

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 13-26

CONTROLLED SOLIDS DISTRIBUTION REPORT

FOR SECOND QUARTER 2013

August 2013

Protecting Our Water Environment

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August 16, 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 2013)

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 2013) 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 April – June 2013 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 ten sites during the second quarter of 2013. 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

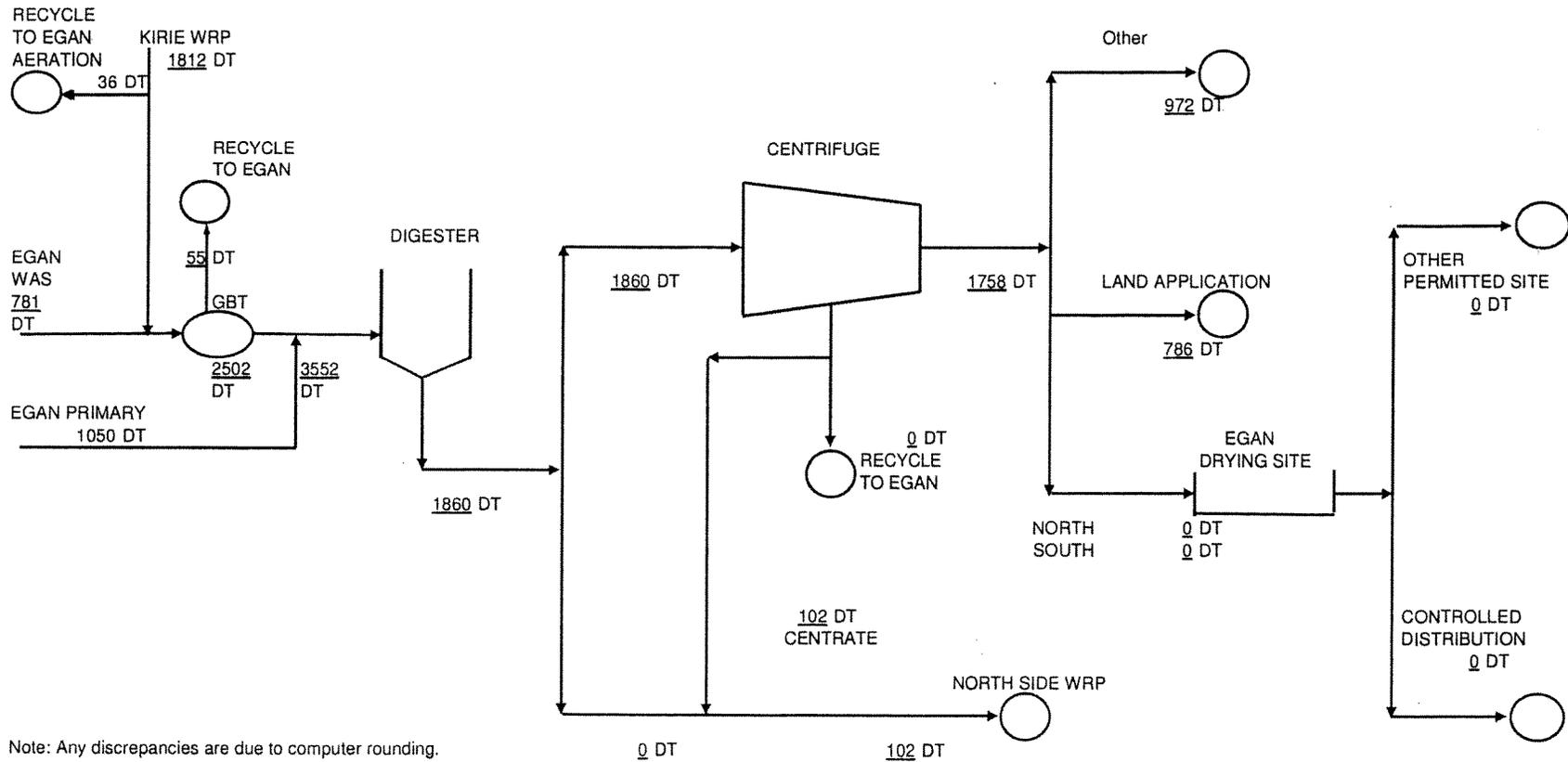
TCG:OO:cm

Attachments

cc: Mr. V. Aistars (USEPA)
Mr. J. Patel (IEPA)

J.E. EGAN WRP SOLIDS DISTRIBUTION- FIGURE 1

April - June 2013



Note: Any discrepancies are due to computer rounding.

