

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 09-12

MONTHLY CONTROLLED SOLIDS

DISTRIBUTION REPORT

SEPTEMBER 2008 - REVISED

MARCH 2009

Metropolitan Water Reclamation District of Greater Chicago

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March 12, 2009

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: Metropolitan Water Reclamation District of Greater Chicago – Revised Controlled Solids Distribution Program IEPA Permit No. 2005-SC-3793, August 2008 - Revised

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago - Controlled Solids Distribution Program for August 2008, as required by Illinois Environmental Protection Agency Permit No. 2005-SC-3793. The data in Tables 3, 4, and 5 of the earlier report submitted on February 20, 2009 have been revised. Please replace the February 20, 2009 report with this revised report.

Sludge flow schematic diagrams for solids processed during August 2008 are shown in Figure 1 - John E. Egan Water Reclamation Plant (WRP), Figure 2 - Calumet WRP, and Figure 3 - Stickney WRP.

Biosolids were distributed to six sites in August. The user information report for these six sites is presented in Table 1, and the analyses of composited biosolids delivered to those sites are presented in Tables 2, 3, 4, 5, 6, 7, and 8.

Very truly yours,

Louis Kollias
Director
Monitoring and Research

LK:KK:kq
Attachments
cc: Aistars (USEPA)
Sulski (IEPA)
Sobanski
Granato/O'Connor/Cox

TABLE 1: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT FOR AGITATION-DRIED ANAEROBICALLY DIGESTED SOLIDS

No.	Name and Address of User	Source	Dates	Quantity (dry tons)		Biosolids Use	Application		Analysis
				September 2008	Cumulative 2008		Area (ac)	Rate (tons/ac)	
1.	Tinley Park Park District 8125 W. 171st St. Tinley Park, IL 60477	Calumet WRP- West Drying Area	30	64.5	64.5	Top dressing as fertilizer for turf growth on soccer field.	2	32.2	Table 2
2.	Summit Park District 5700 S. Archer Ave. Summit, IL 60501	Calumet WRP- West Drying Area	30	130.7		Soil amendment for turf growth on baseball field renovation.	1	130.7	Table 3
		Stickney WRP LASMA	3	57.0	200.7	Top dressing as fertilizer for turf growth on established athletic fields.	3	19.0	Table 4
3.	Cinder Ridge Golf Course 24801 Lakepoint Drive Wilmington, IL 60481	Stickney WRP - LASMA & Vulcan Drying Area	3, 29	128.0	203.0	Top dressing as fertilizer for turf growth on golf course.	60	2.1	Table 5
4.	Village of Romeoville 1100 Murphy Dr. Romeoville, IL 60446	Stickney WRP- Vulcan Drying Area	29	29.0	29.0	Top dressing as fertilizer for turf growth on soccer fields.	3	9.7	Table 6
5.	Woodridge Park District 2600 Center Dr. Woodridge, IL 60517	Stickney WRP- Vulcan Drying Area	29	30.0	30.0	Top dressing as fertilizer for turf growth on soccer and baseball fields.	1	30.0	Table 7

TABLE 2: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE TOWN POINTE PARK SOCCER FIELD LOCATED AT 179th ST. AND 84th AVE., TINLEY PARK, IL, FROM THE CALUMET WEST DRYING AREA DURING SEPTEMBER 2008

Constituent	Units	Concentration
pH		6.6
Total Solids	%	77.4
Total Volatile Solids	"	40.3
Volatile Acids as Acetic Acid	mg/dry kg	89.1
Total Kjeldahl-N	"	23,108
NH ₃ -N	"	513
Total P	"	21,091
K	"	3,775
Cd	"	3.8
Cr	"	100
Cu	"	438
Pb	"	112
Hg	"	2.78
Mo	"	14.7
As	"	8.5
Mn	"	1,024
Ni	"	38.6
Se	"	4.4
Zn	"	1,070

¹Results based on one sample.

