

Metropolitan Water Reclamation District of Greater Chicago

## RESEARCH AND DEVELOPMENT DEPARTMENT

**REPORT NO. 06-49** 

MONTHLY CONTROLLED SOLIDS

DISTRIBUTION REPORT

JUNE 2006

**AUGUST 2006** 

#### Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

Kathleen Therese Meany Vice President Gloria Alitto Majewski Chairman of Finance Frank Avila James C. Harris Barbara J. McGowan Cynthia M. Santos Patricia Young Harry "Bus" Yourell

BOARD OF COMMISSIONERS Terrence J. O'Brien President

August 28, 2006

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

312 - 751 - 5190

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, June 2006

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago (District) - Controlled Solids Distribution Program for June 2006, as required by Illinois Environmental Protection Agency Permit No. 2005-SC-3793.

Sludge flow schematic diagrams for solids processed during June 2006 are shown in <u>Figure 1</u> - John E. Egan Water Reclamation Plant (WRP), Figure 2 - Calumet WRP, and Figure 3 - Stickney WRP.

Biosolids were distributed to two sites in June. The user information report for the Droldon Point M. South Ridge Elementary School, Plainfield School District 202 is presented in <u>Table 1</u>, and the analysis of composited biosolids delivered in June to that site is presented in Table 2.

The user information report for the Steger Veteran's Park football field and new soccer field, Village of Steger is presented in <u>Table 3</u>, and the analysis of composited biosolids delivered in June to that user is presented in <u>Table 4</u>.

Very truly yours,

Louis Kollias Director Research and Development

LK:KK:spy Attachments

cc w/att.:

Aistars (USEPA)

Sulski (IEPA)

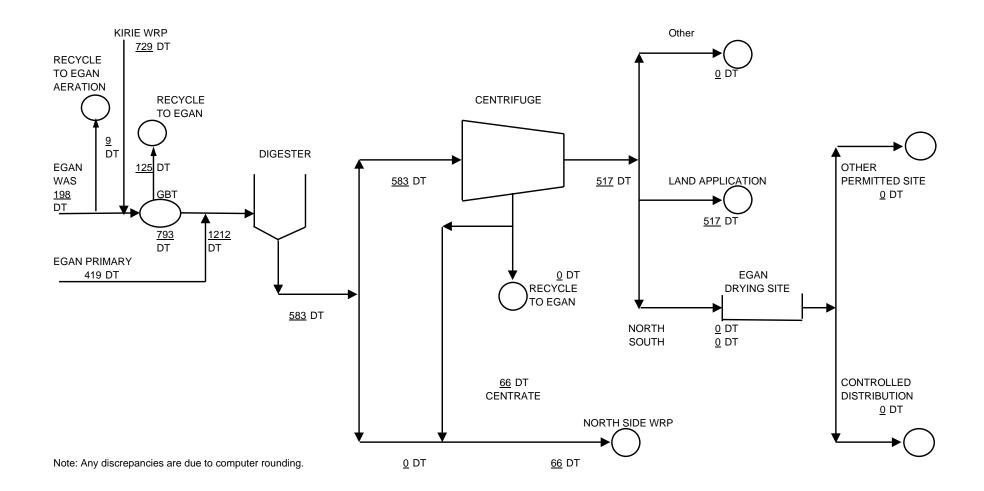
cc via MWRDGC web site:

Sobanski

Levy/Quintanilla Sharma /Conway Ballowe/Collins Granato/O'Connor Cox/Kumar/Dennison

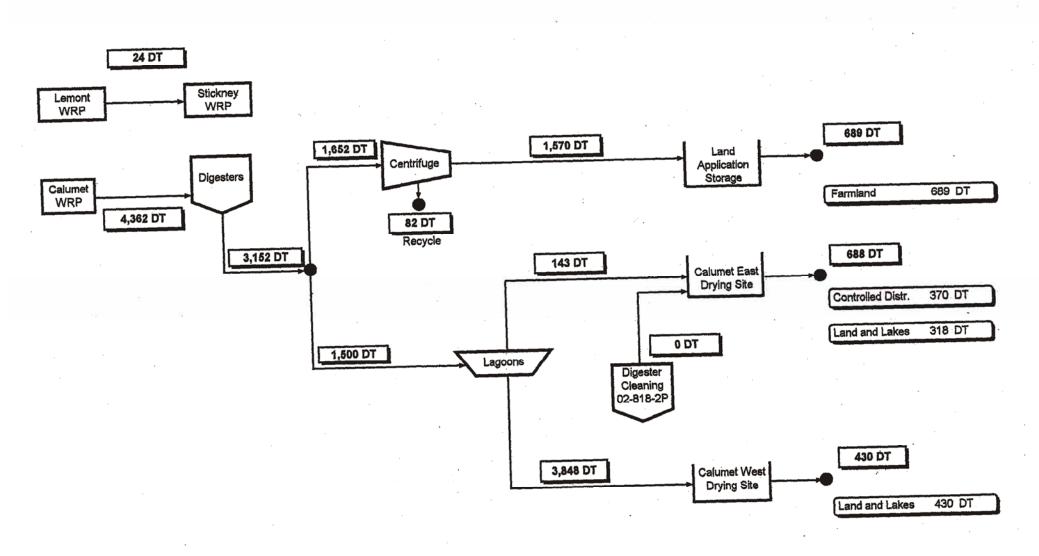
#### J.E. EGAN WRP SOLIDS DISTRIBUTION-FIGURE 1

