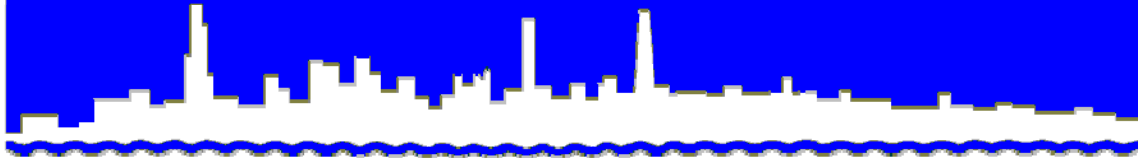


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 12-47

CONTROLLED SOLIDS DISTRIBUTION REPORT

FOR THIRD QUARTER 2012

December 2012

Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street

Chicago, Illinois 60611-3154

312.751.5190

Thomas C. Granato, Ph.D.

Director of Monitoring and Research Department

thomas.granato@mwrdd.org

November 26, 2012

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, Third Quarter (July – September 2012)

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago - Controlled Solids Distribution Program for the third quarter (July – September 2012) as required by Illinois Environmental Protection Agency Permit No. 2010-SC-0200 and 2010-SC-0200-2.

Estimated sludge mass flow schematic diagrams for solids processed during July – September 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 22 sites during the third quarter of 2012. The user information report for these sites is presented in Tables 1 and 2, and the analysis of biosolids delivered to these sites is presented in Tables 3 and 4.

