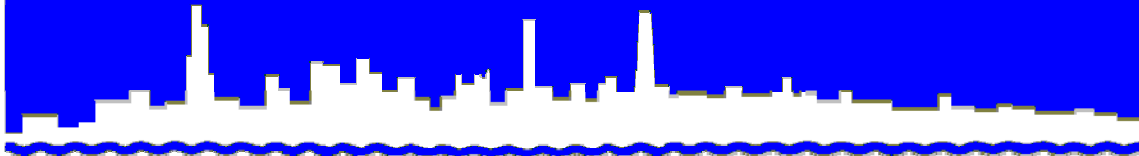


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***RESEARCH AND DEVELOPMENT
DEPARTMENT***

REPORT NO. 07-33

CALUMET WEST SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FIRST QUARTER 2007

MAY 2007

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312-751-5600

Louis Kollias, P.E., BCEE
Director of Research and Development
312-751-5190

May 24, 2007

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: Calumet West Solids Management Area - Stickney WRP, Contract No. 84-270-2P, C175399, IEPA Permit No. 2005-AO-4281-1 Monitoring Report for January, February, and March 2007

The attached two tables contain the monitoring data for the Calumet West Solids Management Area for January, February, and March 2007 as required by IEPA Operating Permit No. 2005-AO-4281-1. During the week of March 5, 2007, all lysimeters were frozen and could not be sampled.

The data reported are as follows:

Table 1, Analysis of Water from Lysimeters L-1 through L-3 at the Calumet West Solids Management Area Sampled on January 10, 2007

Table 2, Analysis of Water from Lysimeters L-1 through L-3 at the Calumet West Solids Management Area Sampled on February 21, 2007

Mr. S. Alan Keller

2

May 24, 2007

Subject: Calumet West Solids Management Area - Stickney WRP, Contract No. 84-270-2P, C175399, IEPA Permit No. 2005-AO-4281-1, Monitoring Report for January, February, and March 2007

No biosolids were placed in or removed from the solids drying area during January, February, and March 2007.

Very truly yours,

Louis Kollias
Director
Research and Development

LK:PL:spy

Attachments

cc w/att: Mr. Sulski, IEPA
Records Unit, IEPA
Mr. W. Stuba
Dr. T. Granato
Dr. A. Cox
Dr. P. Lindo
Ms. M. Patel

cc wo/att: Ms. M. Sharma
Mr. S. Levy
Mr. O. Jamjun
Mr. A. Quintanilla
Mr. A. Ryzak

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS
L-1 THROUGH L-3 AT THE CALUMET WEST
SOLIDS MANAGEMENT AREA SAMPLED ON JANUARY 10, 2007

Parameter	Unit	Lysimeter No.		
		L-1	L-2	L-3
pH ¹		7.6		7.6
EC	mS/m	263		333
Total Dissolved Solids	mg/L	2,938		3,492
Total Diss. Org. Carbon	"	2		2
Cl ⁻	"	100		26
SO ₄ ⁼	"	1,580		1,959
			L	
TKN	"	0.89	Y	0.61
NH ₃ -N	"	0.03	S	0.24
NO ₂ + NO ₃ -N	"	0.21	I	0.24
Total P	"	<0.05	M	<0.05
Alkalinity as CaCO ₃	"	155	E	149
			T	
Al	"	0.050	E	0.048
Ca	"	331	R	380
Cd	"	<0.0004		<0.0004
Cr	"	<0.0005	F	<0.0005
Cu	"	<0.002	R	<0.002
			O	
Fe	"	0.780	Z	0.275
Hg	μg/L	0.06	E	0.06
K	mg/L	7	N	6
Mg	"	148		193
Mn	"	0.1897		0.3254
Na	"	204		190
Ni	"	<0.0004		<0.0004
Pb	"	<0.004		<0.004
Zn	"	0.006		0.007

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS
L-1 THROUGH L-3 AT THE CALUMET WEST
SOLIDS MANAGEMENT AREA SAMPLED ON FEBRUARY 21, 2007

Parameter	Unit	Lysimeter No.		
		L-1	L-2	L-3
pH ¹		7.6	7.7	7.6
EC	mS/m	276	291	297
Total Dissolved Solids	mg/L	2,934	3,184	3,338
Total Diss. Org. Carbon	"	2	3	2
Cl ⁻	"	103	31	28
SO ₄ ⁼	"	1,566	1,813	1,967
TKN	"	0.90	0.67	0.61
NH ₃ -N	"	0.27	0.02	<0.02
NO ₂ + NO ₃ -N	"	0.23	0.14	0.46
Total P	"	0.06	0.05	0.05
Alkalinity as CaCO ₃	"	169	180	138
Al	"	0.048	0.062	0.067
Ca	"	328	350	372
Cd	"	<0.0004	<0.0004	<0.0004
Cr	"	<0.0005	<0.0005	<0.0005
Cu	"	<0.002	<0.002	<0.002
Fe	"	3.39	0.348	0.093
Hg	μg/L	<0.05	<0.05	<0.05
K	mg/L	7	8	6
Mg	"	150	181	189
Mn	"	0.1691	0.1266	0.1419
Na	"	195	184	184
Ni	"	<0.0004	0.0067	<0.0004
Pb	"	<0.004	<0.004	<0.004
Zn	"	0.007	0.008	0.008

¹pH analyzed beyond recommended holding time of 15 minutes.