

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 10-04

MONTHLY CONTROLLED SOLIDS

DISTRIBUTION REPORT

OCTOBER 2009

JANUARY 2010

Protecting Our Water Environment

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January 21, 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: Metropolitan Water Reclamation District of Greater Chicago – Controlled Solids Distribution Program Illinois Environmental Protection Agency Permit No. 2005-SC-3793, October 2009

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago - Controlled Solids Distribution Program for October 2009, as required by Illinois Environmental Protection Agency Permit No. 2005-SC-3793

Sludge flow schematic diagrams for solids processed during October 2009 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 four sites in November. The user information report for those sites are presented in Table 1, and the analyses of composited biosolids delivered to those sites are presented in Tables 2 – 5.

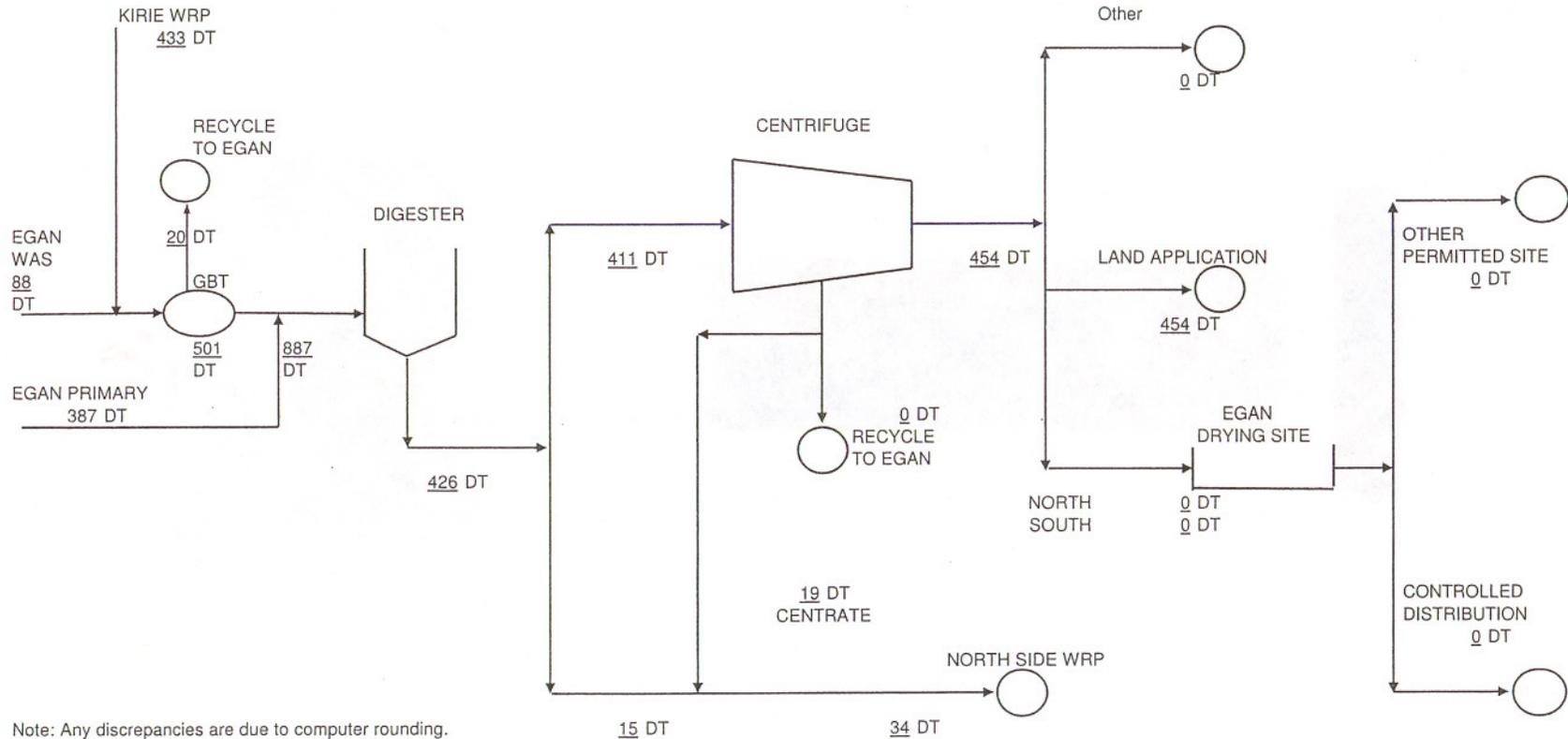
Very truly yours,

Louis Kollias
Director
Monitoring and Research

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

J.E. EGAN WRP SOLIDS DISTRIBUTION- FIGURE 1

October-09



Note: Any discrepancies are due to computer rounding.
Centrifuge draw DT exceeds Centrifuge feed DT by 43 DT because of sample anomalies. Centrate DT are estimated to be approximately 19 DT.

