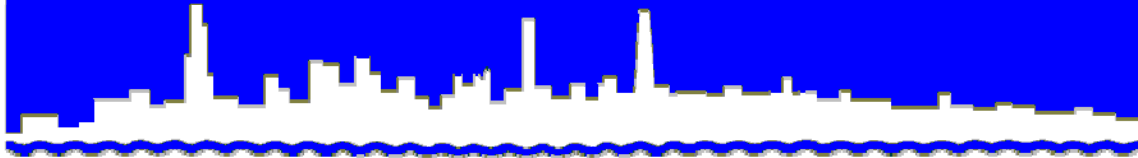


*Protecting Our Water Environment*



***Metropolitan Water Reclamation District of Greater Chicago***

*MONITORING AND RESEARCH  
DEPARTMENT*

***REPORT NO. 12-43***

***CONTROLLED SOLIDS DISTRIBUTION REPORT***

***FOR SECOND QUARTER 2012 (REVISED)***

***January 2013***

Metropolitan Water Reclamation District of Greater Chicago

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January 24, 2013

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, Second Quarter (April – June 2012) - Revised

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago - Controlled Solids Distribution Program for the second quarter (April – June 2012), as required by Illinois Environmental Protection Agency Permit No. 2010-SC-0200 and 2010-SC-0200-2. The data in Figure 3 of the earlier report submitted on September 14, 2012, have been revised. The revision is needed because of a correction in the solids content of biosolids of one of the lagoons, which changed the total amount of centrifuge biosolids from 42,385 dry tons to 42,331 dry tons and the amount to agricultural utilization from 37,756 dry tons to 37,810 dry tons. Please replace the September 14, 2012, report with this revised report.

Sludge flow schematic diagrams for solids processed during April – June 2012 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 31 sites during the second quarter of 2012. The user information report for those sites is presented in Table 1, and the analysis of the composited biosolids delivered to those sites is presented in Table 2.

