

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 13-27

122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT

AREA MONITORING REPORT FOR

SECOND QUARTER 2013

AUGUST 2013

Protecting Our Water Environment

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August 22, 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: 122nd and Stony Island Avenue Solids Management Area – Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2010-AO-0267, Monitoring Report for April, May, and June 2013

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for April, May, and June 2013 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2010-AO-0267.

The data reported are as follows:

Table 1, Analysis of Water from Lysimeter L-1 at the 122nd and Stony Island Avenue Solids Management Area Sampled During April, May, and June 2013

Table 2, Analysis of Water from Lysimeters L-2 Through L-4 at the 122nd and Stony Island Avenue Solids Management Area Sampled on May 8, 2013

No biosolids were placed in or removed from the solids drying area during April, May, and June 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 LYSIMETER L-1
 AT THE 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT
 AREA SAMPLED DURING APRIL, MAY, AND JUNE 2013

Parameter	Unit	Date Sampled		
		04/03/13	05/08/13	06/05/13
pH ¹		7.6	7.7	7.4
EC	mS/m	309	316	311
Total Dissolved Solids	mg/L	2,242	2,252	2,258
Total Dissolved Organic Carbon	"	12	41	38
Cl ⁻	"	209	201	194
SO ₄ ⁼	"	169	200	216
Alkalinity as CaCO ₃	"	NRR ²	1,443	1,449
TKN	"	NRR ²	35	34
NH ₃ -N	"	33	32	31
NO ₂ + NO ₃ -N	"	< 0.15	< 0.15	< 0.15
Total P	"	< 0.20	< 0.20	< 0.20
Al	"	< 1.0	< 1.0	< 1.0
B	"	12	8.2	7.3
Ca	"	307	297	311
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	22	21	23
Hg	µg/L	< 0.20	< 0.20	< 0.20
K	mg/L	33	30	36
Mg	"	144	148	157
Mn	"	0.354	0.347	0.355
Na	"	216	195	187
Ni	"	0.008	< 0.005	< 0.005
Pb	"	< 0.02	< 0.02	< 0.02
Zn	"	< 0.01	< 0.01	< 0.01

¹pH analyzed beyond recommended holding time of 15 minutes.

²No reportable result.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-2 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON MAY 8, 2013

Parameter	Unit	Lysimeter No.		
		L-2	L-3	L-4
pH ¹		8.2	8.0	7.9
EC	mS/m	213	284	194
Total Dissolved Solids	mg/L	1,776	2,478	1,234
Total Dissolved Organic Carbon	"	19	48	18
Cl ⁻	"	< 10	95	242
SO ₄ ⁼	"	147	492	13
Alkalinity as CaCO ₃	"	498	1,045	669
TKN	"	4	10	6
NH ₃ -N	"	2	7	4
NO ₂ + NO ₃ -N	"	0.20	< 0.15	< 0.15
Total P	"	1.3	< 0.20	< 0.20
Al	"	< 1.0	< 1.0	< 1.0
B	"	1.4	0.40	1.5
Ca	"	123	430	118
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	22	28	1
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	57	7	23
Mg	"	88	160	68
Mn	"	1.09	0.365	0.106
Na	"	255	58	196
Ni	"	< 0.005	< 0.005	< 0.005
Pb	"	< 0.02	< 0.02	< 0.02
Zn	"	< 0.01	< 0.01	< 0.01

¹pH analyzed beyond recommended holding time of 15 minutes.