

*Protecting Our Water Environment*



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

***MONITORING AND RESEARCH  
DEPARTMENT***

***REPORT NO. 12-13***

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

***MONITORING REPORT FOR***

***FOURTH QUARTER 2011***

***FEBRUARY 2012***

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 Department

[thomas.granato@mwrld.org](mailto:thomas.granato@mwrld.org)

February 22, 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 October, November, and December 2011

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for October, November, and December 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 October, November, and December 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 October 12, 2011

No biosolids were placed in or removed from the solids drying area during October, November, and December 2011.

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 122<sup>ND</sup> AND STONY ISLAND AVENUE SOLIDS MANAGEMENT  
AREA SAMPLED DURING OCTOBER, NOVEMBER, AND DECEMBER 2011

Parameter	Unit	Date Sampled		
		10/12/11	11/09/11	12/07/11
pH <sup>1</sup>		7.9	8.0	8.1
EC	mS/m	315	286	307
Total Dissolved Solids	mg/L	2,130	2,212	2,158
Total Dissolved Organic Carbon	"	34	41	33
Cl <sup>-</sup>	"	257	231	228
SO <sub>4</sub> <sup>=</sup>	"	291	255	257
TKN	"	33	37	37
NH <sub>3</sub> -N	"	33	33	32
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.11	0.17	0.10
Total P	"	0.57	0.26	< 0.10
Alkalinity as CaCO <sub>3</sub>	"	1,318	1,337	1,389
Al	"	< 1.0	< 1.0	< 1.0
B	"	5.5	5.6	5.4
Ca	"	314	306	318
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	< 0.2	25	2
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	30	28	28
Mg	"	145	138	142
Mn	"	0.301	0.308	0.355
Na	"	210	202	200
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.

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 OCTOBER 12, 2011

Parameter	Unit	Lysimeter No.		
		L-2	L-3	L-4
pH <sup>1</sup>		8.2	8.0	8.1
EC	mS/m	206	300	255
Total Dissolved Solids	mg/L	1,286	2,490	1,600
Total Dissolved Organic Carbon	"	14	49	26
Cl <sup>-</sup>	"	352	116	222
SO <sub>4</sub> <sup>=</sup>	"	62	438	194
TKN	"	2	14	8
NH <sub>3</sub> -N	"	0.5	11	7
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.07	0.31	0.07
Total P	"	< 0.10	< 0.10	< 0.10
Alkalinity as CaCO <sub>3</sub>	"	494	1,022	1,042
Al	"	< 1.0	< 1.0	< 1.0
B	"	1.1	0.42	1.3
Ca	"	90	499	229
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	< 0.2	2	< 0.2
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	43	7	25
Mg	"	60.0	162	131
Mn	"	0.749	0.407	0.193
Na	"	234	50	183
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.