Very truly yours,

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

TCG:OO:cm

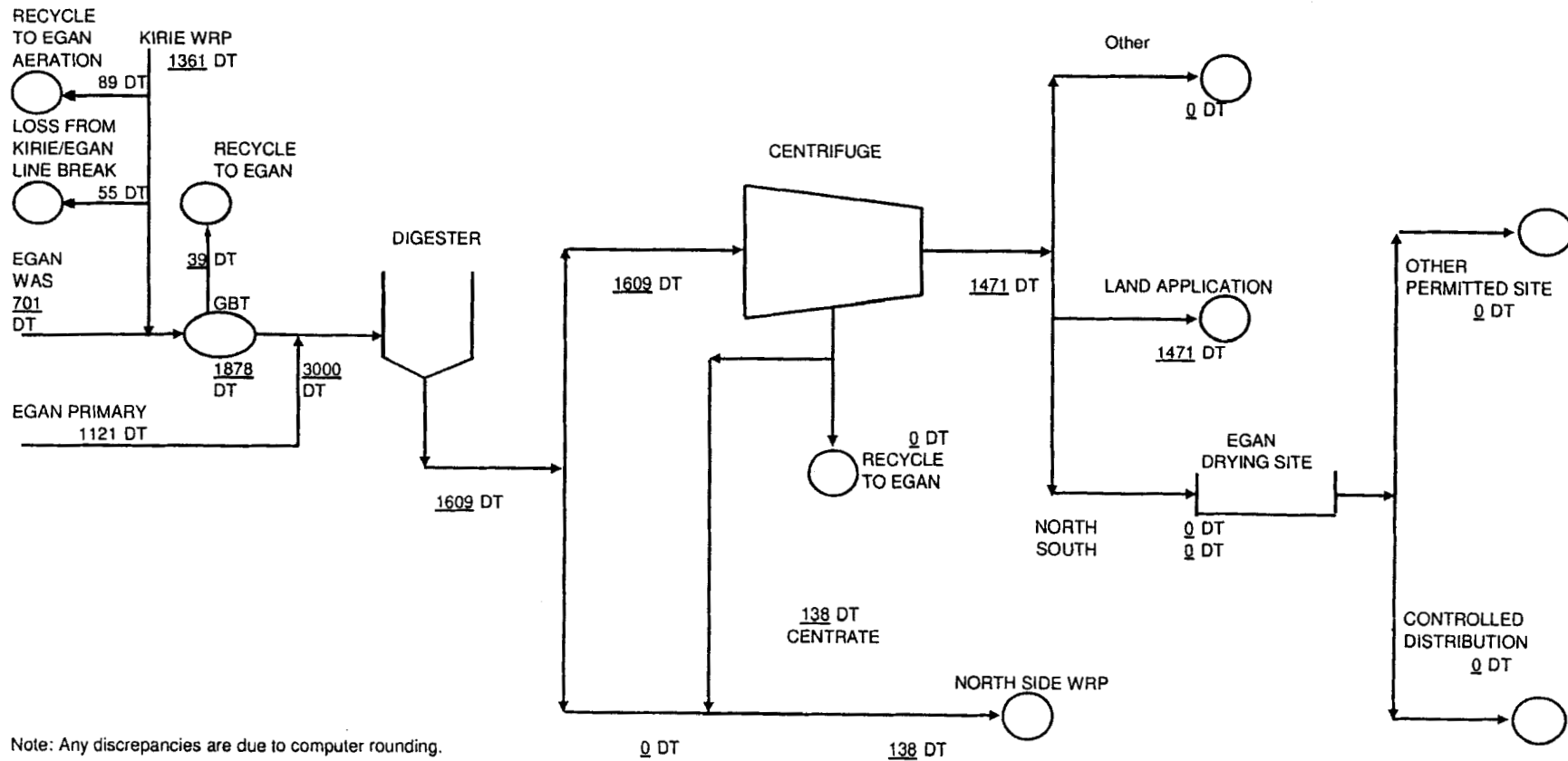
Attachments

cc: V. Aistars (USEPA)

