

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 17-21

FOR FIRST QUARTER 2017



Metropolitan Water Reclamation District of Greater Chicago

CECIL LUE-HING RESEARCH AND DEVELOPMENT COMPLEX
6001 WEST PERSHING ROAD CICERO, ILLINOIS 60804-4112

May 2, 2017

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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.

2015-SC-59620, First Quarter (January – March 2017)

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago – Controlled Solids Distribution Program for the first quarter (January – March 2017), as required by Illinois Environmental Protection Agency Permit No. 2015-SC-59620.

Sludge flow schematic diagrams for solids processed during January – March 2017 are shown in Figure 1 – John E. Egan Water Reclamation Plant (WRP), Figure 2 – Calumet WRP, and Figure 3 – Stickney WRP.

Composted biosolids were used at two sites during the first quarter of 2017. The user information reports for these sites are presented in $\underline{\text{Table 1}}$, and the analyses of composed biosolids delivered to these sites are presented in $\underline{\text{Table 2}}$.

Very truly yours,

Albert E. Cox, Ph.D. Environmental Monitoring and Research Manager Monitoring and Research Department

AC:OO:cm Attachments

cc/att: Mr. J. Colletti (USEPA)/Mr. J. Patel (IEPA)

Mr. E. Podczerwinski

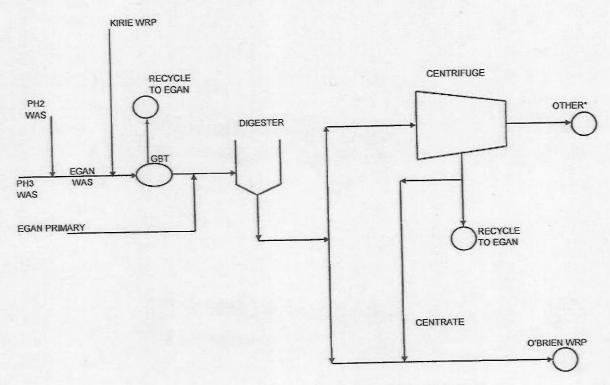
Mr. J. Murray/Mr. B. Garelli/Mr. T. Conway Mr. Ahmad Laban/Dr. H. Zhang/Dr. A. Cox

Dr. G. Tian/Dr. O. Oladeji

CONTROLLED SOLIDS DISTRIBUTION REPORT FOR FIRST QUARTER 2017

Monitoring and Research Department Edward W. Podczerwinski, Acting Director

FIGURE 1: JOHN E. EGAN WATER RECLAMATION PLANT OPERATIONAL FLOW CHART FOR FIRST QUARTER 2017



^{*}Sent to either Stickney or Calumet drying sites for further processing or storage prior to farmland application.

