

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 11-03

MONTHLY CONTROLLED SOLIDS

DISTRIBUTION REPORT

OCTOBER 2010

FEBRUARY 2011

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

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February 10, 2011

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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, October 2010

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

Sludge flow schematic diagrams for solids processed during October 2010 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 15 sites in October. The user information report for those sites is presented in $\underline{\text{Table 1}}$, and the analyses of the composited biosolids delivered to those sites are presented in $\underline{\text{Tables 2}}$ and $\underline{3}$.

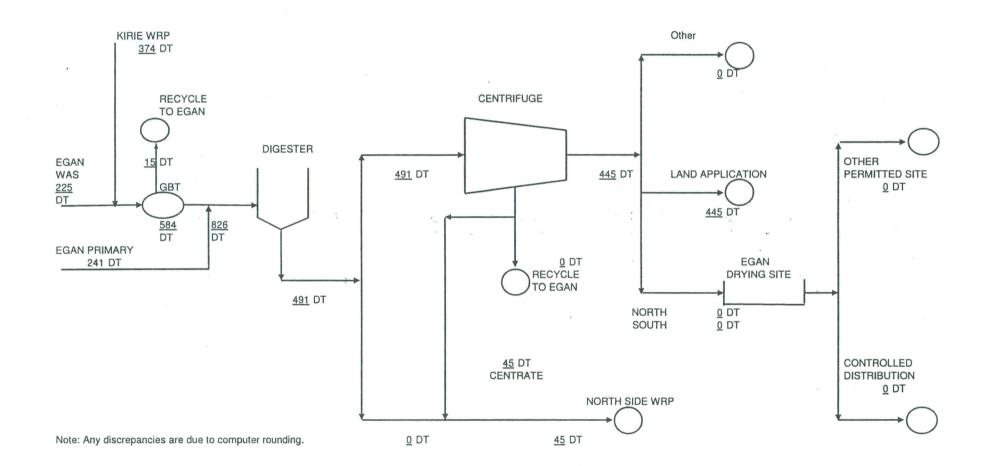
Very truly yours,

Thomas C. Granato Acting Director Monitoring and Research

TCG:OO:kq:cm
Attachments
cc: Aistars (USEPA)
Sulski (IEPA)
Kits
O'Connor

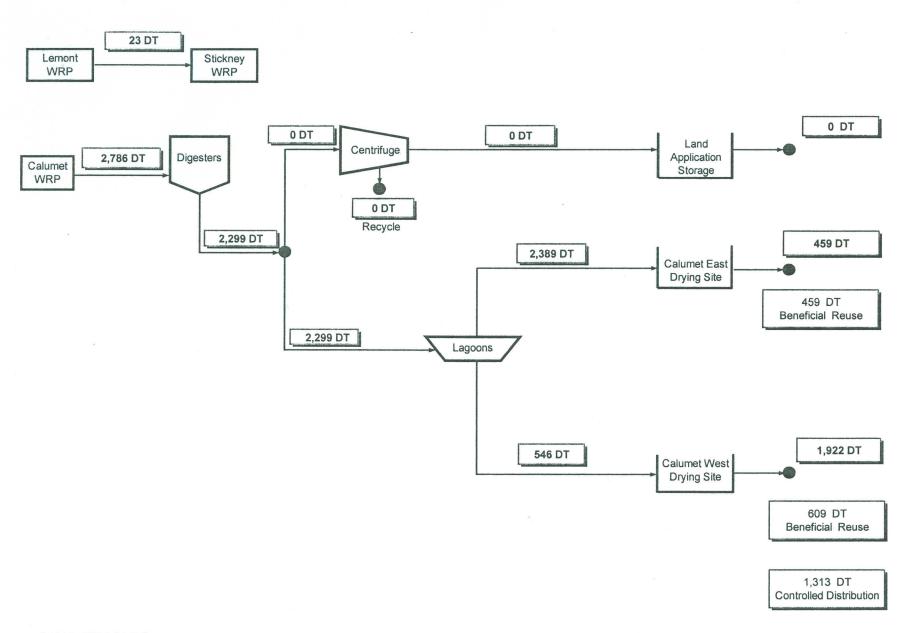
J.E. EGAN WRP SOLIDS DISTRIBUTION-FIGURE 1