CALUMET WATER RECLAMATION PLANT SOLIDS DISTRIBUTION - Second Quarter 2013

Figure 2

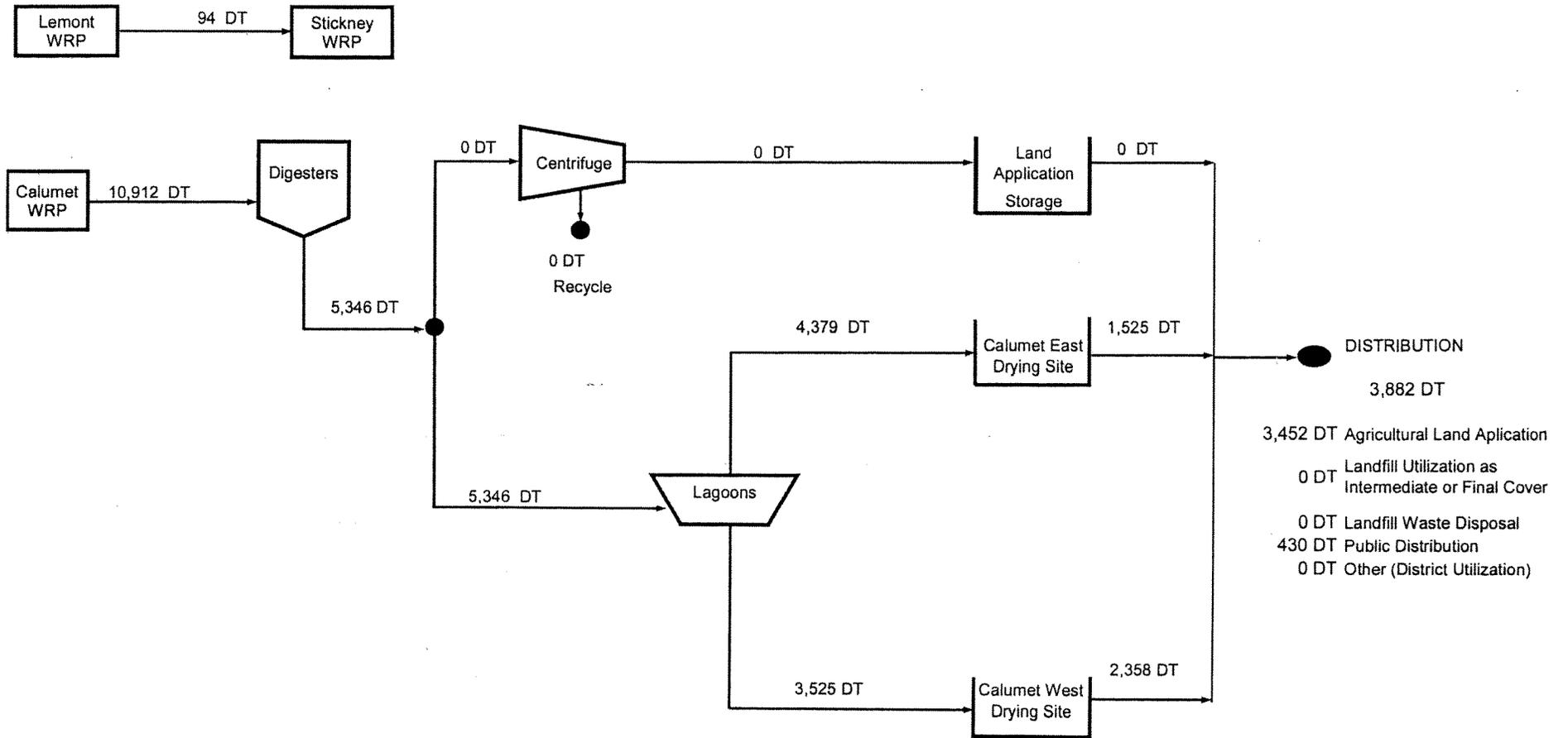


TABLE 1: USER INFORMATION FOR THE STICKNEY WATER RECLAMATION PLANT'S AIR-DRIED BIOSOLIDS DISTRIBUTED UNDER THE CONTROLLED SOLIDS DISTRIBUTION PROGRAM DURING THE SECOND QUARTER OF 2013

