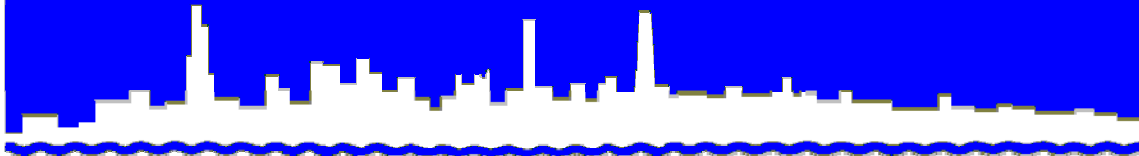


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 09-07

122ND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

THIRD QUARTER 2008

JANUARY 2009

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Louis Kollias, P.E., BCEE
Director of Research and Development

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January 9, 2009

Mr. S. Allan 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, IEPA Permit No. 2005-AO-4283, Monitoring Report for July, August, and September 2008

The attached three tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area (SMA) for July, August, and September 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 SMA Sampled on July 9, 2008

Table 2, Analysis of Water from Lysimeters L-1 through L-4 at the 122nd and Stony Island Avenue SMA Sampled on August 6, 2008

Table 3, Analysis of Water from Lysimeters L-1 through L-4 at the 122nd and Stony Island Avenue SMA Sampled on September 3, 2008

Mr. S. Alan Keller

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January 9, 2009

Subject: 122nd and Stony Island Avenue Solids Management Area – Stickney
Water Reclamation Plant, IEPA Permit No. 2005-AO-4283, Monitoring
Report for July, August, and September 2008

No biosolids were placed in or removed from the solids drying area during July,
August, and September 2008.

Very truly yours,

Louis Kollias
Director
Monitoring and Research

LK:PL:kq

Attachments

cc: Mr. R. Sulski, IEPA

Records Unit, IEPA

Stuba/Granato/Cox/Lindo/M. Patel

TABLE 1: ANALYSIS¹ OF WATER FROM LYSIMETERS
L-1 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE
SOLIDS MANAGEMENT AREA SAMPLED ON JULY 9, 2008

Parameter	Unit	Lysimeter No.			
		L-1	L-2	L-3	L-4
pH ²		7.6	7.6	7.8	7.9
EC	mS/m	311	215	286	214
Total Dissolved Solids	mg/L	2,056	1,552	2,820	1,332
Total Diss. Org. Carbon	"	38	13	40	19
Cl ⁻	"	209	332	97	266
SO ₄ ⁼	"	301	277	680	28
TKN	"	36	3	11	7
NH ₃ -N	"	30	1	6	4
NO ₂ + NO ₃ -N	"	<0.1	<0.1	3	<0.1
Total P	"	<0.25	<0.25	<0.25	<0.25
Alkalinity as CaCO ₃	"	1,079	347	1,079	658
Al	"	0.082	<0.035	0.082	<0.035
B	"	4.5	0.84	0.43	1.5
Ca	"	286	131	505	139
Cd	"	<0.002	<0.002	<0.002	<0.002
Cr	"	<0.0025	<0.0025	<0.0025	<0.0025
Cu	"	<0.01	<0.01	<0.01	<0.01
Fe	"	0.89	3.4	3.6	1.1
Hg	μg/L	<0.25	<0.25	<0.25	<0.25
K	mg/L	28	31	6	21
Mg	"	143	68	164	76
Mn	"	0.337	1.08	0.616	0.155
Na	"	179	228	54	216
Ni	"	<0.002	<0.002	<0.002	<0.002
Pb	"	<0.02	<0.02	<0.02	<0.02
Zn	"	<0.01	<0.01	<0.01	<0.01

¹Limit of quantitation (LOQ) instead of MDL was used as reporting limit.

²pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS¹ OF WATER FROM LYSIMETERS
L-1 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE
SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 6, 2008

Parameter	Unit	Lysimeter No.			
		L-1	L-2	L-3	L-4
pH ²		7.3	7.4	7.1	7.6
EC	mS/m	238	180	247	167
Total Dissolved Solids	mg/L	2,084	1,472	2,848	1,260
Total Diss. Org. Carbon	"	39	13	38	20
Cl ⁻	"	198	340	92	279
SO ₄ ⁼	"	336	264	695	18
TKN	"	33	2	10	6
NH ₃ -N	"	31	0.5	6	4
NO ₂ + NO ₃ -N	"	0.2	0.4	0.2	<0.1
Total P	"	<0.25	<0.25	<0.25	<0.25
Alkalinity as CaCO ₃	"	1,066	356	1,192	628
Al	"	<0.035	<0.035	<0.035	<0.035
B	"	3.9	0.70	0.25	1.2
Ca	"	262	127	520	133
Cd	"	<0.002	<0.002	<0.002	<0.002
Cr	"	<0.0025	<0.0025	<0.0025	<0.0025
Cu	"	<0.01	<0.01	<0.01	<0.01
Fe	"	4.6	9.1	29	4.3
Hg	μg/L	<0.25	<0.25	<0.25	<0.25
K	mg/L	27	32	5	16
Mg	"	131	64	162	67
Mn	"	0.332	1.12	0.491	0.122
Na	"	185	225	47	204
Ni	"	<0.002	<0.002	<0.002	<0.002
Pb	"	<0.02	<0.02	<0.02	<0.02
Zn	"	<0.01	<0.01	<0.01	<0.01

¹Limit of quantitation (LOQ) instead of MDL was used as reporting limit.

²pH analyzed beyond recommended holding time of 15 minutes.

TABLE 3: ANALYSIS¹ OF WATER FROM LYSIMETERS
L-1 THROUGH L-4 AT THE 122ND AND STONY ISLAND AVENUE
SOLIDS MANAGEMENT AREA SAMPLED ON SEPTEMBER 3, 2008

Parameter	Unit	Lysimeter No.			
		L-1	L-2	L-3	L-4
pH ²		7.4	7.4	7.1	7.5
EC	mS/m	303	229	314	161
Total Dissolved Solids	mg/L	2,104	1,520	3,156	1,292
Total Diss. Org. Carbon	"	33	10	34	16
Cl ⁻	"	193	333	93	273
SO ₄ ⁼	"	324	205	663	24
TKN	"	33	2	9	7
NH ₃ -N	"	32	0.8	6	4
NO ₂ + NO ₃ -N	"	0.2	<0.1	0.6	<0.1
Total P	"	<0.25	<0.25	<0.25	<0.25
Alkalinity as CaCO ₃	"	1,091	391	1,145	622
Al	"	<0.035	<0.035	0.040	<0.035
B	"	4.3	0.96	0.40	1.4
Ca	"	267	127	514	137
Cd	"	<0.002	<0.002	<0.002	<0.002
Cr	"	<0.0025	<0.0025	<0.0025	<0.0025
Cu	"	<0.01	<0.01	<0.01	<0.01
Fe	"	0.15	1.9	5.6	0.38
Hg	μg/L	<0.20	<0.20	<0.20	<0.20
K	mg/L	28	33	6	16
Mg	"	135	66	162	67
Mn	"	0.303	0.958	0.548	0.124
Na	"	190	221	50	195
Ni	"	<0.002	<0.002	<0.002	<0.002
Pb	"	<0.02	<0.02	<0.02	<0.02
Zn	"	<0.01	<0.01	<0.01	<0.01

¹Limit of quantitation (LOQ) instead of MDL was used as reporting limit.

²pH analyzed beyond recommended holding time of 15 minutes.