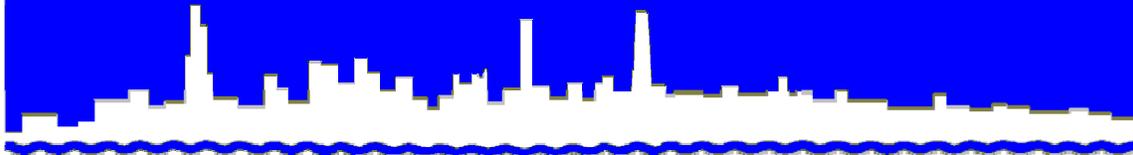


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 10-26

122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FIRST QUARTER 2010

MAY 2010

Protecting Our Water Environment

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Louis Kollias, P.E., BCEE

Director of Monitoring and Research

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May 27, 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 January, February, and March 2010

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for January, February, and March 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 Lysimeters L-1 at the 122nd and Stony Island Avenue Solids Management Area Sampled in January, February, and March 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 March 10, 2010

A supplemental permit was issued by the IEPA on July 30, 2009, to modify the monitoring schedule for lysimeters at the Stony Island site to once per quarter, except for L-1, which is monitored once per month.

Mr. S. Alan Keller

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May 27, 2010

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 January, February, and March 2010

No biosolids were placed in or removed from the solids drying area during this quarter.

Very truly yours,

Louis Kollias
Director
Monitoring and Research

LK:PL:kq

Attachments

cc w/att: Mr. Sulski, IEPA
Records Unit, IEPA
O'Connor/Cox/Lindo

TABLE 1: ANALYSIS OF WATER FROM LYSIMETER L-1 AT THE 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA SAMPLED IN JANUARY, FEBRUARY, AND MARCH 2010

Parameter	Unit	Sample Date		
		Jan. 20, 2010	Feb. 8, 2010	March 10, 2010
pH ¹		8.1	8.1	8.0
EC	mS/m	243	284	288
Total Dissolved Solids	mg/L	1,882	1,870	1,950
Total Diss. Org. Carbon	“	34	37	35
Cl ⁻	“	204	200	205
SO ₄ ⁼	“	162	170	170
TKN	“	33	27	29
NH ₃ -N	“	27	27	26
NO ₂ +NO ₃ -N	“	0.40	0.85	0.56
Total P	“	<0.1	<0.1	<0.1
Alkalinity as CaCO ₃	“	1,206	1,175	1,127
Al	“	0.070	0.074	0.056
B	“	3.9	3.7	3.7
Ca	“	265	269	248
Cd	“	<0.002	<0.002	<0.002
Cr	“	<0.003	<0.003	<0.003
Cu	“	<0.01	<0.01	<0.01
Fe	“	0.19	0.16	2.2
Hg	µg/L	<0.20	<0.20	<0.20
K	mg/L	27	26	25
Mg	“	130	126	123
Mn	“	0.279	0.264	0.272
Na	“	201	196	190
Ni	“	<0.002	<0.002	<0.002
Pb	“	0.02	<0.02	<0.02
Zn	“	0.02	<0.01	0.01

¹Samples 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 10, 2010

Parameter	Unit	Lysimeter No.		
		L-2	L-3	L-4
pH ¹		7.9	7.7	8.0
EC	mS/m	186	221	197
Total Dissolved Solids	mg/L	1,248	2,620	1,360
Total Diss. Org. Carbon	"	16	42	17
Cl ⁻	"	297	109	294
SO ₄ ⁼	"	56	641	25
TKN	"	3	10	6
NH ₃ -N	"	1	7	5
NO ₂ +NO ₃ -N	"	0.04	0.04	<0.04
Total P	"	1	0.1	<0.1
Alkalinity as CaCO ₃	"	524	1,311	708
Al	"	0.036	0.112	0.049
B	"	1.0	0.41	1.4
Ca	"	101	476	135
Cd	"	<0.002	<0.002	<0.002
Cr	"	<0.003	<0.003	<0.003
Cu	"	<0.01	<0.01	<0.01
Fe	"	1.2	3.7	0.57
Hg	µg/L	<0.20	<0.20	<0.20
K	mg/L	33	6	16
Mg	"	59	152	65
Mn	"	0.876	0.512	0.126
Na	"	183	49	191
Ni	"	0.003	<0.002	<0.002
Pb	"	<0.02	<0.02	<0.02
Zn	"	<0.01	<0.01	<0.01

¹Samples analyzed beyond recommended holding time of 15 minutes.