

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 10-49

122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

SECOND QUARTER 2010

AUGUST 2010

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

Louis Kollias, P.E., BCEE

Director of Monitoring and Research

louis.kollias@mwr.org

August 20, 2010

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. 2005-AO-4283-2, Monitoring Report for April, May, and June 2010

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for April, May, and June 2010 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2005-AO-4283-2.

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 April, May, and June, 2010

Table 2, Analysis of Water from Lysimeters L-2 through L-4 at the 122nd and Stony Island Avenue Solids Management Area Sampled on April 14, 2010

No biosolids were placed in or removed from the solids drying area during April, May, and June 2010.

Very truly yours,

Louis Kollias
Director
Monitoring and Research

LK: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 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT
AREA SAMPLED DURING APRIL, MAY, AND JUNE 2010

Parameter	Unit	Date Sampled		
		04/14/10	05/05/10	06/02/10
pH ¹		8.1	8.1	8.0
EC	mS/m	275	NA ²	286
Total Dissolved Solids	mg/L	1,940	1,932	1,910
Total Dissolved Organic Carbon	"	35	38	34
Cl ⁻	"	203	199	200
SO ₄ ⁼	"	159	166	162
TKN	"	26	25	24
NH ₃ -N	"	25	24	23
NO ₂ + NO ₃ -N	"	0.06	0.17	0.11
Total P	"	< 0.10	0.15	< 0.10
Alkalinity as CaCO ₃	"	1,169	1,032	1,022
Al	"	0.102	0.069	0.075
B	"	3.8	4.0	4.0
Ca	"	252	264	261
Cd	"	< 0.003	< 0.003	< 0.003
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.008	< 0.008	< 0.008
Fe	"	2.76	0.253	0.314
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	23	24	23
Mg	"	120	125	121
Mn	"	0.302	0.311	0.312
Na	"	188	202	204
Ni	"	< 0.004	< 0.004	< 0.004
Pb	"	< 0.020	< 0.020	< 0.020
Zn	"	< 0.015	< 0.015	< 0.015

¹pH analyzed beyond recommended holding time of 15 minutes.

²No analysis.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-2 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON APRIL 14, 2010

Parameter	Unit	Lysimeter No.		
		L-2	L-3	L-4
pH ¹		8.3	7.9	8.2
EC	mS/m	201	282	220
Total Dissolved Solids	mg/L	1,300	2,636	1,444
Total Dissolved Organic Carbon	"	16	42	21
Cl ⁻	"	338	96	259
SO ₄ ⁼	"	123	557	58
TKN	"	2	10	6
NH ₃ -N	"	0.4	8	6
NO ₂ + NO ₃ -N	"	0.17	0.19	0.05
Total P	"	0.11	< 0.10	0.19
Alkalinity as CaCO ₃	"	429	1,151	771
Al	"	0.053	0.288	0.092
B	"	0.71	0.35	1.5
Ca	"	103	501	156
Cd	"	< 0.003	< 0.003	< 0.003
Cr	"	< 0.003	< 0.003	< 0.003
Cu	"	< 0.008	< 0.008	< 0.008
Fe	"	5.70	19.5	7.30
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	30	5	19
Mg	"	62.4	155	76.8
Mn	"	0.844	0.427	0.133
Na	"	190	47	202
Ni	"	< 0.004	< 0.004	< 0.004
Pb	"	< 0.020	< 0.020	< 0.020
Zn	"	< 0.015	< 0.015	< 0.015

¹pH analyzed beyond recommended holding time of 15 minutes.