

Metropolitan Water Reclamation District of Greater Chicago

### RESEARCH AND DEVELOPMENT DEPARTMENT

**REPORT NO. 07-68** 

MONTHLY CONTROLLED SOLIDS

**DISTRIBUTION REPORT** 

**AUGUST 2007** 

NOVEMBER 2007



Metropolitan Water Reclamation District of Greater Chicago100 EAST ERIE STREETCHICAGO, ILLINOIS 60611-3154312:751.5600

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Louis Kollias, P.E., BCEE Director of Research and Development

312.751.5190

November 9, 2007

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 IEPA Permit No. 2005-SC-3793, August 2007

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago (District) - Controlled Solids Distribution Program for August 2007, as required by Illinois Environmental Protection Agency Permit No. 2005-SC-3793.

Sludge flow schematic diagrams for solids processed during August 2007 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 three sites in August. The user information report for Moody Bible Institute, 820 N. LaSalle Blvd., Chicago is presented in <u>Table 1</u>, and the analysis of composited biosolids delivered in August to that site is presented in <u>Table 2</u>.

The user information report for Campton Hills Park, Intersection of Campton Hills Drive and Peck Road, St. Charles Park District, St. Charles is presented in <u>Table 3</u>, and the analysis of composited biosolids delivered in August to that site is presented in <u>Table 4</u>.

Mr. S. Alan Keller

November 9, 2007

Subject: Metropolitan Water Reclamation District of Greater Chicago – Con trolled Solids Distribution Program IEPA Permit No. 2005-SC-3793, August 2007

The user information report for White Pines Golf Club, 500 W. Jefferson Street, Bensenville is presented in <u>Table 5</u>, and the analysis of composited biosolids delivered in August to that site is presented in <u>Table 6</u>.

Very truly yours,

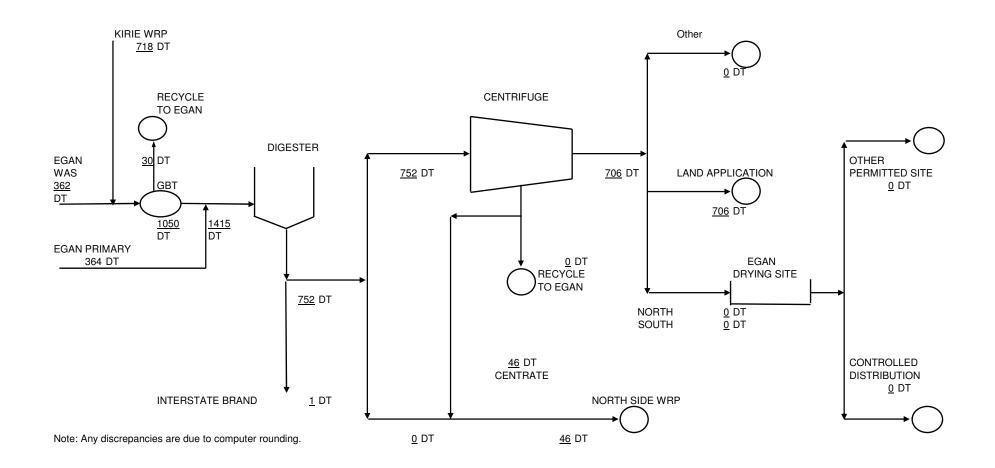
Louis Kollias Director Research and Development

LK:KK:spy Attachments

cc w/att.: Aistars (USEPA) Sulski (IEPA) Sobanski Granato/O'Connor/Cox cc wo/att: Garelli/Conway Sharma /Ford Frost/Collins Solids Diagram

