

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 11-44

MONTHLY CONTROLLED SOLIDS

DISTRIBUTION REPORT

May 2011

August 2011

Metropolitan Water Reclamation District of Greater Chicago

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August 29, 2011

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. 2010-SC-0200, May 2011

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago - Controlled Solids Distribution Program for May 2011, as required by Illinois Environmental Protection Agency Permit No. 2010-SC-0200.

Sludge flow schematic diagrams for solids processed during May 2011 are shown in <u>Figure 1</u>-John E. Egan Water Reclamation Plant (WRP), <u>Figure 2</u> - Calumet WRP, and <u>Figure 3</u> - Stickney WRP.

Biosolids were distributed to nine sites in May. The user information report for those sites is presented in $\underline{\text{Table 1}}$, and the analysis of the composited biosolids delivered to those sites are presented in $\underline{\text{Table 2}}$.

Very truly yours,

Thomas C. Granato, Ph.D. Acting Director Monitoring and Research

TCG:OO:cm Attachments

cc: V. Aistars (USEPA)

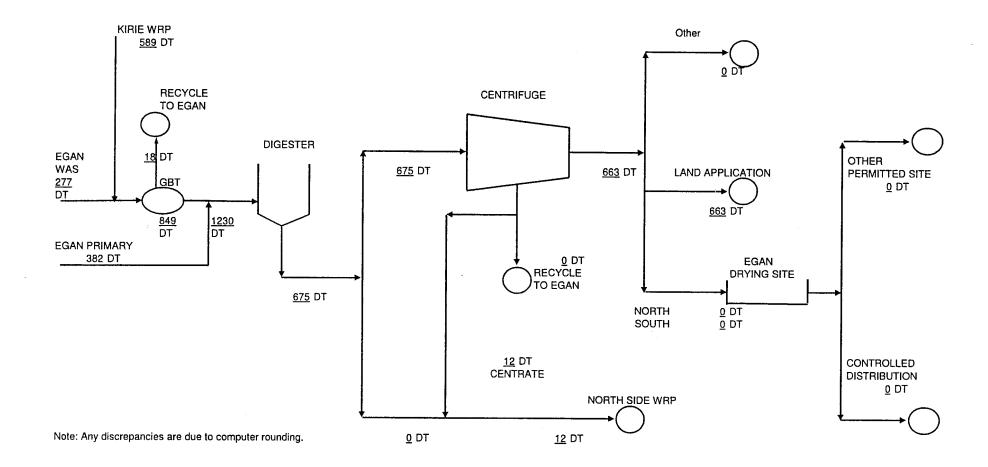
R. Sulski (IEPA)

K. Kits

C. O'Connor

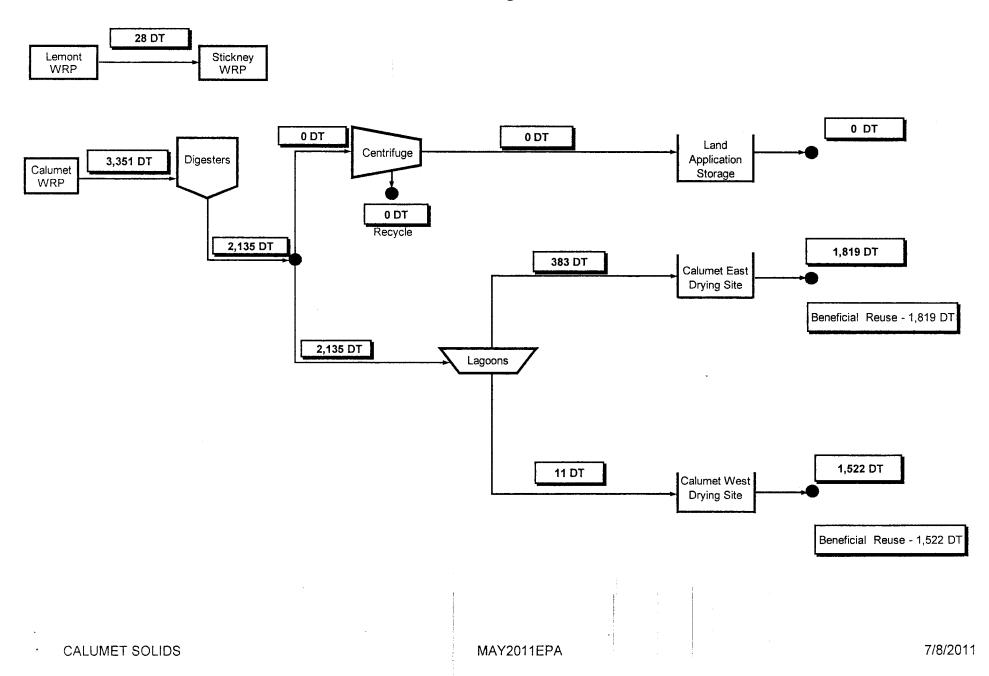
J.E. EGAN WRP SOLIDS DISTRIBUTION-FIGURE 1