J. Patel (IEPA)

# J.E. EGAN WRP SOLIDS DISTRIBUTION- FIGURE 1

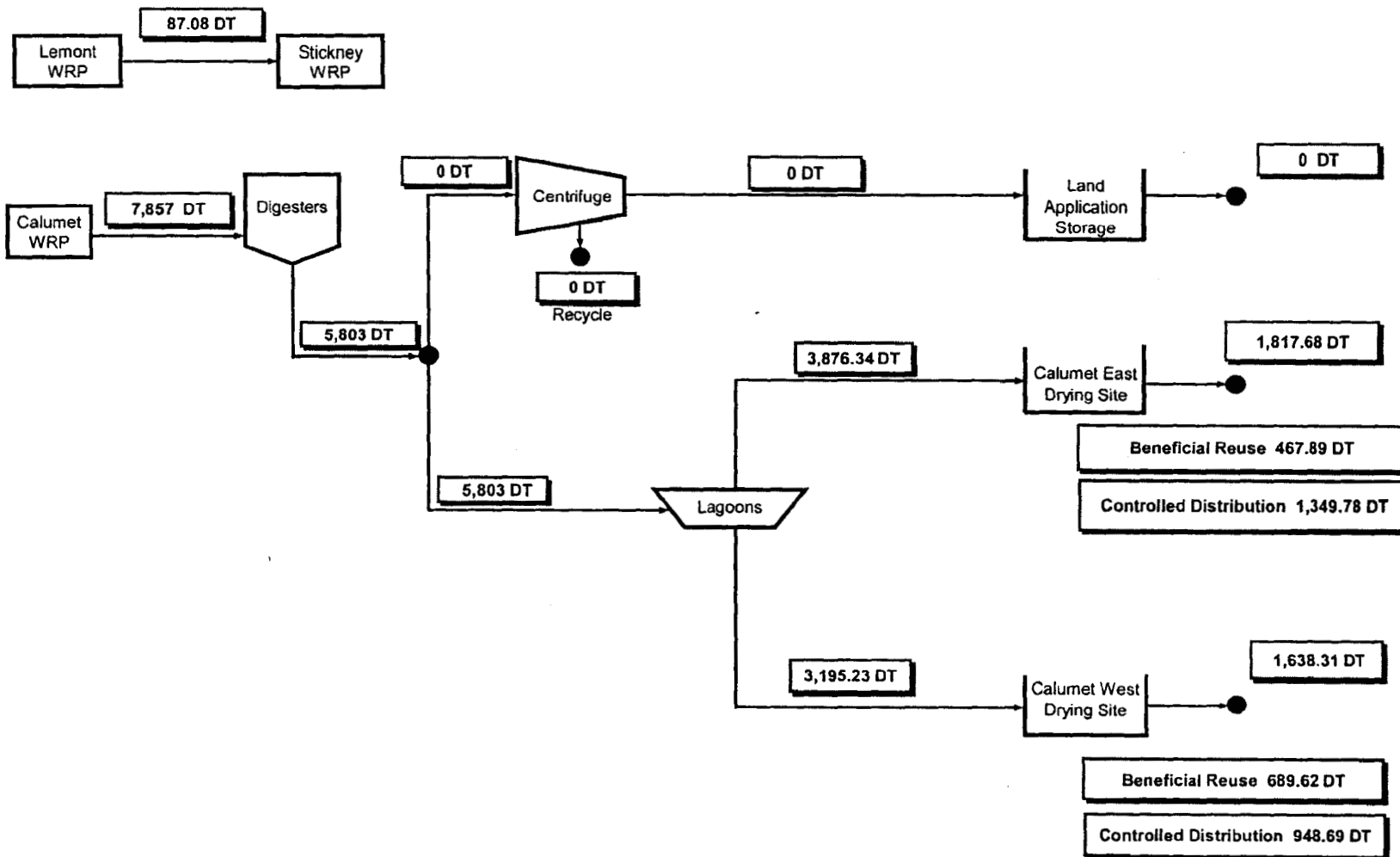
April - June 2012



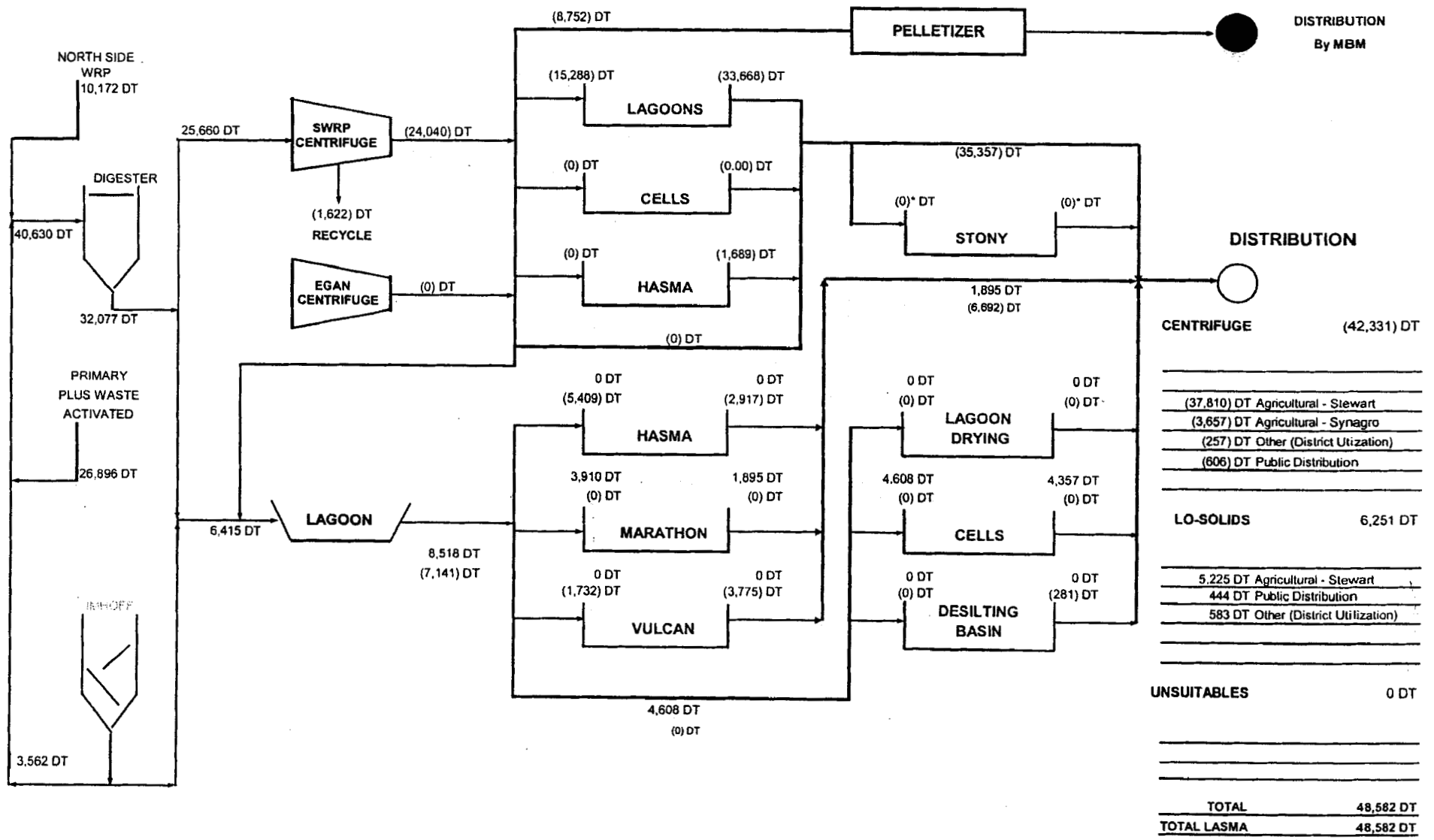
Note: Any discrepancies are due to computer rounding.