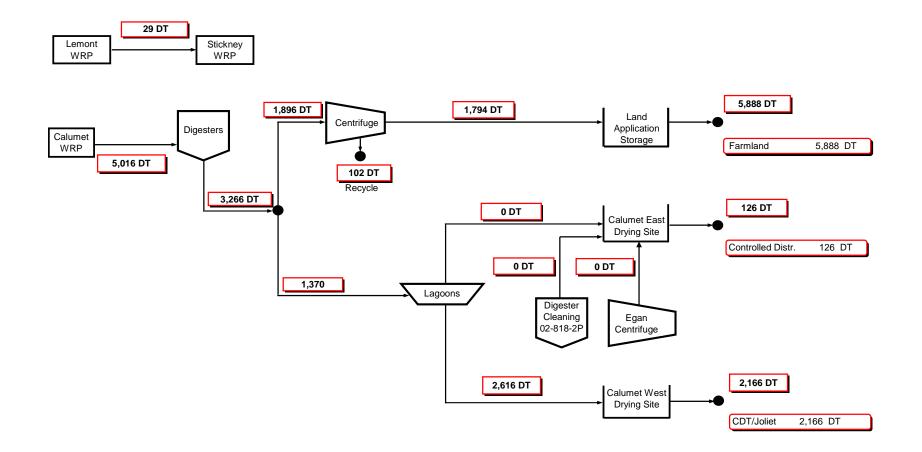
### J.E. EGAN WRP SOLIDS DISTRIBUTION-FIGURE 1

August-07



#### **CALUMET WRP SOLIDS DISTRIBUTION – August 2007**

Figure 2



#### STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR AUGUST 2007

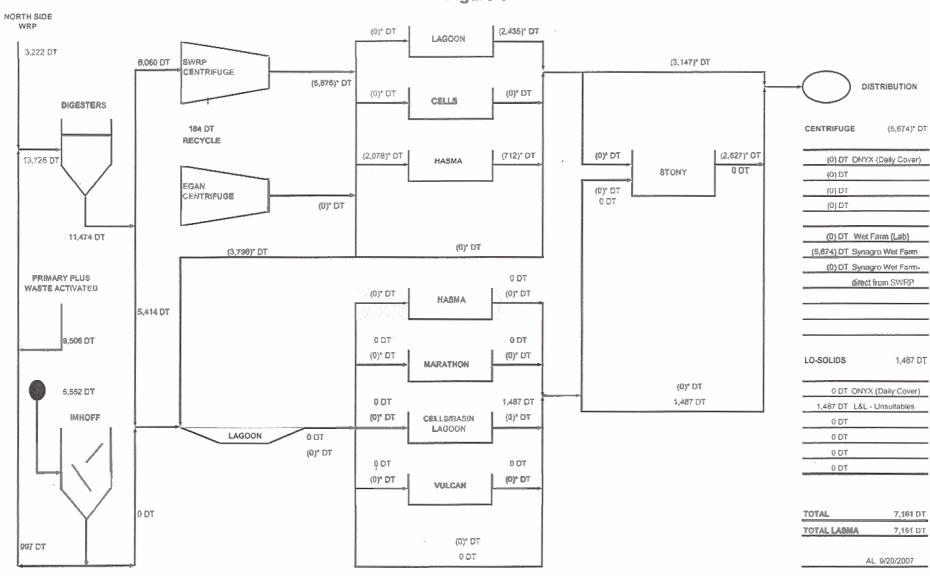


Figure 3

(CENTRIFUGE CAKE)\*

# TABLE 1: CONTROLLED SOLIDS DISTRIBUTION PROGRAMUSER INFORMATION REPORT

1.	Name of User:	Moody Bible Institute
2.	Address of User:	820 N. LaSalle Blvd. Chicago, IL 60610
3.	Type of Solids and Source:	Agitation dried lagooned anaerobically digested biosolids from the Calumet WRP. Drying was done at the Calumet East solids drying areas.
4.	Quantity Received (August 2007):	14.48 dry tons
	Cumulative Quantity Received in 2007:	14.48 dry tons
5.	Date Biosolids Received:	August 8, 2007
6.	Use of Biosolids at Site:	Used as top dressing in golf course turf areas.
7.	Size of Application Area:	3 acres
8.	Application Rate:	4.83 tons/acre