October-10



CALUMET WRP SOLIDS DISTRIBUTION - October 2010

Figure 2



STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR OCTOBER 2010 FIGURE 3

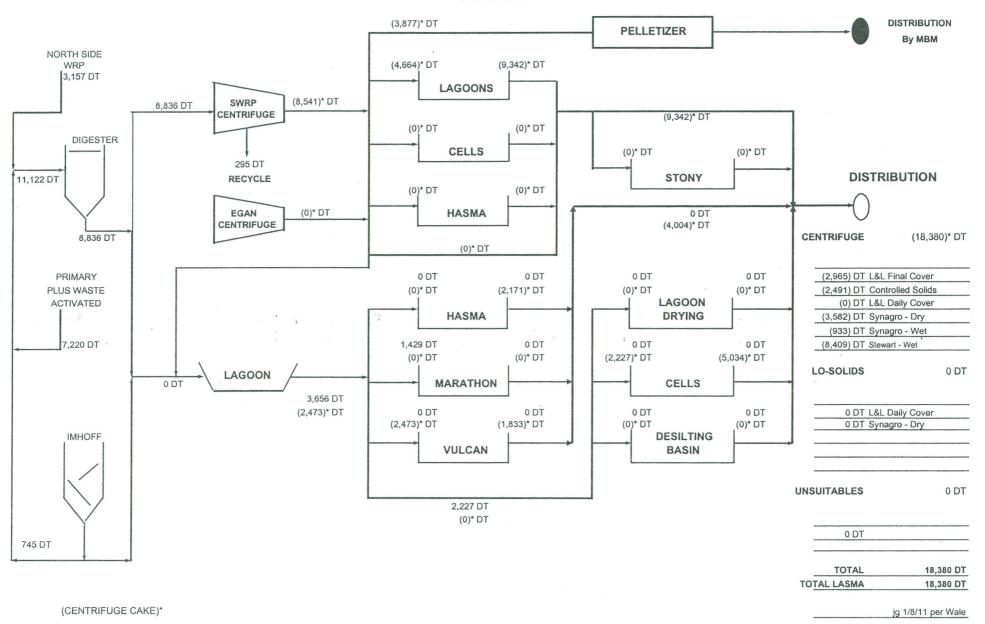


TABLE 1: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT FOR AGITATION-DRIED, ANAEROBICALLY-DIGESTED SOLIDS

				Quantity (dry tons)			Application	
Location No.	Name and Address of User	WRP ¹	Dates	2010 October	2010 Cumulative	Biosolids Use	Area (acres)	Rate (tons/acre)
1	YMCA 1834 N. Lawndale Chicago, IL 60647	Stickney	5	49.3	49.3	Incorporation with top soil for turf growth.	1	49.3
2	McNulty Farm 13410 McCarthy Rd. Lemont, IL 60439	Stickney	7	207.4	207.4	Topdressing as fertilizer for turf growth.	8	25.9
3	MWRD 6001 W. Pershing Rd. Cicero, IL 60804	Stickney	7	4.1	4.1	Incorporation with topsoil for turf growth.	0.1	41
4	BBJ Group 13821 S. Harrison Ave. Blue Island, IL 60406	Stickney	8, 11, 12, 13, 14, 15	1,722.1	1,737.5	Topsoil blending at Stony Island facility. ²	NA	NA
5	Midlothian Park District Memorial Park 14500 S. Kostner Ave. Midlothian, IL 60445	Stickney	12	49.4	49.4	Topdressing as fertilizer for turf growth.	8	6.2
6	Posen Park District Memorial Park 14200 S. Campbell Ave. Posen, IL 60469	Stickney	12	78.8	78.8	Incorporation with topsoil for turf growth.	0.5	158
7	Hoffman Estates Pk. District Canterbury Fields 2352 Hasell Rd. Hoffman Estates, IL 60192	Stickney	13, 14	76.8	76.8	Topdressing as fertilizer for turf growth.	4.6	16.7
8	Woodridge Park District Cypress Cove Park 8325 S. Janes Ave. Woodridge, IL 60517	Stickney	13	13.5	75.1	Topdressing as fertilizer for turf growth.	1	13.5

