MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 12-55

122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA MONITORING REPORT FOR THIRD QUARTER 2012

DECEMBER 2012

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
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

Thomas C. Granato, Ph.D.
Director of Monitoring and Research Department
thomas.granato@mwrd.org

December 21, 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 July, August, and September 2012

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for July, August, and September 2012 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 July, August, and September 2012

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 18, 2012

No biosolids were placed in or removed from the solids drying area during July, August, and September 2012.

Very truly yours,

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

TCG:PL:cm
Attachments
cc w/att: Mr. J. Patel, IEPA
Region 2 – Des Plaines
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 2012

Parameter	Unit	Date Sampled		
		07/18/12	08/01/12	09/05/12
pH[1]		7.9	7.8	7.8
EC	mS/m	302	311	308
Total Dissolved Solids	mg/L	2,354	2,176	2,250
Total Dissolved Organic Carbon	"	35	35	36
Cl^-	"	214	193	230
$SO_4^=$	"	237	185	215
TKN	"	34	37	33
NH_3-N	"	32	33	33
$NO_2 + NO_3$-N	"	< 0.15	< 0.15	< 0.15
Total P	"	< 0.10	< 0.10	< 0.10
Alkalinity as $CaCO_3$	"	1,411	1,359	1,484
Al	"	< 1.0	< 1.0	< 1.0
B	"	5.4	6.3	7.5
Ca	"	293	295	309
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	0.2	13	11
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	29	30	29
Mg	"	135	139	142
Mn	"	0.279	0.284	0.291
Na	"	218	230	216
Ni	"	< 0.005	< 0.005	< 0.005
Pb	"	< 0.02	< 0.02	< 0.02
Zn	"	< 0.01	< 0.01	< 0.01

[1] pH 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 18, 2012

Parameter	Unit	Lysimeter No. L-2	L-3	L-4
pH[1]		8.0	7.9	8.1
EC	mS/m	168	284	245
Total Dissolved Solids	mg/L	1,076	2,518	1,790
Total Dissolved Organic Carbon	"	13	40	25
Cl^-	"	303	93	235
$SO_4^=$	"	55	503	184
TKN	"	2	11	7
NH_3-N	"	0.5	8	6
$NO_2 + NO_3$-N	"	< 0.15	< 0.15	0.34
Total P	"	< 0.10	< 0.10	< 0.10
Alkalinity as $CaCO_3$	"	410	1,274	1,092
Al	"	< 1.0	< 1.0	< 1.0
B	"	0.69	0.40	1.2
Ca	"	80	469	217
Cd	"	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005	< 0.005
Fe	"	0.2	3	0.2
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	38	6	23
Mg	"	53	155	128
Mn	"	0.758	0.522	0.206
Na	"	182	50	172
Ni	"	0.030	0.022	0.010
Pb	"	< 0.02	< 0.02	< 0.02
Zn	"	0.03	0.03	< 0.01

[1] pH analyzed beyond recommended holding time of 15 minutes.