### TABLE 2: ANALYSIS\* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE MOODY BIBLE INSTITUTE SOCCER & BASEBALL FIELDS, 820 N. LASALLE CHICAGO, IL FROM THE CALUMET EAST DRYING AREA DURING AUGUST 2007

Constituent	Units	Concentration
рН		6.4
Total Solids	%	66.1
Total Volatile Solids	"	33.2
Volatile Acids as Acetic Acid	mg/dry kg	27
Total Kjeldahl-N	"	13,539
NH <sub>3</sub> -N	"	39
Total P	"	21,829
К	"	6,568
Cd	"	8.7
Cr	"	153
Cu	"	341
Pb	"	115
Hg	"	0.8
Mo	"	11.8
As	"	10.9
Mn	"	896
Ni	"	35.7
Se	"	7.0
Zn	"	1,048

\*Results based on one sample.

# TABLE 3: CONTROLLED SOLIDS DISTRIBUTION PROGRAMUSER INFORMATION REPORT

1.	Name of User:	St. Charles Park District
2.	Address of User:	Campton Hills Drive & Peck Road Campton Hills Park, St. Charles, IL
3.	Type of Solids and Source:	Agitation dried lagooned anaerobically digested biosolids from the Calumet WRP. Drying was done at the Calumet East solids drying areas.
4.	Quantity Received (August 2007):	83.71 dry tons
	Cumulative Quantity Received in 2007:	83.71 dry tons
5.	Date Biosolids Received:	August 30, 2007
6.	Use of Biosolids at Site:	Used as top dressing of turf on soccer fields.
7.	Size of Application Area:	6 acres
8.	Application Rate:	13.95 dry tons/acre

### TABLE 4: ANALYSIS\* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT CAMPTON HILLS PARK SOCCER FIELDS, ST. CHARLES, IL FROM THE CALUMET EAST DRYING AREA DURING AUGUST 2007

Constituent	Units	Concentration
рН		6.6
Total Solids	%	67.3
Total Volatile Solids	"	37.8
Volatile Acids as Acetic Acid	mg/dry kg	74
Total Kjeldahl-N	"	16,699
NH <sub>3</sub> -N	"	124
Total P	"	28,976
Κ	"	3,758
Cd	"	8.8
Cr	"	141
Cu	"	447
Pb	"	133
Hg	"	0.72
Mo	"	13.0
As	"	10.2
Mn	"	849
Ni	"	35.9
Se	"	9.4
Zn	u.	1,198

\*Results based on one sample.

# TABLE 5: CONTROLLED SOLIDS DISTRIBUTION PROGRAMUSER INFORMATION REPORT

1.	Name of User:	White Pines Golf Club
2.	Address of User:	500 W. Jefferson St. Bensenville, IL 60106
3.	Type of Solids and Source:	Agitation dried lagooned anaerobically digested biosolids from the Calumet WRP. Drying was done at the Calumet East solids drying areas.
4.	Quantity Received (August 2007):	28.22 dry tons
	Cumulative Quantity Received in 2007:	58.90
5.	Date Biosolids Received:	August 30, 2007
6.	Use of Biosolids at Site:	Used as top dressing in golf course turf areas.
7.	Size of Application Area:	1 acre
8.	Application Rate:	28.22 tons/acre

### TABLE 6: ANALYSIS\* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE WHITE PINES GOLF CLUB, 500 W. JEFFERSON ST., BENSENVILLE, IL DURING AUGUST 2007

Constituent	Units	Concentration
рН		6.6
Total Solids	%	68.2
Total Volatile Solids	"	37.1
Volatile Acids as Acetic Acid	mg/dry kg	60
Total Kjeldahl-N	"	15,472
NH <sub>3</sub> -N	"	148
Total P	"	25,701
К	u	4,123
Cd	"	8.8
Cr	"	147
Cu	"	465
Pb	u	138
Hg	"	0.78
Mo	"	12.7
As	"	10.5
Mn	"	836
Ni	"	37.9
Se	"	9.4
Zn	"	1,192

\*Results based on one sample.