

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 13-12

122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT

AREA MONITORING REPORT FOR

FIRST QUARTER 2013

MAY 2013

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street

Chicago, Illinois 60611-3154

312.751.5190

BOARD OF COMMISSIONERS

Kathleen Therese Meany

President

Barbara J McGowan

Vice President

Mariyana T. Spyropoulos

Chairman of Finance

Michael A. Alvarez

Frank Avila

Cynthia M. Santos

Debra Shore

Kari K. Steele

Patrick D. Thompson

THOMAS C. GRANATO, Ph.D.

Director of Monitoring and Research

312.751.5190 f: 312.751.5194

thomas.granato@mwr.org

May 24, 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 January, February, and March 2013

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for January, February, and March 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 February and March 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 March 13, 2013

No biosolids were placed in or removed from the solids drying area during January, February, and March 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 FEBRUARY AND MARCH 2013

Parameter	Unit	Date Sampled ¹	
		02/07/13	03/13/13
pH ²		7.4	7.7
EC	mS/m	322	307
Total Dissolved Solids	mg/L	2,322	2,248
Total Dissolved Organic Carbon	"	42	39
Cl ⁻	"	232	209
SO ₄ ⁼	"	201	155
TKN	"	30	31
NH ₃ -N	"	30	31
NO ₂ + NO ₃ -N	"	0.54	< 0.15
Total P	"	< 0.20	< 0.20
Alkalinity as CaCO ₃	"	1,364	1,490
Al	"	< 1.0	< 1.0
B	"	11	13
Ca	"	365	325
Cd	"	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005
Cu	"	0.025	< 0.005
Fe	"	30	29
Hg	μg/L	< 0.20	< 0.20
K	mg/L	32	38
Mg	"	163	151
Mn	"	0.313	0.363
Na	"	188	223
Ni	"	< 0.005	< 0.005
Pb	"	< 0.02	< 0.02
Zn	"	0.04	< 0.01

¹No sample collected in January; lysimeter inaccessible.

²pH 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 13, 2013

Parameter	Unit	Lysimeter No.		
		L-2	L-3	L-4
pH ¹		7.7	7.7	8.0
EC	mS/m	253	278	194
Total Dissolved Solids	mg/L	1,560	2,490	1,238
Total Dissolved Organic Carbon	"	25	40	18
Cl ⁻	"	566	86	271
SO ₄ ⁼	"	15	543	23
TKN	"	2	11	5
NH ₃ -N	"	0.9	8	5
NO ₂ + NO ₃ -N	"	0.30	< 0.15	< 0.15
Total P	"	0.70	< 0.20	< 0.20
Alkalinity as CaCO ₃	"	90	1,234	708
Al	"	< 1.0	< 1.0	< 1.0
B	"	1.6	1.0	2.0
Ca	"	103	458	129
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	15	29	3
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	65	8	29
Mg	"	71	170	75
Mn	"	0.887	0.390	0.115
Na	"	292	69	219
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.