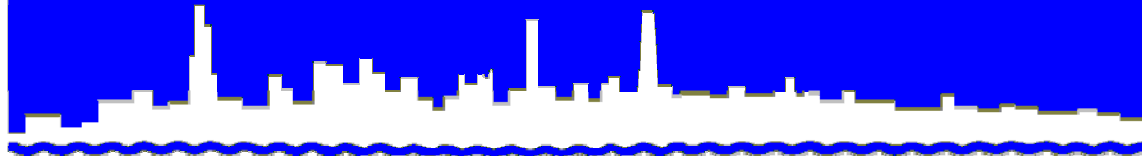


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***RESEARCH AND DEVELOPMENT
DEPARTMENT***

REPORT NO. 08-49

122ND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

SECOND QUARTER 2008

AUGUST 2008

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Louis Kollias, P.E., BCEE

August 29, 2008

Director of Research and Development

312-751-5190

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
WRP, IEPA Permit No. 2005-AO-4283, Monitoring Report for April,
May, and June 2008

The attached three tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for April, May, and June 2008 as required by IEPA Operating Permit No. 2005-AO-4283.

The data reported are as follows:

Table 1, Analysis of Water from Lysimeters L-1 through L-4 at the 122nd and Stony Island Avenue Solids Management Area Sampled on April 2, 2008

Table 2, Analysis of Water from Lysimeters L-1 through L-4 at the 122nd and Stony Island Avenue Solids Management Area Sampled on May 14, 2008

Table 3, Analysis of Water from Lysimeters L-1 through L-4 at the 122nd and Stony Island Avenue Solids Management Area Sampled on June 11, 2008

Mr. S. Alan Keller

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August 29, 2008

Subject: 122nd and Stony Island Avenue Solids Management Area - Stickney
WRP, IEPA Permit No. 2005-AO-4283, Monitoring Report for April,
May, and June 2008

No biosolids were placed in or removed from the solids drying area during April, May,
and June 2008.

Very truly yours,

Louis Kollias
Director
Research and Development

LK:PL:kq

Attachments

cc w/att: Mr. Sulski, IEPA
Records Unit, IEPA
Stuba/Granato/Cox/Lindo/M. Patel
cc wo/att: Jamjun/Sharma/Garelli

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS
L-1 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE
SOLIDS MANAGEMENT AREA SAMPLED ON APRIL 2, 2008

Parameter	Unit	Lysimeter No.			
		L-1	L-2	L-3	L-4
pH ¹		7.8	7.6	7.6	7.8
EC	mS/m	277	175	309	179
Total Dissolved Solids	mg/L	2,076	1,476	2,592	1,268
Total Diss. Org. Carbon	"	36	14	43	18
Cl ⁻	"	228	398	103	310
SO ₄ ⁼	"	302	261	652	18
TKN	"	32	1.6	10	4.9
NH ₃ -N	"	30	0.36	6.3	3.0
NO ₂ + NO ₃ -N	"	0.45	0.23	0.22	0.15
Total P	"	<0.05	0.10	<0.05	<0.05
Alkalinity as CaCO ₃	"	1,187	386	1,307	697
Al	"	0.048	0.024	0.071	0.027
B	"	3.94	0.718	0.365	1.46
Ca	"	265	122	504	124
Cd	"	<0.0004	0.0021	<0.0004	<0.0004
Cr	"	0.0013	0.0013	0.0013	0.0014
Cu	"	<0.002	<0.002	<0.002	<0.002
Fe	"	8.15	10.5	14.2	1.32
Hg	μg/L	<0.25 ^a	<0.25 ^a	<0.25 ^a	<0.25 ^a
K	mg/L	27	31	6	20
Mg	"	130	63.3	156	69.7
Mn	"	0.3645	0.9445	0.4705	0.1506
Na	"	168	237	46	211
Ni	"	<0.0004	0.0027	0.0006	0.0020
Pb	"	<0.004	<0.004	<0.004	<0.004
Zn	"	0.005	0.007	0.004	0.003

¹pH analyzed beyond recommended holding time of 15 minutes.

