

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 10-12

RIDGELAND AVENUE SOLIDS MANAGEMENT AREA

MONITORING REPORT FOR

FOURTH QUARTER 2009

FEBRUARY 2010

Protecting Our Water Environment



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

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Louis Kollias, P.E., BCEE Director of Monitoring and Research Iouis.kollias@mwrd.org

February 26, 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: Ridgeland Avenue Solids Management Area - Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2005-AO-4283-2, Monitoring Report for October, November, and December 2009

The attached table contains the monitoring data for the Ridgeland Avenue Solids Management Area (RASMA) for October, November, and December 2009 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2005-AO-4283-2.

A supplemental permit was issued by the IEPA on July 30, 2009, to discontinue monitoring of all lysimeters located at the RASMA site, except L-2N, which will be monitored once per month.

The data reported are as follows:

Table 1, Analysis of Water from Lysimeters L-2N at the Ridgeland Avenue Solids Management Area Sampled in October, November, and December 2009 Mr. S. Alan Keller

Subject: Ridgeland Avenue Solids Management Area - Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2005-AO-4283-2, Monitoring Report for October, November, and December 2009

No biosolids were placed in or removed from the solids drying area during October, November, and December 2009.

Very truly yours,

Louis Kollias Director Monitoring and Research

LK:PL:kq Attachments cc w/att: Mr. Sulski, IEPA Records Unit, IEPA Granato/O'Connor/Cox/Lindo

Parameter	Unit	Sample Date		
		Oct. 7, 2009	Nov. 4, 2009	Dec. 2, 2009
pH ¹		7.8	7.6	7.6
EC	mS/m	270	280	266
Total Dissolved Solids	mg/L	2,216	2,196	1,728
Total Diss. Org. Carbon	"	8	7	6
Cl	"	300	369	317
$SO_4^{=}$	"	255	247	253
TKN	"	40	44	38
NH ₃ -N	"	39	43	38
NO ₂ +NO ₃ -N	"	< 0.04	0.09	0.05
Total P	"	0.1	0.1	0.1
Alkalinity ²	"	822	863	880
Al	"	0.068	0.101	0.035
As	"	< 0.025	< 0.025	< 0.025
Ca	"	222	212	213
Cd	"	< 0.002	< 0.002	< 0.002
Cr	"	<0.003	< 0.003	< 0.003
Cu	"	<0.01	< 0.01	< 0.01
Fe	"	4.7	4.7	5.4
Hg	μg/L	< 0.20	< 0.20	< 0.20
K	mg/L	11	11	11
Mg	"	135	134	133
Mn	"	0.122	0.108	0.119
Na	"	102	100	97
Ni	"	< 0.002	< 0.002	< 0.002
Pb	"	< 0.02	< 0.02	< 0.02
Se	"	< 0.1	< 0.1	< 0.1
Zn	"	< 0.01	< 0.01	< 0.01

TABLE 1: ANALYSIS OF WATER FROM LYSIMETER L-2N AT THE RIDGELAND AVENUE SOLIDS MANAGEMENT AREA SAMPLED IN OCTOBER, NOVEMBER, AND DECEMBER 2009

¹Samples analyzed beyond recommended holding time of 15 minutes. ²As CaCO₃.