Very truly yours,

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

TCG:OO:cm

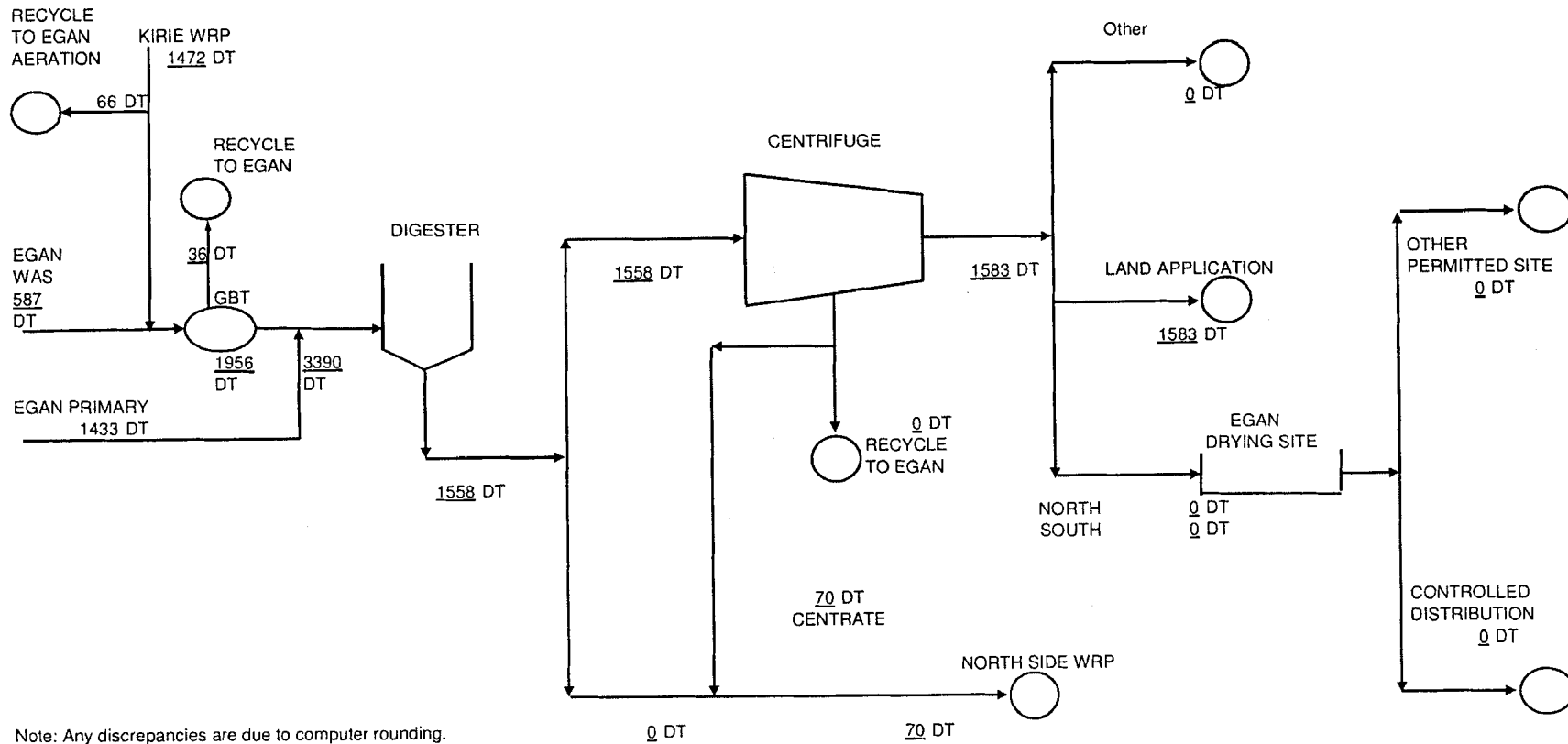
Attachments

cc: Mr. V. Aistars (USEPA)

Mr. J. Patel (IEPA)

