

Metropolitan Water Reclamation District of Greater Chicago

# RESEARCH AND DEVELOPMENT DEPARTMENT

**REPORT NO. 08-62** 

MONTHLY CONTROLLED SOLIDS

DISTRIBUTION REPORT

MAY 2008

**NOVEMBER 2008** 

#### Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

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November 5, 2008

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, May 2008

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago - Controlled Solids Distribution Program for May 2008, as required by Illinois Environmental Protection Agency Permit No. 2005-SC-3793.

Sludge flow schematic diagrams for solids processed during May 2008 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 three sites in May.

The user information report for Oak Forest High School, 15201 South Central Avenue, Oak Forest, Illinois, is presented in <u>Table 1</u>, and the analysis of composited biosolids delivered to that site is presented in <u>Table 2</u>.

The user information report for Blue Island Park District, 12804 South Highland Avenue, Blue Island, Illinois, is presented in <u>Table 3</u>, and the analysis of composited biosolids delivered to that site is presented in <u>Table 4</u>.

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

Very truly yours,

Louis Kollias Director Research and Development

LK:KK:kq Attachments

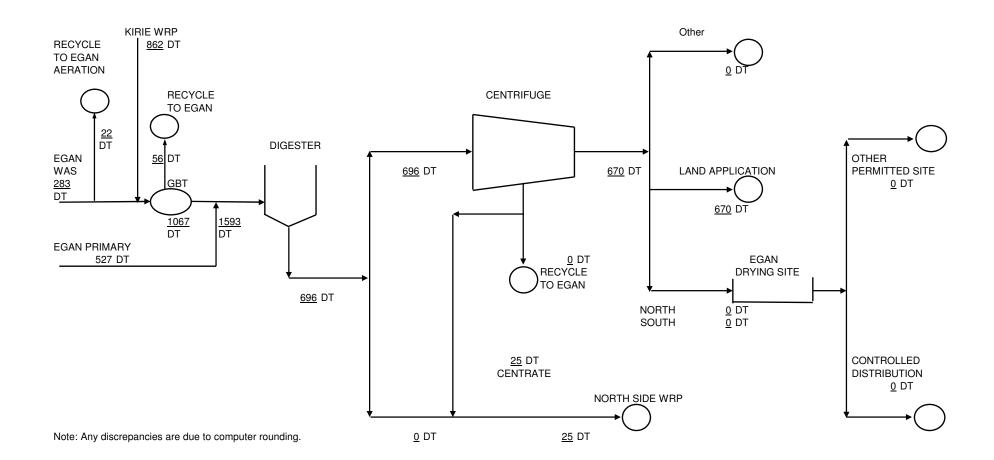
cc w/att.: Aistars (USEPA)

Sulski (IEPA)

Granato/O'Connor/Cox

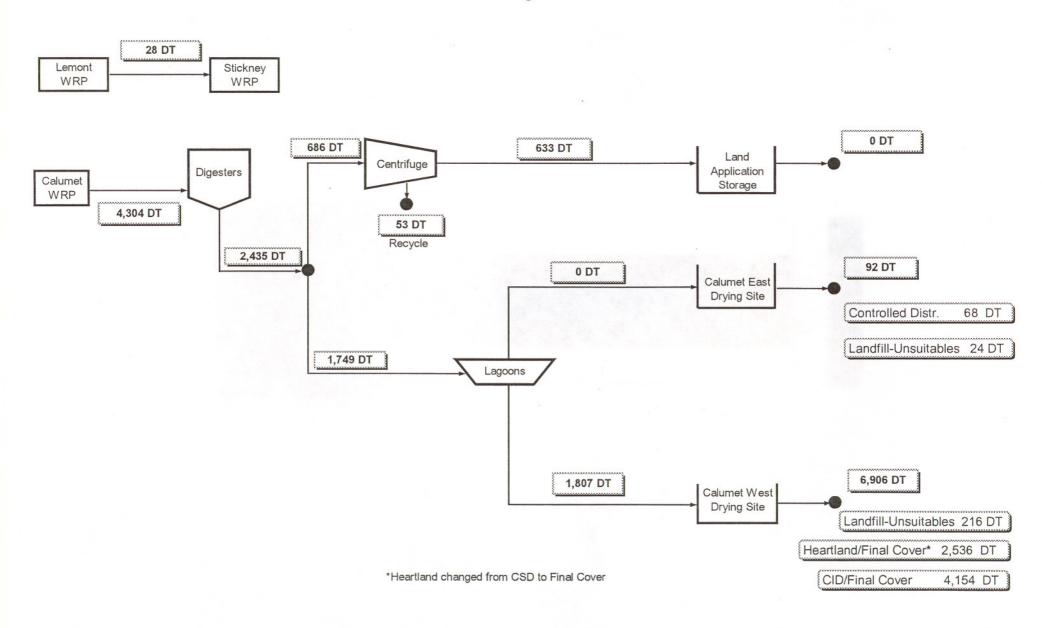
### J.E. EGAN WRP SOLIDS DISTRIBUTION-FIGURE 1