CALUMET WRP SOLIDS DISTRIBUTION - October 2009

Figure 2

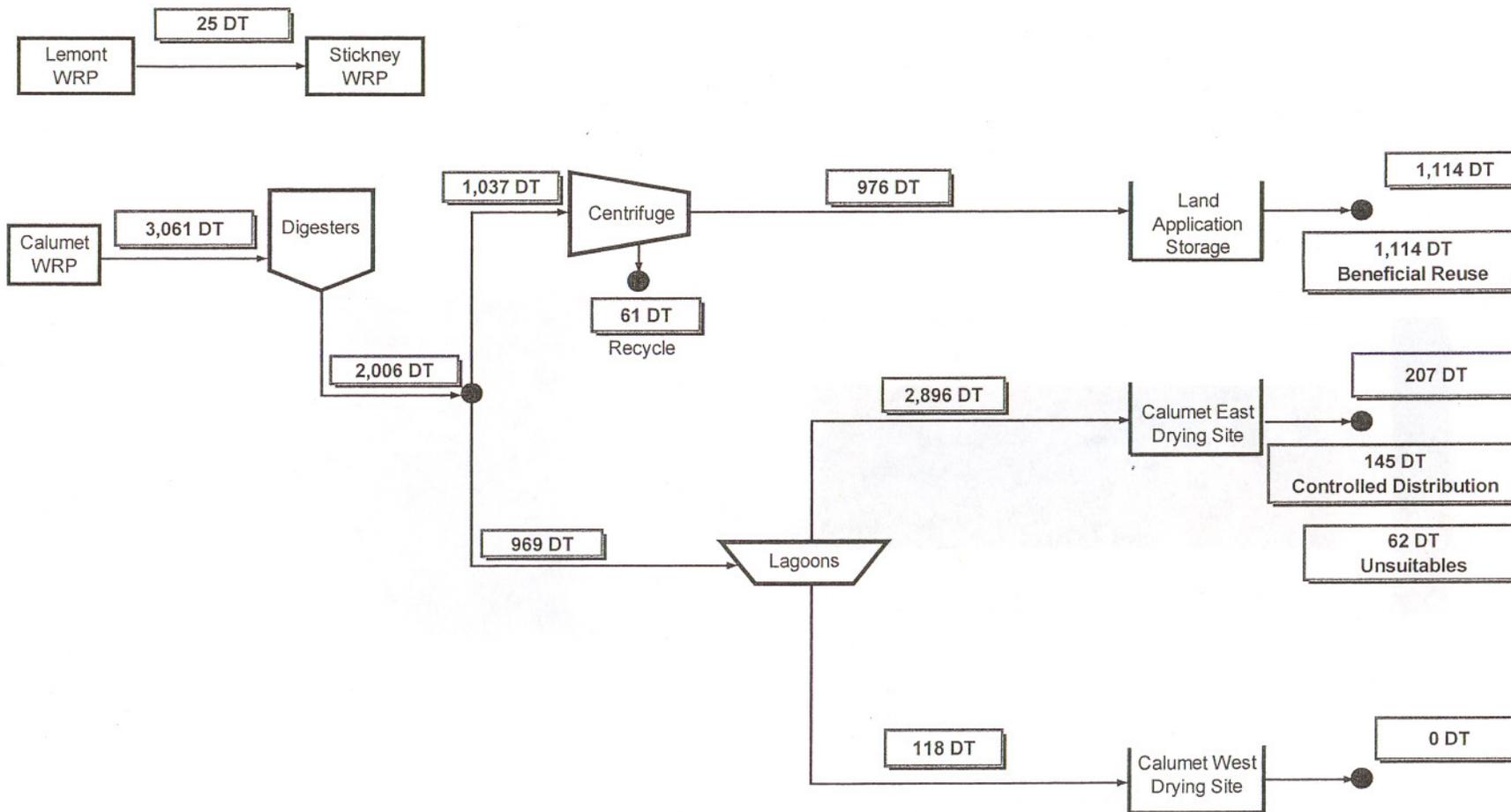


TABLE 1: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT
FOR AGITATION-DRIED, ANAEROBICALLY-DIGESTED SOLIDS

No.	Name and Address of User	Source	Dates	Quantity (dry tons)		Biosolids Use	Application		Analysis
				2009 October	2009 Cumulative		Area (acres)	Rate (tons/acre)	
1.	Cinder Ridge 24801 Lakepoint Dr. Wilmington, IL 60481	Calumet WRP ¹ – East drying area	1	145.3	304.6	Topdressing as fertilizer for turf growth on golf course.	15.0	9.7	Table 2
2.	Oak Lawn Park District Stony Creek Golf Complex 5810 West 103 rd St. Oak Lawn, IL 60453	Stickney WRP – LASMA drying area	1	34.0	34.0	Nutrient source for turf growth.	2.0	17.0	Table 3
3.	Chicago Highlands 22 nd and 31 st Streets Westchester, IL 60154	Stickney WRP – LASMA drying area	1	28.0	450.3	Soil amended for construction of golf course fairways.	1.0	28.0	Table 4
4.	Metropolitan Water Reclamation District of Greater Chicago Calumet WRP 400 East 130 th Street Calumet, IL 60628	Stickney WRP – LASMA drying area	19, 20	191.0	372.0	Soil amendment for landscaping.	2.0	95.5	Table 5

¹WRP – Water Reclamation Plant.

TABLE 2: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT
 CINDER RIDGE, 24801 LAKEPOINT DR., WILMINGTON, IL, FROM THE
 CALUMET WATER RECLAMATION PLANT EAST DRYING AREA
 DURING OCTOBER 2009

Constituent	Units	Concentration
pH		6.8
Total Solids	%	78.9
Total Volatile Solids	"	35.7
Volatile Acids as Acetic Acid	mg/dry kg	11
Total Kjeldahl-N	"	20,767
NH ₃ -N	"	840
Total P	"	22,209
K	"	2,406
Cd	"	3.8
Cr	"	98
Cu	"	463
Pb	"	115
Hg	"	1.23
Mo	"	14.9
As	"	8.8
Mn	"	1,039
Ni	"	44.3
Se	"	5.8
Zn	"	1,090

