

*Protecting Our Water Environment*



***Metropolitan Water Reclamation District of Greater Chicago***

***MONITORING AND RESEARCH  
DEPARTMENT***

***REPORT NO. 11-32***

***122<sup>ND</sup> AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA***

***MONITORING REPORT FOR***

***FIRST QUARTER 2011***

***JUNE 2011***

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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: 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 2011

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for January, February, and March 2011 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 January, February, and March 2011

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 9, 2011

No biosolids were placed in or removed from the solids drying area during January, February, and March 2011.

Very truly yours,

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

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

**TABLE 1: ANALYSIS OF WATER FROM LYSIMETER L-1  
AT THE 122<sup>ND</sup> AND STONY ISLAND AVENUE SOLIDS MANAGEMENT  
AREA SAMPLED DURING JANUARY, FEBRUARY, AND MARCH 2011**

Parameter	Unit	Date Sampled		
		01/05/11	02/07/11	03/09/11
pH <sup>1</sup>		7.8	8.1	8.1
EC	mS/m	303	292	291
Total Dissolved Solids	mg/L	2,172	2,238	2,216
Total Dissolved Organic Carbon	"	37	39	37
Cl <sup>-</sup>		208	241	212
SO <sub>4</sub> <sup>=</sup>		441	456	419
TKN	"	33	29	28
NH <sub>3</sub> -N	"	32	31	28
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.17	0.50	0.82
Total P	"	< 0.10	< 0.10	< 0.10
Alkalinity as CaCO <sub>3</sub>	"	1,248	1,225	1,169
Al	"	< 1.0	< 1.0	< 1.0
B	"	4.3	4.4	4.3
Ca	"	317	313	298
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	NRR <sup>2</sup>	15	12
Hg	µg/L	< 0.20	< 0.20	< 0.20
K	mg/L	29	29	27
Mg	"	140	141	136
Mn	"	0.342	0.324	0.296
Na	"	189	197	196
Ni	"	< 0.008	< 0.008	< 0.008
Pb	"	< 0.03	< 0.03	< 0.03
Zn	"	0.03	0.03	< 0.02

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.

<sup>2</sup>No reportable result.

**TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-2 THROUGH  
L-4 AT THE 122<sup>ND</sup> AND STONY ISLAND AVENUE SOLIDS MANAGEMENT  
AREA SAMPLED ON MARCH 9, 2011**

Parameter	Unit	Lysimeter No.		
		L-2	L-3	L-4
pH <sup>1</sup>		8.2	8.0	8.2
EC	mS/m	204	279	233
Total Dissolved Solids	mg/L	1,408	2,424	1,492
Total Dissolved Organic Carbon	"	17	41	23
Cl <sup>-</sup>		324	120	281
SO <sub>4</sub> <sup>=</sup>		77	548	66
TKN	"	3	9	5
NH <sub>3</sub> -N	"	1	7	4
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.32	1.0	0.63
Total P	"	0.19	< 0.10	< 0.10
Alkalinity as CaCO <sub>3</sub>	"	502	< 15	915
Al	"	< 1.0	< 1.0	< 1.0
B	"	0.94	0.46	1.4
Ca	"	111	477	180
Cd	"	0.002	< 0.001	< 0.001
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	13	15	1
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	38	6	21
Mg	"	69.4	155	93.4
Mn	"	0.906	0.413	0.151
Na	"	230	51	203
Ni	"	< 0.008	< 0.008	< 0.008
Pb	"	< 0.03	< 0.03	< 0.03
Zn	"	< 0.02	< 0.02	< 0.02

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.