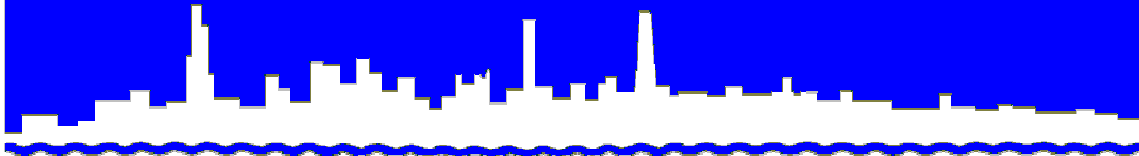


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 10-13

122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FOURTH QUARTER 2009

FEBRUARY 2010

Protecting Our Water Environment

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Louis Kollias, P.E., BCEE

Director of Monitoring and Research

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February 26, 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 October, November, and December 2009

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for October, November, and December 2009 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 October, November, and December 2009

Table 2, Analysis of Water from Lysimeters L-1 through L-4 at the 122nd and Stony Island Avenue Solids Management Area Sampled on October 14, 2009

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 L-1, which will be monitored once per month.

Mr. S. Alan Keller

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February 26, 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 October,
November, and December 2009

No biosolids were placed in or removed from the solids drying area during October,
November, and December 2009.

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/Cox/Lindo

TABLE 1: ANALYSIS OF WATER FROM LYSIMETER L-1 AT THE 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA SAMPLED IN OCTOBER, NOVEMBER, AND DECEMBER 2009

Parameter	Unit	Sample Date		
		Oct. 14, 2009	Nov. 4, 2009	Dec. 2, 2009
pH ¹		7.8	7.6	7.6
EC	mS/m	224	292	309
Total Dissolved Solids	mg/L	2,036	2,190	2,116
Total Diss. Org. Carbon	"	37	41	23
Cl ⁻	"	232	235	218
SO ₄ ⁼	"	201	225	204
TKN	"	33	31	32
NH ₃ -N	"	28	31	30
NO ₂ +NO ₃ -N	"	0.04	0.18	0.23
Total P	"	0.4	<0.1	<0.1
Alkalinity ²	"	1,334	1,384	1,291
Al	"	0.076	0.106	0.045
B	"	3.7	3.7	3.8
Ca	"	255	273	275
Cd	"	<0.002	<0.002	<0.002
Cr	"	<0.003	<0.003	<0.003
Cu	"	<0.01	<0.01	<0.01
Fe	"	0.45	16	17
Hg	µg/L	<0.20	<0.20	<0.20
K	mg/L	27	26	26
Mg	"	125	129	127
Mn	"	0.281	0.326	0.341
Na	"	197	197	192
Ni	"	<0.002	<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.

²As CaCO₃.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-2 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA SAMPLED ON OCTOBER 14, 2009

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 ²	"	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.

²As CaCO₃.