¹Results based on one sample.

TABLE 3: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE OAK LAWN PARK DISTRICT, STONY CREEK GOLF COMPLEX, 5810 WEST 103RD ST., OAK LAWN, IL, FROM THE STICKNEY WATER RECLAMATION PLANT LASMA DRYING AREA DURING OCTOBER 2009

Constituent	Units	Concentration
pH		6.7
Total Solids	%	65.5
Total Volatile Solids	"	41.7
Volatile Acids as Acetic Acid	mg/dry kg	1,124
Total Kjeldahl-N	"	25,982
NH ₃ -N	"	4,682
Total P	"	21,386
K	"	2,193
Cd	"	3.3
Cr	"	155
Cu	"	412
Pb	"	127
Hg	"	1.16
Mo	"	13.1
As	"	<10.0
Mn	"	501
Ni	"	42.5
Se	"	<8.0
Zn	"	850

¹Results based on one sample.

TABLE 4: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT CHICAGO HIGHLANDS, 22ND & 31ST STREETS, WESTCHESTER, IL, FROM THE STICKNEY WATER RECLAMATION PLANT LASMA DRYING AREA DURING OCTOBER 2009

Constituent	Units	Concentration
pH		6.7
Total Solids	%	65.5
Total Volatile Solids	"	41.7
Volatile Acids as Acetic Acid	mg/dry kg	1,124
Total Kjeldahl-N	"	25,982
NH ₃ -N	"	4,682
Total P	"	21,386
K	"	2,193
Cd	"	3.3
Cr	"	155
Cu	"	412
Pb	"	127
Hg	"	1.16
Mo	"	13.1
As	"	<10.0
Mn	"	501
Ni	"	42.5
Se	"	<8.0
Zn	"	850

¹Results based on one sample.

TABLE 5: ANALYSIS¹ OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO, CALUMET WATER RECLAMATION PLANT, 400 EAST 130TH ST., CALUMET, IL , FROM THE STICKNEY WATER RECLAMATION PLANT LASMA DRYING AREA DURING OCTOBER 2009

Constituent	Units	Concentration
pH		7.4
Total Solids	%	62.0
Total Volatile Solids	"	39.8
Volatile Acids as Acetic Acid	mg/dry kg	2,417
Total Kjeldahl-N	"	24,191
NH ₃ -N	"	6,118
Total P	"	21,324
K	"	2,943
Cd	"	4.2
Cr	"	165
Cu	"	447
Pb	"	134
Hg	"	1.09
Mo	"	15.2
As	"	
Mn	"	549
Ni	"	46.7
Se	"	<8.0
Zn	"	963

¹Results based on one sample.