

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 12-18

122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT

AREA MONITORING REPORT FOR

FIRST QUARTER 2012

JUNE 2012

Protecting Our Water Environment

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June 1, 2012

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 January, February, and March 2012

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for January, February, and March 2012 as required by Illinois Environmental Protection Agency 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 January, February, and March 2012

Table 2, Analysis of Water from Lysimeters L-2 Through L-4 at the 122nd and Stony Island Avenue Solids Management Area Sampled on March 14, 2012

No biosolids were placed in or removed from the solids drying area during January, February, and March 2012.

Very truly yours,

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

TCG:PL:cm

Attachments

cc w/att: R. Sulski, 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 JANUARY, FEBRUARY, AND MARCH 2012

Parameter	Unit	Date Sampled		
		01/04/12	02/02/12	03/14/12
pH ¹		8.0	8.0	7.9
EC	mS/m	302	292	291
Total Dissolved Solids	mg/L	2,128	2,128	2,064
Total Dissolved Organic Carbon	"	38	40	35
Cl ⁻	"	225	228	182
SO ₄ ⁼	"	211	258	264
TKN	"	36	33	29
NH ₃ -N	"	31	30	29
NO ₂ + NO ₃ -N	"	0.20	0.31	0.46
Total P	"	< 0.10	0.12	< 0.10
Alkalinity as CaCO ₃	"	1,420	1,367	1,295
Al	"	< 1.0	< 1.0	< 1.0
B	"	4.9	5.0	3.8
Ca	"	312	315	311
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	15	13	< 0.1
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	27	28	28
Mg	"	145	141	141
Mn	"	0.346	0.311	0.302
Na	"	198	196	193
Ni	"	< 0.005	< 0.005	0.010
Pb	"	< 0.02	< 0.02	< 0.02
Zn	"	< 0.01	< 0.01	0.02

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-2 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON MARCH 14, 2012

Parameter	Unit	Lysimeter No.		
		L-2	L-3	L-4
pH ¹		8.3		8.2
EC	mS/m	175		251
Total Dissolved Solids	mg/L	1,060		1,800
Total Dissolved Organic Carbon	"	14		26
Cl ⁻	"	280	L	207
SO ₄ ⁼	"	35	Y	228
TKN	"	2	S	6
NH ₃ -N	"	0.5	I	5
NO ₂ + NO ₃ -N	"	< 0.15	M	1.2
Total P	"	< 0.10	E	< 0.10
Alkalinity as CaCO ₃	"	449	T	982
Al	"	< 1.0	R	< 1.0
B	"	0.80	I	1.3
Ca	"	84	N	245
Cd	"	< 0.001	A	< 0.001
Cr	"	< 0.005	C	< 0.005
Cu	"	< 0.005	C	< 0.005
Fe	"	< 0.1	E	< 0.1
Hg	μg/L	< 0.20	S	< 0.20
K	mg/L	40	I	25
Mg	"	57	B	129
Mn	"	0.675	L	0.166
Na	"	193	E	183
Ni	"	< 0.005		< 0.005
Pb	"	< 0.02		< 0.02
Zn	"	< 0.01		< 0.01

¹pH analyzed beyond recommended holding time of 15 minutes.