J.E. EGAN WRP SOLIDS DISTRIBUTION- FIGURE 1

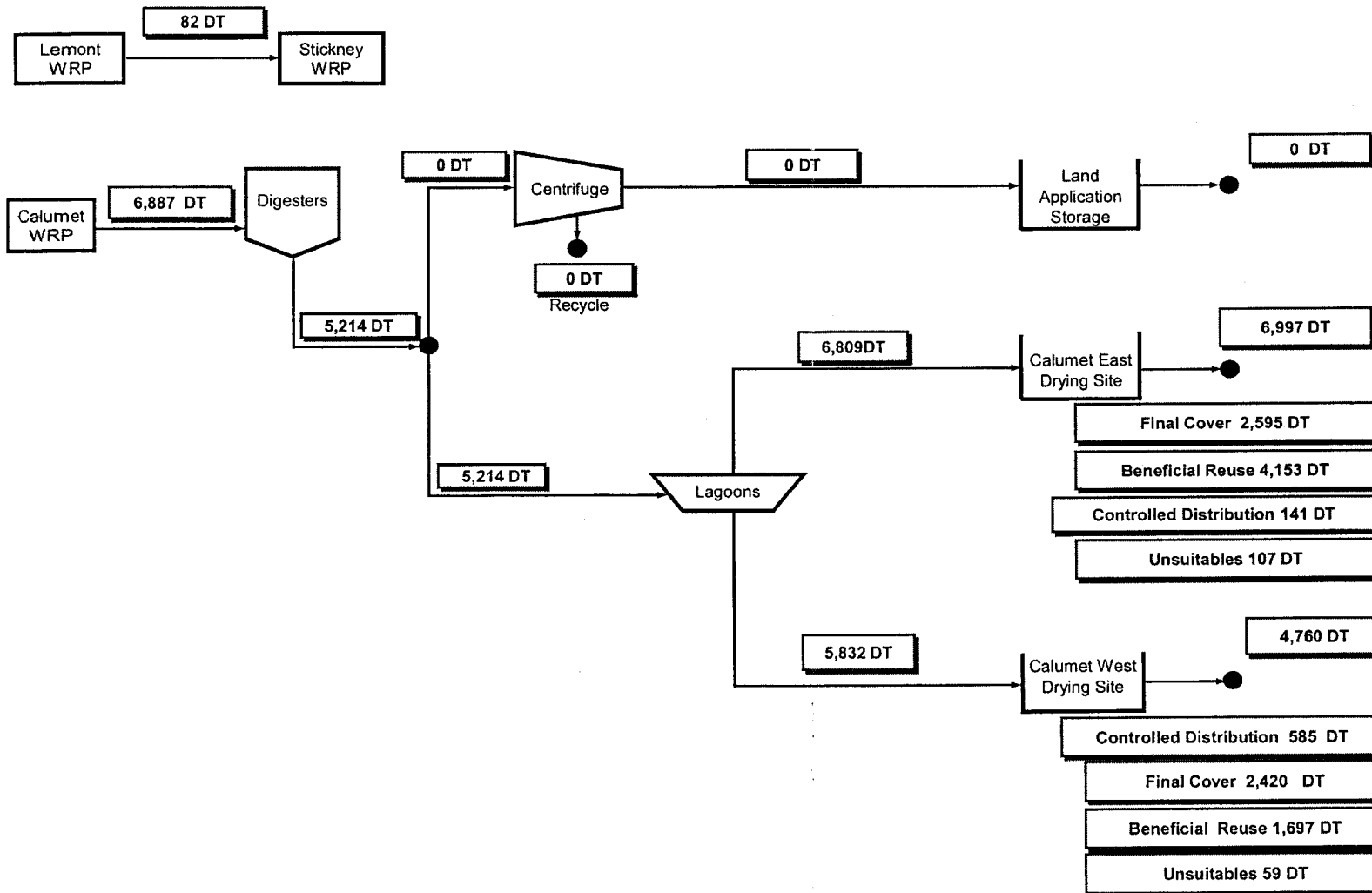
July - September 2012



Note: Any discrepancies are due to computer rounding.
Centrifuge draw DT exceeds Centrifuge feed DT in July and August because of sample anomalies. Centrate DT are estimated.