June-06



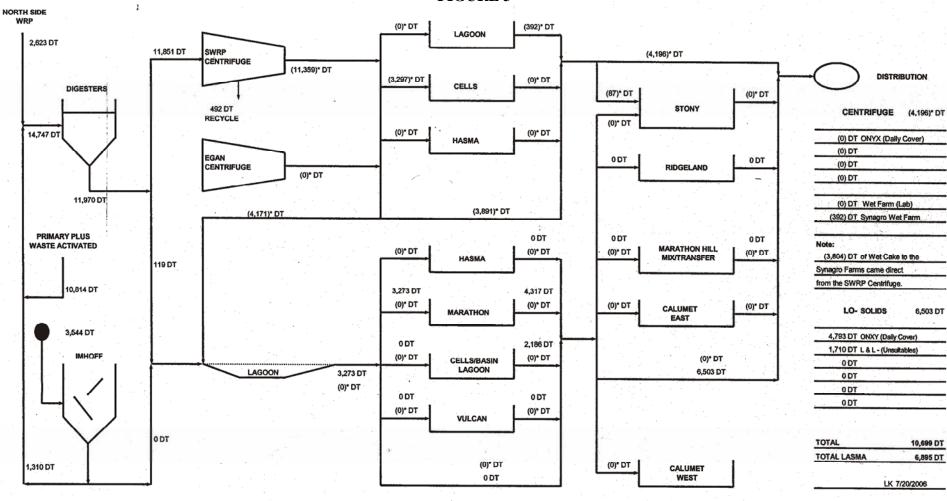
### **CALUMET WRP SOLIDS DISTRIBUTION - June 2006**

Figure 2



#### STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR JUNE 2006

#### FIGURE 3



(CENTRIFUGE CAKE)\*

#### TABLE 1

## CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT

Name of User: 1. Plainfield School District 202 2. Address of User: 15732 Howard Ave. Plainfield, IL 60544 3. Type of Solids and Agitation dried anaerobically digested biosolid Source: from the Calumet WRP. Drying was done at the Calumet East solids drying area 261.6 dry tons 4. Quantity Received (June 2006): **Cumulative Quantity** 261.6 dry tons Received in 2006: 5. Date Sludge Received: June 13 - 19, 2006 6. Use of Sludge at Site: Used as soil conditioner and nutrient source for enhancing turf growth. 7. Size of Application 20 acres Area:

13 dry tons/acre

**Application Rate:** 

#### TABLE 2

# ANALYSIS\* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT DROLDON POINT M. SO. RIDGE ELEMENTARY SCHOOL BETWEEN 1911 DROLDON ROAD AND 1900 CATON RIDGE DRIVE FROM THE CALUMET EAST DRYING AREA DURING JUNE 2006

Constituent	Unit	Concentration
рН		6.1
Total Solids	%	77.6
Total Volatile Solids	"	40.7
Volatile Acids as Acetic Acid	mg/dry kg	50
Total Kjeldahl-N	"	17,441
NH <sub>3</sub> -N	"	90
Total P	"	26,571
K	"	3,717
Cd	"	8.7
Cr	"	147
Cu	"	487
Pb	"	166
Hg	"	1.39
Mo	"	18.2
As	"	10.0
Mn	"	856
Ni	"	45.0
Se	"	0.70
Zn	"	1,612

<sup>\*</sup>Results based on two samples.

#### TABLE 3

## CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT

1. Name of User: Village of Steger

2. Address of User: 35 W. 34th Sreet

Steger, IL 60475

3. Type of Solids and

Source:

Agitation dried lagooned anaerobically digested biosolids from the Calume

WRP. Drying was done at Calumet East

solids drying area.

4. Quantity Received

(June 2006):

108 dry tons

Cumulative Quantity

Received in 2006:

108 dry tons

5. Date Sludge Received: June 21, 2006

6. Use of Sludge at Site: Used as soil conditioner and nutrient source

for enhancing turf growth.

7. Size of Application

Area:

2 acres

8. Application Rate: 54 dry tons/acre

#### TABLE 4

## ANALYSIS\* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE STEGER VETERAN'S PARK FOOTBALL FIELD AND NEW SOCCER FIELD FROM THE CALUMET EAST DRYING AREA DURING JUNE 2006

Constituent	Units	Concentration
рН		6.3
Total Solids	%	63.9
Total Volatile Solids	"	41.3
Volatile Acids as Acetic Acid	mg/dry kg	6
Total Kjeldahl-N	"	9,690
NH <sub>3</sub> -N	"	102
Total P	u u	14,375
K	"	2,449
Cd	"	8.9
Cr	II .	135
Cu	"	502
Pb	"	167
Hg	"	1.95
Mo	"	16.0
As	"	12.5
Mn	"	858
Ni	"	39.4
Se	"	20.2
Zn	"	1,647

<sup>\*</sup>Results based on one sample.