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

Location No.				Quantity (dry tons)			Application	
	Name and Address of User	WRP ¹	Dates	2010 October	2010 Cumulative	Biosolids Use	Area (acres)	Rate (tons/acre)
9	Reavis High School 6034 W. 77 th St. Burbank, IL 60459	Stickney	14	198.2	198.2	Topdressing as fertilizer for turf growth.	8	24.8
10	Franklin Park Park District North Park 10040 Addison St. Franklin Park, IL 60131	Stickney	19	91.1	91.1	Incorporation with topsoil for turf growth.	3	30.4
11	BBJ Group 13821 S. Harrison Ave. Blue Island, IL 60406	Calumet	1	74.6	94.1	Topsoil blending at Blue Island facility.	NA	NA
12	Tinley Park Park District Freedom Park 7835 Timber Dr. Tinley Park, IL 60477	Calumet	4, 5	96.4	96.4	Topdressing as fertilizer for turf growth.	5	19.3
13	Dolton Park District Main Park 721 Engle St. Dolton, IL 604192	Calumet	5, 6, 7	377.7	377.7	Topdressing as fertilizer for turf growth.	25	15.1
14	BBJ Group 13821 S. Harrison Ave. Blue Island, IL 60406	Calumet	7, 8, 14, 15, 18, 19	693.4	2,430.9	Topsoil blending at Stony Island facility. ²	NA	NA
15	Joliet Twsp. High School 201 E. Johnson St. Joliet, IL 60432	Calumet	19	71.2	71.2	Topdressing as fertilizer for turf growth.	3	23.7

¹WRP – Water Reclamation Plant.

²Temporarily at the District's Stony Island Solids Drying Area for blending in spring 2011. The use of blended soil will be reported in 2011.

TABLE 2: ANALYSIS OF DIGESTED BIOSOLIDS FROM THE STICKNEY WATER RECLAMATION PLANT APPLIED TO LAND DURING OCTOBER 2010

	Units _	User's Location No. ¹						
		1, 3	2, 4	4	4, 8	5, 6, 7, 9	10	
ьН		6.8	6.4	6.6	6.8	7.0	6.8	
Γotal Solids	%	66.5	69.4	79.2	68.6	83.3	80.4	
Cotal Volatile Solids	"	32.4	32.1	32.9	32.3	32.6	38.7	
Volatile Acids as Acetic Acid	mg/dry kg	105	49	61	76	58	71	
otal Kjeldahl-N	"	25,199	22,664	22,960	26,403	26,846	18,694	
NH ₃ -N	"	4,149	3,391	3,549	4,358	4,904	3,803	
otal P		24,192	21,045	19,740	21,816	20,587	14,491	
As	"	11	10	11	10	11	10	
Cd .	"	3.5	3.4	3.4	3.4	3.5	3.:	
Cr	"	160	157	153	155	162	156	
Cu	"	434	425	438	422	428	414	
Ig	44	1.5	1.4	1.4	1.3	1.2	1.0	
	"	2,746	2,281	2,129	2,737	3,443	3,135	
∕In	"	472	472	466	501	529	513	
Мо	"	12	11	11	11	11	11	
Ji	44	40	40	39	39	40	38	
rb	"	144	143	143	142	144	139	
e	44	<8	<8	<8	<8	<8	<8	
Zn	"	900	892	872	862	881	855	

¹For location number designation, see the first column in <u>Table 1</u>.

TABLE 3: ANALYSIS OF DIGESTED BIOSOLIDS FROM THE CALUMET WATER RECLAMATION PLANT APPLIED TO LAND DURING OCTOBER 2010

	Units	User's Location No. ¹					
	_	11, 12	13, 14	14	14, 15		
рН		6.7	6.5	7.2	7.1		
Γotal Solids	%	72.9	61.1	72.0	67.3		
Total Volatile Solids	"	36.0	37.3	34.1	35.2		
Volatile Acids as Acetic Acid	mg/dry kg	54	61	78	150		
Гotal Kjeldahl-N	"	21,964	22,654	25,474	23,639		
NH_3 - N	"	1,345	1,669	2,288	3,183		
Total P	"	20,445	21,620	20,636	17,421		
As	٠.	10.1	9.4	9.1	5		
Cd	"	3.2	3.3	3.3	3.2		
Cr	44	80	77	77	87		
Cu	دد	429	426	419	449		
Нg	٠.	1.4	1.5	1.1	1.1		
X	"	2,960	2,725	2,447	3,390		
Mn	"	964	950	928	931		
Мо	44	16	15	15	15		
Ni	44	38	38	37	40		
Pb	"	102	101	107	102		
Se	44	5	4	4	1		
Zn	44	1,155	1,147	1,164	1,127		

¹For location number designation, see the first column in <u>Table 1</u>.