^aLimit of quantitation (LOQ) instead of MDL was used as reporting limit.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS
L-1 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE
SOLIDS MANAGEMENT AREA SAMPLED ON MAY 14, 2008

Parameter	Unit	Lysimeter No.			
		L-1	L-2	L-3	L-4
pH ¹		7.4	7.6	7.3	7.7
EC	mS/m	232	177	217	158
Total Dissolved Solids	mg/L	2,008	1,548	2,692	1,344
Total Diss. Org. Carbon	"	36	13	39	19
Cl ⁻	"	240	385	105	310
SO ₄ ⁼	"	270	298	687	28
TKN	"	31	2.4	9.6	5.9
NH ₃ -N	"	28	1.1	5.5	4.1
NO ₂ + NO ₃ -N	"	0.41	0.08	0.12	0.05
Total P	"	<0.05	<0.05	<0.05	0.10
Alkalinity as CaCO ₃	"	1,239	380	1,283	726
Al	"	0.050	0.040	0.076	0.029
B	"	3.88	0.781	0.377	1.64
Ca	"	286	139	552	134
Cd	"	<0.0004	0.0012	0.0009	0.0008
Cr	"	<0.0005	<0.0005	<0.0005	0.0005
Cu	"	<0.002	<0.002	<0.002	<0.002
Fe	"	0.245	0.952	2.41	0.275
Hg	μg/L	<0.25 ^a	<0.25 ^a	<0.25 ^a	<0.25 ^a
K	mg/L	26	32	6	24
Mg	"	138	71.1	174	80.7
Mn	"	0.3403	0.9767	0.5810	0.1568
Na	"	169	246	54	247
Ni	"	0.0005	0.0023	0.0010	0.0026
Pb	"	<0.004	<0.004	<0.004	0.004
Zn	"	0.004	0.003	0.004	0.003

¹pH analyzed beyond recommended holding time of 15 minutes.

^aLimit of quantitation (LOQ) instead of MDL was used as reporting limit.

TABLE 3: ANALYSIS OF WATER FROM LYSIMETERS
L-1 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE
SOLIDS MANAGEMENT AREA SAMPLED ON JUNE 11, 2008

Parameter	Unit	Lysimeter No.			
		L-1	L-2	L-3	L-4
pH ¹		7.5	7.5	7.2	7.5
EC	mS/m	316	198	314	221
Total Dissolved Solids	mg/L	1,580	2,092	1,612	1,336
Total Diss. Org. Carbon	"	40	13	32	19
Cl ⁻	"	236	374	100	297
SO ₄ ⁼	"	273	306	705	19
TKN	"	32	2.2	9.4	6.2
NH ₃ -N	"	29	0.86	5.6	4.4
NO ₂ + NO ₃ -N	"	0.30	0.11	0.18	0.03
Total P	"	<0.05	<0.05	<0.05	<0.05
Alkalinity as CaCO ₃	"	1,208	369	1,241	713
Al	"	0.069	0.036	0.090	0.035
B	"	4.36	0.812	0.436	1.60
Ca	"	280	135	529	122
Cd	"	0.0004	0.0011	0.0005	0.0006
Cr	"	<0.0005	<0.0005	<0.0005	<0.0005
Cu	"	<0.002	<0.002	<0.002	<0.002
Fe	"	0.964	0.951	6.49	0.617
Hg	μg/L	<0.25 ^a	<0.25 ^a	<0.25 ^a	<0.25 ^a
K	mg/L	27	32	6	24
Mg	"	142	70.3	170	74.5
Mn	"	0.3323	1.019	0.5622	0.1449
Na	"	173	240	52	226
Ni	"	0.0006	0.0018	0.0004	0.0021
Pb	"	<0.004	0.005	<0.004	0.005
Zn	"	0.005	0.002	0.004	0.002

¹pH analyzed beyond recommended holding time of 15 minutes.

^aLimit of quantitation (LOQ) instead of MDL was used as reporting limit.