CALUMET WRP SOLIDS DISTRIBUTION - Third Quarter 2012

Figure 2



**STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR 3rd QUARTER 2012
FIGURE 3**

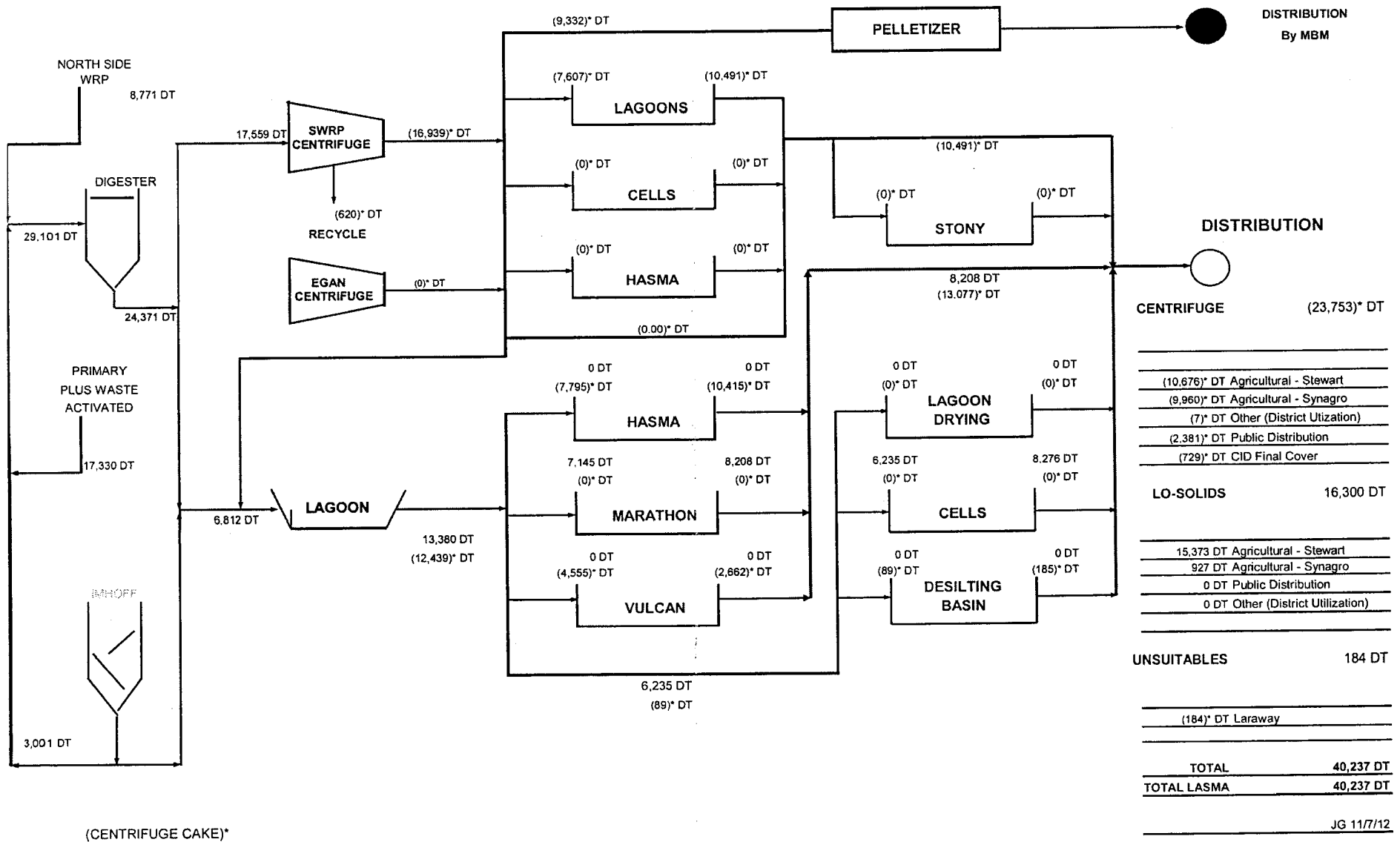


TABLE 1: USER INFORMATION FOR THE STICKNEY WATER RECLAMATION PLANT'S AIR-DRIED BIOSOLIDS DISTRIBUTED UNDER THE CONTROLLED SOLIDS DISTRIBUTION PROGRAM DURING THE THIRD QUARTER OF 2012

Site No.	Name and Address of User	Dates	Quantity, dry ton		Purpose	Application	
			3rd Quarter	Cumulative		Area (acre)	Rate (ton/acre) ¹
1	Frankfort Square Park District Union Creek Community Park 19900 S. 80th Ave. Tinley Park, IL 60477	7/9, 7/10, 7/11, 7/12	650.8	650.8	Topdressing fertilizer for turf growth	25	26.0
2	St. Charles Park District James O. Breen Park 3615 Campton Hills Rd. St. Charles, IL 60174	7/30, 7/31	202.1	202.1	Topdressing fertilizer for turf growth	8	25.3
3	Hubble Middle School 3S600 Herrick Rd. Warrenville, IL 60555	8/2, 8/3, 8/6	694.9	694.9	Soil amendment for turf estab- lishment	10	69.5
4	West Chicago Park District Cornerstone Park 157 W. Washington St. West Chicago, IL 60185	8/23	71.7	71.7	Topdressing fertilizer for turf growth	3	23.9
5	Lisle Park District Community Park 1825 Short St. Lisle, IL 60532	8/24	35.9	35.9	Topdressing fertilizer for turf growth	2	17.9

TABLE 1 (Continued): USER INFORMATION FOR THE STICKNEY WATER RECLAMATION PLANT'S AIR-DRIED BIOSOLIDS DISTRIBUTED UNDER THE CONTROLLED SOLIDS DISTRIBUTION PROGRAM DURING THE THIRD QUARTER OF 2012

Site No.	Name and Address of User	Dates	Quantity, dry ton		Purpose	Application	
			3rd Quarter	Cumulative		Area (acre)	Rate (ton/acre) ¹
6	Midlothian Park District Memorial Park 14500 S. Kostner Ave. Midlothian, IL 60445	9/12	170.6	170.6	Topdressing fertilizer for turf growth	7	24.4
7	Joliet Township High School 201 E. Johnson St. Joliet, IL 60432	9/12	63.8	63.8	Topdressing fertilizer for turf growth	3	21.3
8	Twin Orchard Golf Club 22353 Old McHenry Rd. Long Grove, IL 60047	9/12, 9/22	208.8	312.4	Topdressing fertilizer for turf growth	14	22.3
9	Village Greens of Woodridge 1575 W. 75th St. Woodridge, IL 60517	9/12	43.8	43.8	Topdressing fertilizer for turf growth	2	21.9
10	Oak Lawn Park District Centennial Park 93rd and Oak Park Ave. Oak Lawn, IL 60453	9/21	12.7	12.7	Topdressing fertilizer for turf growth	0.5	25.4