Site No.	Name and Address of User	Dates	Quantity, dry ton		Application		
			2nd Quarter	Cumulative	Purpose	Area (acre)	Rate (ton/acre) ¹
1	St. Benedictine University 5700 College Rd. Lisle, IL 60532	06/19	54.1	54.1	Topdressing fertilizer for turf growth	4	13.5
2	Wauconda High School 555 N. Main St. Wauconda, IL 60084	06/19, 06/20, 06/21	44.2	44.2	Topdressing fertilizer for turf growth	3	14.7
3	Turfcare Landscaping Inc. Emerson Square 1700 W. Foster Evanston, IL 60201	06/19, 06/27	90.2	90.2	Soil amendment for turf establishment	2	45.1

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

TABLE 2: USER INFORMATION FOR THE CALUMET WATER RECLAMATION PLANT'S AIR-DRIED BIOSOLIDS DISTRIBUTED UNDER THE CONTROLLED SOLIDS DISTRIBUTION PROGRAM DURING THE SECOND QUARTER OF 2013

Site No.	Name and Address of User	Dates	Quantity, dry ton		Application		
			2nd Quarter	Cumulative	Purpose	Area (acre)	Rate (ton/acre) ¹
1	Frankfort Park District Main Park 401 W. Nebraska St. Frankfort, IL 60423	06/18	31.7	31.7	Topdressing fertilizer for turf growth	2	15.8
2	Bremen Township 6801 W 157 th Pl. Oak Forest, IL 60477	06/18, 06/19	63.9	63.9	Soil amendment for turf establishment	2	31.9
3	Riverdale Park District Franson Park 250 W. 144 th St. Riverdale, IL 60827	06/25	59.4	59.4	Topdressing fertilizer for turf growth	4	14.9
4	Riverdale Park District Mohawk Park 137th St/S. Perry Ave. Riverdale, IL 60827	06/27	56.9	56.9	Topdressing fertilizer for turf growth	4	14.2
5	Harvey Park District Holmes Park 160 th & Woodbridge Ave. Harvey, IL 60426	06/27	70.6	70.6	Topdressing fertilizer for turf growth	6	11.8
6	Alsip Park District Sears Park 12500 S. Kostner Ave. Alsip, IL 60803	06/28	147.7	147.7	Topdressing fertilizer for turf growth	8	18.5

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

TABLE 3: ANALYSIS OF AIR-DRIED BIOSOLIDS APPLIED TO LAND FROM THE STICKNEY WATER RECLAMATION PLANT'S SOLIDS DRYING AREAS DURING THE SECOND QUARTER OF 2013

Sampling Date	19-Jun	27-Jun
Site No. ¹	1, 2, 3	3
Constituent	Unit	
pH		6.0 6.1
Total Solids	%	67.0 60.5
Total Volatile Solids	"	34.9 36.5
Volatile Acids as Acetic Acid	mg/kg	70 121
Total Kjeldahl Nitrogen	"	21,772 15,186
NH ₃ -N	"	1,081 382
Total P	"	24,162 16,596
As	"	8.0 10.0
Cd	"	3.0 3.0
Cr	"	147 144
Cu	"	423 371
Hg	"	0.9 1.1
K	"	2,286 3,782
Mn	"	576 529
Mo	"	7.0 7.0
Ni	"	39.0 37.0
Pb	"	123 120
Se	"	<5.0 <5.0
Zn	"	833 785

¹Batches of biosolids applied to sites listed in [Table 1](#).

TABLE 4: ANALYSIS OF AIR-DRIED BIOSOLIDS APPLIED TO LAND FROM THE CALUMET WATER RECLAMATION PLANT'S SOLIDS DRYING AREAS DURING THE SECOND QUARTER OF 2013

Sampling Date	19-June	
Site No. ¹	1, 2, 3, 4, 5, 6	
Constituent	Unit	
pH		6.5
Total Solids	%	73.4
Total Volatile Solids	"	43.0
Volatile Acids as Acetic Acid	mg/kg	68
Total Kjeldahl Nitrogen	"	17,743
NH ₃ -N	"	595
Total P	"	18,931
As	"	5.0
Cd	"	2.0
Cr	"	50.0
Cu	"	419
Hg	"	0.9
K	"	2,237
Mn	"	936
Mo	"	8.0
Ni	"	26.0
Pb	"	79.0
Se	"	<5.0
Zn	"	1,096

¹Same batch of biosolids applied to all sites listed in [Table 2](#).