# CALUMET WRP SOLIDS DISTRIBUTION - 2nd Quarter 2012

Figure 2



# STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR 2nd QUARTER 2012 FIGURE 3 (Revised)



(CENTRIFUGE CAKE)\*

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		
				2nd Quarter 2012	Cumulative 2012	Biosolids Use	Area (acres)	Rate (tons/acre)
1	Village of Evergreen Park Yukich Park West 89th St. and South Kedzie Ave. Evergreen Park, IL 60805	Calumet WRP	4/9	16.4	16.4	Topdressing as fertilizer for turf growth	1	16.4
2	Hinsdale Park District Veeck Park 701 E. Chicago Ave. Hinsdale, IL 60522	Calumet WRP	4/11, /12	75.8	75.8	Topdressing as fertilizer for turf growth	3	25.3
3	St. Xavier University 18230 Orland Parkway Orland Park, IL 60467	Calumet WRP	4/12	1.8	1.8	Topdressing as fertilizer for turf growth	0.1	18.0
4	Frankfort Park District Main Park 401 W. Nebraska St. Frankfort, IL 60423	Calumet WRP	4/24	34.2	34.2	Topdressing as fertilizer for turf growth	2	17.1
5	Glendale Heights Park District Nazos Park 1351 Joyce St. Glendale Heights, IL 60139	Calumet WRP	4/24	17.6	17.6	Topdressing as fertilizer for turf growth	1	17.6

TABLE 1 (Continued): 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		
				2nd Quarter 2012	Cumulative 2012	Biosolids Use	Area (acres)	Rate (tons/acre)
6	Tinley Park Park District McCarthy Park 16801 S. 80th Ave. Tinley Park, IL 60477	Calumet WRP	4/24, 5/15	80.9	80.9	Topdressing as fertilizer for turf growth	4	20.2
7	Cinder Ridge Golf Course 24801 Lakepoint Dr. Wilmington, IL 60481	Calumet WRP	4/25, 4/26, 4/27, 5/23, 5/24, 5/29, 5/30, 5/31, 6/05	1184.7	1184.7	Topdressing as fertilizer for turf growth	55	21.5
8	Chicago Park District Union Park 1501 W. Randolph St. Chicago, IL 60607	Calumet WRP	4/25, 4/26	45.3	45.3	Topdressing as fertilizer for turf growth	2	22.6
9	Romeoville High School 100 N. Independence Blvd. Romeoville, IL	Calumet WRP	4/27, 5/22	60.8	60.8	Topdressing as fertilizer for turf growth	3	20.3
10	Glenwoodie Golf Course 19301 State St. Glenwood, IL 60425	Calumet WRP	5/15	31.0	31.0	Topdressing as fertilizer for turf growth	2	15.5

TABLE 1 (Continued): 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		
				2nd Quarter 2012	Cumulative 2012	Biosolids Use	Area (acres)	Rate (tons/acre)
11	Frankfort Park District Commissioners Park 140 Oak St. Frankfort Park, IL 60423	Calumet WRP	5/16	43.7	43.7	Topdressing as fertilizer for turf growth	2	21.8
12	York Center Park District Knolls Park 1502 S. Meyers Rd. Lombard, IL 60148	Calumet WRP	5/16	27.9	27.9	Topdressing as fertilizer for turf growth	2	14.0
13	Alsip Park District Sears Park 125 S Kostner Ave. Alsip, IL 60803	Calumet WRP	5/22	160.3	160.3	Topdressing as fertilizer for turf growth	7	22.9
14	De La Salle High School 3455 S Wabash Ave. Chicago, IL 60616	Calumet WRP	5/23	32.7	32.7	Topdressing as fertilizer for turf growth	2	16.3
15	Twin Orchard Country Club 22353 Old McHenry Rd. Long Grove, IL 60047	Calumet WRP	5/23, 5/30	103.6	103.6	Topdressing as fertilizer for turf growth	5	20.7