TABLE 1 (Continued): USER INFORMATION FOR THE STICKNEY WATER RECLAMATION PLANT'S AIR-DRIED BIOSOLIDS DISTRIBUTED UNDER THE CONTROLLED SOLIDS DISTRIBUTION PROGRAM DURING THE THIRD QUARTER OF 2012

Site No.	Name and Address of User	Dates	Quantity, dry ton		Purpose	Application	
			3rd Quarter	Cumulative		Area (acre)	Rate (ton/acre) ¹
11	Chicago Park District Horner Park 2741 W. Montrose Ave. Chicago, IL 60611	9/26, 9/27, 9/28	211.2	211.2	Topdressing fertilizer for turf growth	9	23.5
12	Northfield Park District Willow Park 401 Wagner Rd. Northfield, IL 60093	9/27	14.9	14.9	Topdressing fertilizer for turf growth	1	14.9

¹Application rate is based on quantity of biosolids distributed in 3rd quarter.

TABLE 2: USER INFORMATION FOR THE CALUMET WATER RECLAMATION PLANT'S AIR-DRIED BIOSOLIDS DISTRIBUTED UNDER THE CONTROLLED SOLIDS DISTRIBUTION PROGRAM DURING THE THIRD QUARTER OF 2012

Site No.	Name and Address of User	Dates	Quantity, dry ton		Purpose	Application	
			3rd Quarter	Cumulative		Area (acre)	Rate (ton/acre) ¹
1	Luther South High School 3130 W. 87th St. Chicago, IL 60652	7/2	35.2	35.2	Topdressing fertilizer for turf growth	2	17.6
2	Ted's Greenhouse Inc. 16930 South 84th Ave. Tinley Park, IL 60477	7/5	16.8	16.8	Topdressing fertilizer for turf growth	1	16.8
3	Frankfort Square Park District Square Links Park 19900 S. 80th Ave. Tinley Park, IL 60487	7/16	88.8	88.8	Topdressing fertilizer for turf growth	4	22.2
4	Posen Park District Memorial Park 14200 S. Campbell Ave. Posen, IL 60469	8/2	12.4	12.4	Topdressing fertilizer for turf growth	1	12.4
5	Posen Park District Commissioners' Park 147th St. & Sacramento Posen, IL 60469	8/2	23.0	23.0	Topdressing fertilizer for turf growth	1	23.0

TABLE 2 (Continued): USER INFORMATION FOR THE CALUMET WATER RECLAMATION PLANT'S AIR-DRIED BIOSOLIDS DISTRIBUTED UNDER THE CONTROLLED SOLIDS DISTRIBUTION PROGRAM DURING THE THIRD QUARTER OF 2012

Site No.	Name and Address of User	Dates	Quantity, dry ton		Purpose	Application	
			3rd Quarter	Cumulative		Area (acre)	Rate (ton/acre) ¹
6	Reavis High School 6034 W. 77th St. Burbank, IL 60459	8/2	66.6	66.6	Topdressing fertilizer for turf growth	3	22.2
7	Village of Romeoville Irene H. King Elementary School 301 Eaton Avenue Romeoville IL 60446	8/10	108.9	108.9	Topdressing fertilizer for turf growth	5	21.8
8	West Chicago Park District Reed-Kepler Park 157 W. Washington St. West Chicago, IL 60185	9/6	61.4	61.4	Topdressing fertilizer for turf growth	3	20.5
9	West Chicago Park District Pioneer Park 157 W. Washington St. West Chicago, IL 60185	9/10	64.6	64.6	Topdressing fertilizer for turf growth	3	21.5
10	Midlothian Park District Memorial Park 14500 S. Kostner Ave. Midlothian, IL 60445	8/31 9/11, 9/14	248.3	418.9 ²	Topdressing fertilizer for turf growth	11	22.6

¹Application rate is based on quantity of biosolids distributed in 3rd quarter.