FIGURE 2: CALUMET WATER RECLAMATION PLANT OPERATIONAL FLOW CHART FOR FIRST QUARTER 2017

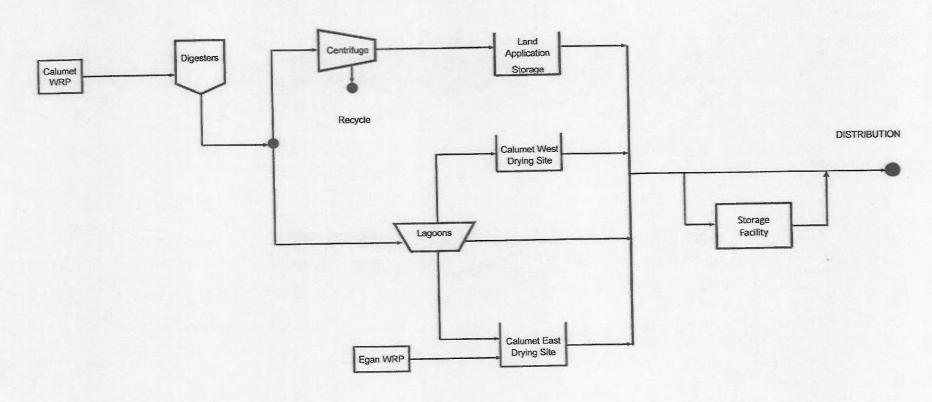


FIGURE 3: STICKNEY WATER RECLAMATION PLANT OPERATIONAL FLOW CHART FOR FIRST QUARTER 2017

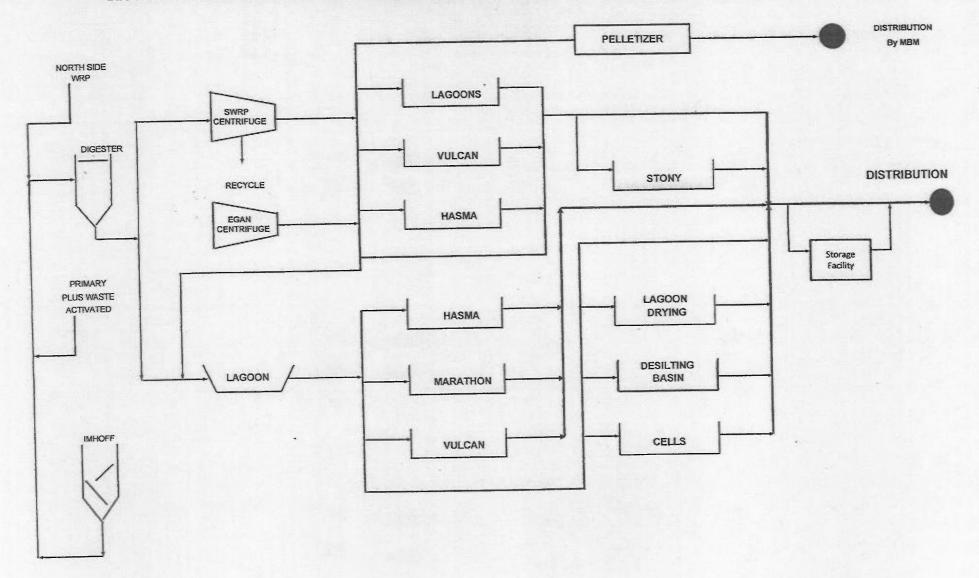


TABLE 1: USER INFORMATION FOR THE STICKNEY WATER RECLAMATION PLANT'S COMPOSTED BIOSOLIDS DISTRIBUTED UNDER THE CONTROLLED SOLIDS DISTRIBUTION PROGRAM DURING THE FIRST QUARTER OF 2017

Site No.	Name and Address of User	Dates	Quantity, Dry Ton		Application		
			First Quarter	Cumulative	Purpose	Area (acre)	Rate (ton/acre)
1	Metropolitan Water Reclamation District of Greater Chicago O'Brien WRP 3500 Howard St. Skokie, IL 60076	2/03	7.7	7.7	Compost as soil amendment for trees	NAI	NA
2	Metropolitan Water Reclamation District of Greater Chicago Stickney WRP 6001 W. Pershing Rd. Cicero, IL 60804	2/17	5.9	5.9	Compost as soil amendment for trees	NA	NA

Not applicable

TABLE 2: ANALYSIS OF COMPOSTED BIOSOLIDS APPLIED TO SOILS FROM THE STICKNEY WATER RECLAMATION PLANT'S SOLIDS DRYING AREAS DURING THE FIRST QUARTER OF 2017

Sampling Date	Feb. 3	
Site No.1		1, 2
Constituent	Unit	20
pH		6.7
Total Solids	%	45.5
Total Volatile Solids	90	47.5
Volatile Acids as Acetic Acid	mg/kg	37
Total Kjeldahl Nitrogen	51	15,637
NH ₃ -N	n	33
Total P	п	10,148
As	0	<5
Cd	99	2
Cr	19	51
Cu	14	190
Hg	. 19	0.3
K	11	3,965
Mn	n	338
Mo	n	2
Ni	"	21
Pb	e e	66
Se	e	<5
Zn	n	380

¹Batches of composted biosolids applied to sites are listed in <u>Table 1</u>.