

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 10-21

CALUMET WEST SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FIRST QUARTER 2010

MAY 2010

Protecting Our Water Environment

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Louis Kollias, P.E., BCEE

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May 27, 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: Calumet West Solids Management Area - Calumet Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2005-AO-4281-2, Monitoring Report for January, February, and March 2010

The attached two tables contain the monitoring data for the Calumet West Solids Management Area for January, February, and March 2010, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2005-AO-4281-2.

The data reported are as follows:

Table 1, Analysis of Water from Lysimeters L-1 through L-3N at the Calumet West Solids Management Area Sampled on March 10, 2010

Three new lysimeters, L-1N, L-2N, and L-3N, were installed at this site in September 2008 as replacements for L-1, L-2, and L-3, respectively. The new and old lysimeters are monitored simultaneously. A request has been submitted to the IEPA to terminate monitoring of the old lysimeters.

A supplemental permit was issued by the IEPA on July 30, 2009, to modify the monitoring schedule for lysimeters at the Calumet West drying site to once per quarter.

Mr. S. Alan Keller

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May 27, 2010

Subject: Calumet West Solids Management Area - Calumet Water Reclamation Plant,
Illinois Environmental Protection Agency Permit No. 2005-AO-4281-2,
Monitoring Report for January, February, and March 2010

No biosolids were placed in or removed from the solids drying area during this quarter.

Very truly yours,

Louis Kollias
Director
Monitoring and Research

LK:PL:kq

Attachments

cc w/att: Mr. Sulski, IEPA
Records Unit, IEPA
O'Connor/Cox/Lindo

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1 THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED ON MARCH 10, 2010

Parameter	Unit	Lysimeter No.					
		L-1	L-1N	L-2	L-2N	L-3	L-3N
pH ¹		7.9	8.2	8.1	9.8	8.1	8.1
EC	mS/m	306	288	333	208	336	373
Total Dissolved Solids	mg/L	2,806	2,714	NA ²	1,694	3,320	3,682
Total Dis. Org. Carbon	“	1	4	3	10	1	3
Cl ⁻	“	104	33	30	32	27	48
SO ₄ ⁻	“	1,538	1,501	974	1,864	1,916	2,061
TKN	“	<0.2	1	0.2	3	0.2	1
NH ₃ -N	“	<0.1	0.6	<0.1	2	<0.1	1
NO ₂ +NO ₃ -N	“	0.18	<0.04	1.4	0.04	0.77	<0.04
Total P	“	<0.1	<0.1	0.1	<0.1	<0.1	0.2
Alkalinity as CaCO ₃	“	147	207	164	53	137	246
Al	“	0.069	0.065	0.103	0.273	0.082	0.074
Ca	“	309	285	373	260	382	392
Cd	“	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cr	“	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Cu	“	0.03	<0.01	0.02	<0.01	<0.01	<0.01
Fe	“	3.4	0.29	6.7	0.04	0.30	3.4
Hg	µg/L	0.38	<0.20	0.54	<0.20	<0.20	<0.20
K	mg/L	7	15	8	37	6	10
Mg	“	138	173	194	1.3	188	237
Mn	“	0.127	0.048	0.052	0.002	0.035	0.367
Na	“	193	134	174	188	180	187
Ni	“	<0.002	<0.002	0.004	0.010	<0.002	<0.002
Pb	“	0.03	<0.02	0.06	<0.02	<0.02	<0.02
Zn	“	0.04	0.01	0.05	<0.01	<0.01	<0.01

¹pH analyzed beyond recommended holding time of 15 minutes.

²No analysis.