²Sum of biosolids received from Calumet and Stickney Water Reclamation Plants.

TABLE 3: ANALYSIS OF AIR-DRIED BIOSOLIDS APPLIED TO LAND FROM THE STICKNEY WATER RECLAMATION PLANT'S SOLIDS DRYING AREAS DURING THE THIRD QUARTER OF 2012

Sampling Date		7/9	7/30	8/2	8/6	8/21	9/12	9/21	9/26
Site No. ¹		1	2	3	3	4, 5	6, 7, 8, 9	10	11, 12
Constituent	Unit								
pH		7.2	6.7	6.5	6.7	6.6	6.1	6.0	6.6
Total Solids	%	80.1	70.0	71.5	75.5	66.2	67.9	66.8	69.6
Total Volatile Solids	"	40.4	40.3	38.4	42.4	41.0	40.2	36.5	40.9
Volatile Acids as Acetic Acid	mg/kg	NRR ²	197	217	109	100	41	67	60
Total Kjeldahl-N	"	16,976	10,478	8,909	21,550	29,029	21,452	18,134	21,152
NH ₃ -N	"	4,586	2,137	1,774	3,012	3,215	696	527	793
Total P	"	15,068	8,568	7,919	17,898	26,818	24,316	22,297	24,605
As	"	8.0	8.0	8.0	9.0	9.0	7.0	10.0	10.0
Cd	"	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Cr	"	141	145	144	150	153	143	155	151
Cu	"	377	448	460	422	414	408	404	444
Hg	"	1.0	1.4	1.0	1.0	0.8	0.9	1.0	0.9
K	"	3,722	2,823	2,479	2,983	2,852	2,891	3,408	1,509
Mn	"	499	547	558	579	612	547	607	589
Mo	"	10.0	10.0	10.0	11.0	10.0	9.0	9.0	10.0
Ni	"	38.0	40.0	40.0	41.0	40.0	38.0	39.0	40.0
Pb	"	106	122	126	125	122	116	128	126
Se	"	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Zn	"	778	836	840	852	855	797	866	871

¹Sites listed in Table 1.

²No reportable result.

TABLE 4: ANALYSIS OF AIR-DRIED BIOSOLIDS APPLIED TO LAND FROM THE CALUMET WATER RECLAMATION PLANT'S SOLIDS DRYING AREAS DURING THE THIRD QUARTER OF 2012

Sampling Date		7/2	7/11	7/18	8/8	8/16	9/10	9/12
Site No. ¹		1	2	3	4, 5, 6	7, 8	9, 10	10
<u>Constituent</u>	<u>Unit</u>							
pH		6.9	7.3	7.3	7.3	6.9	7.4	6.5
Total Solids	%	89.6	82.4	85.0	74.3	71.2	67.1	72.1
Total Volatile Solids	"	39.6	47.1	46.6	43.9	43.6	41.5	42.5
Volatile Acids as Acetic Acid	mg/kg	23	150	213	135	108	624	184
Total Kjeldahl-N	"	20,284	32,294	24,296	27,637	26,064	18,730	25,158
NH ₃ -N	"	2,153	3,748	5,244	3,380	3,521	3,866	3,644
Total P	"	23,287	31,090	25,461	32,501	33,353	21,322	32,872
As	"	7.0	6.0	7.0	6.0	7.0	8.0	5.0
Cd	"	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Cr	"	57	48	48	49	52	57	46
Cu	"	375	437	403	425	390	402	399
Hg	"	0.7	0.6	0.8	0.9	0.7	0.7	0.9
K	"	2,628	4,012	4,939	4,295	4,349	4,317	3,253
Mn	"	989	926	874	897	994	963	901
Mo	"	9.0	9.0	8.0	9.0	8.0	9.0	8.0
Ni	"	27.0	29.0	26.0	27.0	27.0	27.0	25.0
Pb	"	90	70	69	73	74	81	72
Se	"	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Zn	"	1,052	1,159	1,038	1,060	1,036	1,071	1,019

¹Sites listed in Table 2.