May-11



CALUMET WRP SOLIDS DISTRIBUTION - May 2011

Figure 2



STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR MAY 2011 FIGURE 3

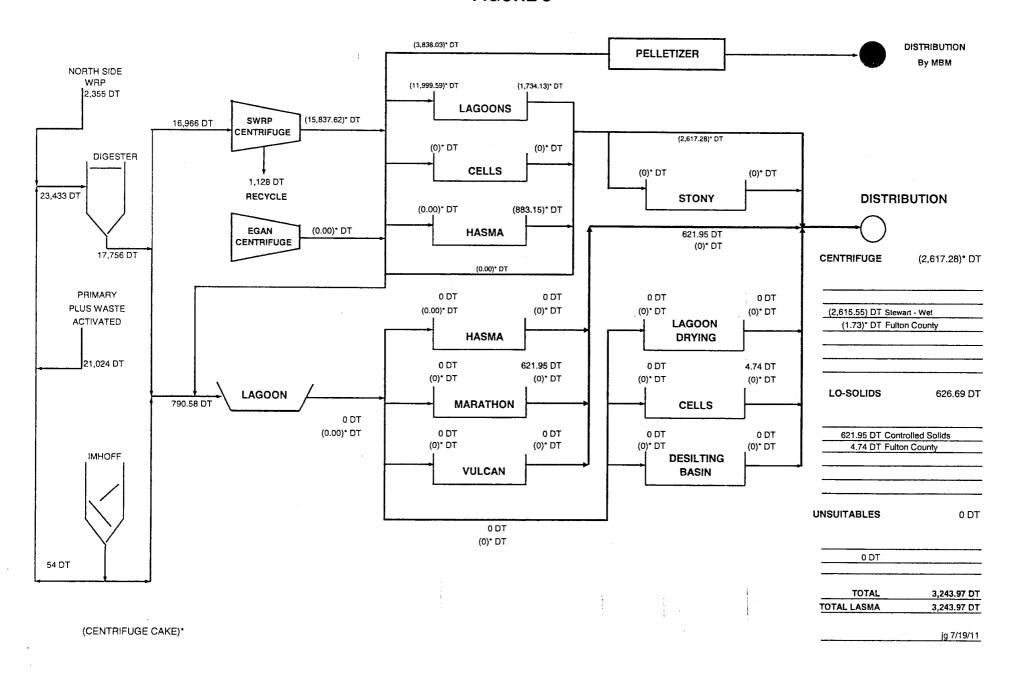


TABLE 1: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT FOR AGITATION-DRIED, ANAEROBICALLY-DIGESTED SOLIDS

Location No.	Name and Address of User	Source	Dates	Quantity (dry tons)			Application	
				2011 May	2011 Cumulative	Biosolids Use	Area (acres)	Rate (tons/acre)
1	Chicago State University 9601 Cottage Grove Avenue Chicago, IL 60628	Stickney WRP	12	61.2	61.2	Soil amendment for biofuel research	1	61.2
2	St. Xavier University 3700 West 103 rd Street Chicago, IL 60655	Stickney WRP	12	14.2	14.2	Topdressing as fertilizer for turf growth	1	14.2
3	Tinley Park Park District Community Park 8125 West 171 st Street Tinley Park., IL 60477	Stickney WRP	12	15.4	15.4	Topdressing as fertilizer for turf growth	1	15.4
4	Hinsdale High School 5500 South Grant Street Hinsdale, IL 60521	Stickney WRP	13	141.1	141.1	Incorporation with top soil for turf growth	2	70.6
5	Richard Vegas 7805 East Huston Street Braceville, IL 60407	Stickney WRP	18, 19, 24	80.7	80.7	Incorporation with top soil for turf growth on geothermal field	1.5	53.8
6	Joliet Township High School 201 East Johnson Street Joliet, IL 60432	Stickney WRP	18	28.0	28.0	Topdressing as fertilizer for turf growth	1	28.0

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

				Quantit	y (dry tons)		Application	
Location No.	Name and Address of User	Source	Dates	2011 May	2011 Cumulative	Biosolids Use	Area (acres)	Rate (tons/acre)
7	Cinder Ridge Golf Course 24801 Lakepoint Drive Wilmington, IL 60481	Stickney WRP	19	70.1	70.1	Topdressing as fertilizer for turf growth	2.5	28.0
8	Frankfort Park District Main Park 140 Oak Street Frankfort, IL 60423	Stickney WRP	20	73.5	73.5	Topdressing as fertilizer for turf growth	3	24.5
9	Chicago Park District Montrose Beach Park 4400 North Lake Shore Drive Chicago, IL 60613	Stickney WRP	24	137.7	137.7	Incorporation with top soil for turf growth	2	68.9

TABLE 2: ANALYSIS OF DIGESTED BIOSOLIDS APPLIED TO LAND FROM THE STICKNEY WATER RECLAMATION PLANT DRYING AREA DURING MAY 2011

		User Location No. ¹					
		1, 2, 3	4	5, 6, 7, 8	5, 9		
Constituent	<u>Unit</u>						
pН		6.8	6.1	6.1	6.2		
Total Solids Total Volatile Solids	% "	62.3 38.0	66.3 39.2	61.3 38.1	59.9 39.2		
Volatile Acids as Acetic Acid Total Kjeldahl-N NH ₃ -N Total P	mg/kg " "	217 21,887 1,457 22,733	149 21,470 1,097 22,093	253 20,327 719 23,583	222 25,242 1,480 23,018		
As Cd Cr Cu	" "	<10 3.5 161 446	<10 3.3 157 446	<10 3.5 167 455	<10 3.2 158 462		
Hg K Mn Mo	" " " " " " " " " " " " " " " " " " " "	0.95 2,995 584 8	0.88 2,866 580 8	1.1 3,780 597 9	1.2 2,085 593 9		
Ni Pb Se Zn	" " "	39.4 125 <8 835	39.5 130 <8 823	40.5 130 <8 852	41.5 133 <8 857		

¹Locations listed in <u>Table 1</u>.