TABLE 1 (Continued): 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)		Biosolids Use	Application	
				2nd Quarter 2012	Cumulative 2012		Area (acres)	Rate (tons/acre)
16	Markham Park District 16053 Richmond Ave. Markham, IL 60428	Calumet WRP	5/30	16.4	16.4	Topdressing as fertilizer for turf growth	1	16.4
17	Evergreen Park High School, 9901 South Kedzie Ave. Evergreen Park, IL 60805	Calumet WRP	5/31	53.5	53.5	Topdressing as fertilizer for turf growth	3	17.8
18	Hillcrest High School 17401 S. Pulaski Rd. Country Club Hills, IL 60478	Calumet WRP	6/5	65.4	65.4	Topdressing as fertilizer for turf growth	3	21.8
19	Evanston High School 1600 Dodge Ave. Evanston, IL 60201	Calumet WRP	6/6, 6/21	73.9	73.9	Topdressing as fertilizer for turf growth	3	24.6
20	Evergreen Cemetary 3401 W. 87 <sup>th</sup> St. Evergreen Park, IL 60805	Calumet WRP	6/7	15.1	15.1	Topdressing as fertilizer for turf growth	1	15.1
21	River Trails Park District Willow Trails Park 801 Apple Dr. Prospect Heights, IL 60070	Calumet WRP	6/27	58.9	58.9	Topdressing as fertilizer for turf growth	3	19.6

TABLE 1 (Continued): 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		
				2nd Quarter 2012	Cumulative 2012	Biosolids Use	Area (acres)	Rate (tons/acre)
22	River Trails Park District Main Park 1500 E. Euclid Ave. Mt. Prospect, IL 60056	Calumet WRP	6/27	98.4	98.4	Topdressing as fertilizer for turf growth	4	24.6
23	Stickney WRP Metropolitan Water Reclamation District of Greater Chicago 6001 W. Pershing Rd. Cicero, IL 60804	Stickney WRP	5/30, 6/11	854.0	854.0	Incorporation with top soil for turf growth	14	61.0
24	Romeoville Park District Volunteer Park 1099 Murphy Dr. Romeoville, IL 60446	Stickney WRP	6/5	96.8	96.8	Topdressing as fertilizer for turf growth	4	24.2
25	Cinder Ridge Golf Course 24801 Lakepoint Dr. Wilmington, IL 60481	Stickney WRP	6/6, 6/7, 6/8	288.0	1472.7	Topdressing as fertilizer for turf growth	12	24.0
26	Village of Orland Hills Ridgegate Park 17001 94th Ave. Orland Hills, IL 60487	Stickney WRP	6/7	78.4	78.4	Topdressing as fertilizer for turf growth	3	26.1

TABLE 1 (Continued): 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		
				2nd Quarter 2012	Cumulative 2012	Biosolids Use	Area (acres)	Rate (tons/acre)
27	Mid Iron Golf Course 12680 Bell Rd. Lemont, IL 60439	Stickney WRP	6/11, 6/12	194.9	194.9	Topdressing as fertilizer for turf growth	8	24.4
28	St. Linus School 10400 S. Lawler Ave. Oak Lawn, IL 60453	Stickney WRP	6/12, 6/13	29.0	29.0	Topdressing as fertilizer for turf growth	2	14.5
29	Benet Academy 2200 Maple Ave. Lisle, IL 60532	Stickney WRP	6/15	17.4	17.4	Topdressing as fertilizer for turf growth	1	17.4
30	River Trails Park District Burning Bush Comm. Center 1313 Burning Bush Ln. Mt. Prospect, IL 60056	Stickney WRP	6/26	146.6	146.6	Topdressing as fertilizer for turf growth	6	24.4
31	River Trails Park District Marvin S. Weiss Comm. Center 1500 E. Euclid Ave. Mt. Prospect, IL 60056	Stickney WRP	6/26, 6/27	146.1	146.1	Topdressing as fertilizer for turf growth	6	24.4
32	River Trails Park District Willow Trails Park 801 Apple Dr. Prospect Heights, IL 60070	Stickney WRP	6/27	38.7	97.6	Topdressing as fertilizer for turf growth	2	19.3

