE HARLEM AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON MARCH 2, 2011

Parameter	Unit	Lysimeter No.		
		L-1N1	L-2N	L-3N
pH ¹		7.7	7.5	7.7
EC	mS/m	258	327	196
Total Dissolved Solids	mg/L	1,808	3,782	1,516
Total Dissolved Organic Carbon	"	41	6	16
Cl ⁻		107	75	34
SO ₄ ⁼		6	1,794	80
TKN	"	8	2	2
NH ₃ -N	"	6	1	1
NO ₂ + NO ₃ -N	"	0.05	45	2.0
Total P	"	0.26	< 0.10	0.17
Alkalinity as CaCO ₃	"	NA ²	508	1,103
Al	"	< 1.0	< 1.0	< 1.0
Ca	"	320	691	281
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.005	< 0.005	< 0.005
Fe		8	< 0.2	15
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	4	2	1
Mg	"	190	202	127
Mn		0.368	2.20	0.906
Na		47	28	36
Ni		< 0.008	0.014	< 0.008
Pb		< 0.03	< 0.03	< 0.03
Zn		< 0.02	0.05	< 0.02

¹pH analyzed beyond recommended holding time of 15 minutes.

²No analysis.

**TABLE 2: ANALYSIS OF MONTHLY COMPOSITED BIOSOLIDS
PLACED IN THE HARLEM AVENUE SOLIDS MANAGEMENT DRYING AREA
DURING JANUARY 2011**

Parameter	Unit	Concentration ¹
pH		8.1
Total Solids	%	22.2
Total Volatile Solids ²	"	64.5

¹Values are the means of four samples.

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 2011**

Parameter	Unit	Concentration ¹
pH		7.9
Total Solids	%	23.5
Total Volatile Solids ²	”	64.2

¹Values are the means of four samples.

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 2011**

Parameter	Unit	Concentration ¹
pH		8.0
Total Solids	%	23.9
Total Volatile Solids ²	”	64.5

¹Values are the means of five samples.

²Total volatile solids as a percentage of total solids.