

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 13-3

122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT

AREA MONITORING REPORT FOR

FOURTH QUARTER 2012

March 2013

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago100 East Erie StreetChicago, Illinois 60611-3154312.751.5190

March 8, 2013

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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 October, November, and December 2012

The attached two tables contain the monitoring data for the 122nd and Stony Island Avenue Solids Management Area for October, November, and December 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 AvenueSolids Management Area Sampled During October, November, and December2012
- Table 2, Analysis of Water from Lysimeters L-2 Through L-4 at the 122nd and StonyIsland Avenue Solids Management Area Sampled on November 14, 2012

No biosolids were placed in or removed from the solids drying area during October, November, and December 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 BOARD OF COMMISSIONERS Kathleen Therese Meany President Barbara J McGowan Vice President Mariyana T. Spyropoulos Chairman of Finance Michael A. Alvarez Frank Avila Cynthia M. Santos Debra Shore Kari K. Steele Patrick D. Thompson

TABLE 1: ANALYSIS OF WATER FROM LYSIMETER L-1 AT THE 122ND AND STONY ISLAND AVENUE SOLIDS MANAGEMENT AREA SAMPLED DURING OCTOBER, NOVEMBER, AND DECEMBER 2012

		Date Sampled		
Parameter	Unit	10/03/12	11/14/12	12/12/12
pH ¹				7.7
EC	mS/m	j	ĺ	322
Total Dissolved Solids	mg/L		Í	2,362
Total Dissolved Organic Carbon	"	.		37
Cl-	,,		,	265
$SO_4^{=}$	"	L	L	298
*		Y	Y	
TKN	"	S	S	34
NH ₃ -N	"	Ι	Ι	31
$NO_2 + NO_3 - N$	"	Μ	М	0.18
Total P	"	Е	Е	< 0.10
Alkalinity as CaCO ₃	3 3	Т	Т	1,072
		Ε	Е	
Al	"	R	R	< 1.0
В	"			9.4
Ca	23	М	Μ	352
Cd	"	А	А	< 0.001
Cr	23	L	L	< 0.005
		F	F	
Cu	"	U	U	0.007
Fe	"	Ν	Ν	0.7
Hg	μ g/L	С	С	< 0.20
К	mg/L	Т	Т	27
Mg	"	Ι	I	142
		Ō	0	
Mn	"	N	N	0.346
Na	**		_ •	199
Ni	"	1	1	< 0.005
Pb	**			< 0.02
Zn	**			0.05
		I	I -	0.00

¹pH 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 NOVEMBER 14, 2012

			Lysimeter No.		
Parameter	Unit	L-2	L-3	L-4	
pH ¹			7.8	8.3	
EC	mS/m	ĺ	273	204	
Total Dissolved Solids	mg/L		2,556	1,388	
Total Dissolved Organic Carbon	,,	ĺ	49	20	
Cl-	33		102	310	
$SO_4^{=}$	"	L	474	57	
		Y			
TKN	"	S	11	6	
NH ₃ -N	"	Ι	9	6	
$NO_2 + NO_3 - N$,,	Μ	< 0.15	< 0.15	
Total P	,,	E	< 0.10	< 0.10	
Alkalinity as CaCO ₃	,,	Т	1,028	599	
		E			
Al	"	R	< 1.0	< 1.0	
В	"		0.43	1.4	
Ca	**	Μ	481	149	
Cd	,,	Α	< 0.001	< 0.001	
Cr	**	L	< 0.005	< 0.005	
		F			
Cu	"	U	< 0.005	< 0.005	
Fe	**	Ν	25	3	
Hg	μ g/L	С	< 0.20	< 0.20	
K	mg/L	Т	6	21	
Mg	,,	Ι	151	82	
0		0			
Mn	**	Ν	0.383	0.127	
Na	,,		49	192	
Ni	"	1	0.006	< 0.005	
Pb	**	i	< 0.02	< 0.02	
Zn	"		0.02	< 0.01	
		I			

¹pH analyzed beyond recommended holding time of 15 minutes.