TABLE 2: ANALYSIS OF DIGESTED BIOSOLIDS APPLIED TO LAND FROM THE STICKNEY AND CALUMET WATER RECLAMATION PLANTS DRYING AREA DURING SECOND QUARTER OF 2012

User Location No. <sup>1</sup>	Calumet Water Reclamation Plant (WRP)									
	1	2, 3, 4, 5, 6, 7, 8, 9	6, 10, 11, 12	7, 9, 13, 14, 15	7, 15, 16, 17 18	7, 18, 19	20	19	21, 22	
<u>Constituent</u>	<u>Unit</u>									
pH		6.9	7.2	7.3	6.7	7.3	6.7	7.0	7.1	6.9
Total Solids	%	66.0	76.6	73.8	76.8	86.0	75.8	79.2	80.8	89.6
Total Volatile Solids	"	42.9	43.2	44.2	42.8	49.9	42.5	39.7	39.1	39.6
Volatile Acids as Acetic Acid	mg/kg	77	76	406	190	133	70	32	38	23
Total Kjeldahl-N	"	24,100	28,294	29,665	22,396	24,104	26,165	24,388	22,233	20,284
NH <sub>3</sub> -N	"	3,115	2,437	2,356	1,601	2,149	1,762	2,058	3,036	2,153
Total P	"	19,771	24,274	27,194	23,279	25,160	24,806	23,594	24,942	23,287
As	"	5.0	5.0	5.0	6.0	<5.0	6.0	5.0	6.0	7.0
Cd	"	2.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0
Cr	"	52	52	52	54	49	54	53	60	57
Cu	"	372	372	372	333	379	358	365	384	375
Hg	"	0.7	0.9	0.9	0.7	0.7	0.6	1.0	0.8	0.7
K	"	2,717	2,638	2,983	3,665	2,427	3,351	2,855	3,344	2,628
Mn	"	884	860	884	873	876	913	923	933	989
Mo	"	10.0	11.0	7.0	9.0	8.0	9.0	7.0	9.0	9.0
Ni	"	26	25	24	23	23	25	25	26	27
Pb	"	80	79	70	78	69	82	84	86	90
Se	"	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zn	"	970	944	914	895	931	935	940	994	1,052

TABLE 2 (Continued): ANALYSIS OF DIGESTED BIOSOLIDS APPLIED TO LAND FROM THE STICKNEY AND CALUMET WATER RECLAMATION PLANTS DRYING AREA DURING SECOND QUARTER OF 2012

User Location No. <sup>1</sup>	Stickney Water Reclamation Plant (WRP)						
	24	25, 26	27, 28	29	30	31, 32	
<u>Constituent</u>	<u>Unit</u>						
pH		6.4	6.7	6.4	6.6	6.7	6.7
Total Solids	%	65.9	85.0	90.2	78.9	79.2	87.4
Total Volatile Solids	"	43.0	43.8	39.4	43.1	42.9	44.4
Volatile Acids as Acetic Acid	mg/kg	333	173	119	155	99	153
Total Kjeldahl-N	"	23,991	25,402	16,839	22,071	25,005	17,351
NH <sub>3</sub> -N	"	3,064	2,854	2,009	2,987	3,614	2,897
Total P	"	20,488	21,510	12,274	18,554	21,984	12,877
As	"	8.0	7.0	6.0	8.0	8.0	7.0
Cd	"	3.0	3.0	4.0	3.0	3.0	3.0
Cr	"	141	131	138	140	145	144
Cu	"	420	397	389	429	476	429
Hg	"	1.1	0.7	0.7	0.9	0.9	0.8
K	"	2,906	3,371	3,602	4,012	2,172	2,857
Mn	"	539	505	554	549	589	544
Mo	"	13.0	10.0	9.0	11.0	11.0	11.0
Ni	"	46	38	38	41	45	43
Pb	"	106	93	97	109	113	98
Se	"	<5	<5	<5	<5	<5	<5
Zn	"	802	730	752	824	929	847

<sup>1</sup>Locations listed in Table 1.

NA= No analysis.