TABLE 3: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE SUMMIT PARK DISTRICT LEGION PARK LOCATED AT 6050 S. HARLEM AVE., SUMMIT, IL, FROM THE CALUMET WEST DRYING AREA DURING SEPTEMBER 2008

Constituent	Units	Concentration
pH		6.6
Total Solids	%	76.9
Total Volatile Solids	"	55.3
Volatile Acids as Acetic Acid	mg/dry kg	167
Total Kjeldahl-N	"	25,322
NH ₃ -N	"	660
Total P	"	22,106
K	"	3,275
Cd	"	4.0
Cr	"	96
Cu	"	461
	"	120
Hg	"	1.32
Mo	"	15.3
As	"	10.6
Mn	"	1,057
Ni	"	37.7
Se	"	3.6
Zn	"	1,127

¹Results based on one sample.

TABLE 4: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE SUMMIT PARK DISTRICT ATHLETIC FIELDS LOCATED AT 5700 S. ARCHER AVE., SUMMIT, IL, FROM THE STICKNEY LASMA DRYING AREA DURING SEPTEMBER 2008

Constituent	Units	Concentration
pH		7.2
Total Solids	%	73.1
Total Volatile Solids	"	41.8
Volatile Acids as Acetic Acid	mg/dry kg	312
Total Kjeldahl-N	"	20,045
NH ₃ -N	"	3,859
Total P	"	16,156
K	"	2,609
Cd	"	3.9
Cr	"	171
Cu	"	397
Pb	"	161
Hg	"	1.07
Mo	"	17.7
As	"	<10.0
Mn	"	533
Ni	"	48.7
Se	"	<8.0
Zn	"	910

¹Results based on one sample.

TABLE 5: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE CINDER RIDGE GOLF COURSE LOCATED AT 24801 LAKEPOINT DR., WILMINGTON, IL, FROM THE STICKNEY WATER RECLAMATION PLANT, LASMA AND VULCAN DRYING AREAS DURING SEPTEMBER 2008

Constituent	Units	Concentration
pH		6.6
Total Solids	%	72.1
Total Volatile Solids	"	40.0
Volatile Acids as Acetic Acid	mg/dry kg	225
Total Kjeldahl-N	"	19,626
NH ₃ -N	"	2,096
Total P	"	18,190
K	"	2,583
Cd	"	4.0
Cr	"	179
Cu	"	406
Pb	"	156
Hg	"	1.28
Mo	"	17.2
As	"	<10.0
Mn	"	530
Ni	"	48
Se	"	<8.0
Zn	"	918

¹Results based on two samples.

TABLE 6: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT VOLUNTEER PARK LOCATED AT 1100 MURPHY DR., ROMEOVILLE, IL, FROM THE STICKNEY WATER RECLAMATION PLANT, VULCAN DRYING AREA DURING SEPTEMBER 2008

Constituent	Units	Concentration
pH		6.1
Total Solids	%	71.0
Total Volatile Solids	"	38.2
Volatile Acids as Acetic Acid	mg/dry kg	138
Total Kjeldahl-N	"	19,206
NH ₃ -N	"	333
Total P	"	20,225
K	"	2,557
Cd	"	4.2
Cr	"	187
Cu	"	414
Pb	"	152
Hg	"	1.48
Mo	"	16.7
As	"	<10.0
Mn	"	527
Ni	"	48.3
Se	"	<8.0
Zn	"	925

¹Results based on one sample.

TABLE 7: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT CY-PRESS COVE PARK LOCATED AT 8325 S. JANES AVE., WOODRIDGE, IL, FROM THE STICKNEY WATER RECLAMATION PLANT, VULCAN DRYING AREA DURING SEPTEMBER 2008

Constituent	Units	Concentration
pH		6.1
Total Solids	%	71.0
Total Volatile Solids	"	38.2
Volatile Acids as Acetic Acid	mg/dry kg	138
Total Kjeldahl-N	"	19,206
NH ₃ -N	"	333
Total P	"	20,225
K	"	2,557
Cd	"	4.2
Cr	"	187
Cu	"	414
Pb	"	152
Hg	"	1.48
Mo	"	16.7
As	"	<10.0
Mn	"	527
Ni	"	48.3
Se	"	<8.0
Zn	"	925

¹Results based on one sample.