

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 11-64

***122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA
MONITORING REPORT FOR
THIRD QUARTER 2011***

NOVEMBER 2011

Protecting Our Water Environment

Board of Commissioners

Terrence J. O'Brien
President
Kathleen Therese Meany
Vice President
Gloria Alitto Majewski
Chairman of Finance
Frank Avila
Patricia Horton
Barbara J. McGowan
Cynthia M. Santos
Debra Shore
Mariyana T. Spyropoulos

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@mwr.org

November 30, 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 July, August, and September 2011

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for July, August, and September 2011 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 July, August, and September 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 July 13, 2011

No biosolids were placed in or removed from the solids drying area during July, August, and September 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 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT
AREA SAMPLED DURING JULY, AUGUST, AND SEPTEMBER 2011

Parameter	Unit	Date Sampled		
		07/13/11	08/03/11	09/14/11
pH ¹		7.7	7.7	7.9
EC	mS/m	299	299	292
Total Dissolved Solids	mg/L	2,190	2,308	2,176
Total Dissolved Organic Carbon	"	34	37	33
Cl ⁻	"	41	203	222
SO ₄ ⁼	"	376	367	351
TKN	"	29	32	36
NH ₃ -N	"	28	30	33
NO ₂ + NO ₃ -N	"	0.06	0.10	0.12
Total P	"	< 0.10	0.14	< 0.10
Alkalinity as CaCO ₃	"	246	1,210	1,234
Al	"	< 1.0	< 1.0	< 1.0
B	"	4.1	4.1	5.1
Ca	"	304	306	310
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	0.4	1	0.4
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	27	27	30
Mg	"	126	130	140
Mn	"	0.323	0.320	0.314
Na	"	207	188	203
Ni	"	< 0.008	< 0.008	< 0.008
Pb	"	< 0.03	< 0.03	< 0.03
Zn	"	< 0.02	< 0.02	< 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 JULY 13, 2011

Parameter	Unit	Lysimeter No.		
		L-2	L-3	L-4
pH ¹		8.0	7.8	7.9
EC	mS/m	226	296	249
Total Dissolved Solids	mg/L	1,584	2,880	1,698
Total Dissolved Organic Carbon	"	15	44	25
Cl ⁻	"	423	98	234
SO ₄ ⁼	"	142	532	151
TKN	"	2	10	8
NH ₃ -N	"	0.8	8	7
NO ₂ + NO ₃ -N	"	0.12	0.36	< 0.04
Total P	"	0.11	< 0.10	< 0.10
Alkalinity as CaCO ₃	"	426	1,337	985
Al	"	< 1.0	< 1.0	< 1.0
B	"	0.79	0.42	1.4
Ca	"	108	478	188
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	0.5	4	0.3
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	39	6	27
Mg	"	68.5	156	116
Mn	"	0.848	0.494	0.179
Na	"	241	51	190
Ni	"	< 0.008	< 0.008	0.009
Pb	"	< 0.03	< 0.03	< 0.03
Zn	"	< 0.02	< 0.02	< 0.02

¹pH analyzed beyond recommended holding time of 15 minutes.