May-08

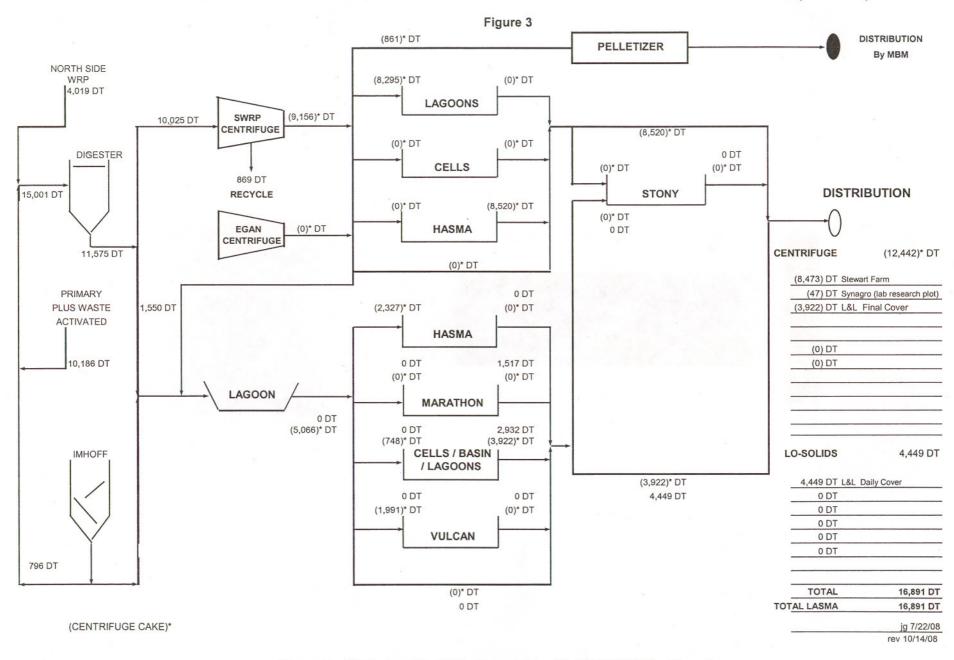


#### **CALUMET WRP SOLIDS DISTRIBUTION - May 2008**

Figure 2



#### STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR MAY 2008 (revised)



### TABLE 1: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT

1. Name of User: Oak Forest High School

2. Address of User: 15201 S. Central Ave.

Oak Forest, IL 60452

3. Type of Solids and

Source:

Agitation dried anaerobically digested biosolids from the Calumet WRP. Drying was done at the

Calumet East solids drying area.

4. Quantity Received

(May 2008):

28.75 dry tons

Cumulative Quantity

Received in 2008:

28.75 dry tons

**Date Biosolids** 

5. Received: May 21, 2008

6. Use of Biosolids at Site: Used as fertilizer top dressing to improve turf growth

of soccer fields at Oak Forest High School,

Oak Forest.

7. Size of Application

Area:

3 acres

8. Application Rate: 9.58 dry tons/acre

TABLE 2: ANALYSIS\* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT OAK FOREST HIGH SCHOOL, 15201 S. CENTRAL AVE., OAK FOREST, IL FROM THE CALUMET EAST DRYING AREA DURING MAY 2008

Constituent	Units	Concentration
рН		6.7
Total Solids	%	69.2
Total Volatile Solids	"	26.0
Volatile Acids as Acetic Acid	mg/dry kg	36
Total Kjeldahl-N	"	12,841
NH3-N	"	36
Total P	"	19,060
K	"	5,715
Cd	"	4.6
Cr	"	96
Cu	"	307
Pb	"	94
Hg	"	0.94
Mo	"	11.5
As	"	9.6
Mn	"	892
Ni	"	38.0
Se	"	1.6
Zn	"	720

## TABLE 3: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT

1. Name of User: Blue Island Park District

2. Address of User: 12804 S. Highland Ave.

Blue Island, IL 60406

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

(May 2008):

13.28 dry tons

Cumulative Quantity

Received in 2008:

29.28 dry tons

**Date Biosolids** 

5. Received:

May 29, 2008

6. Use of Biosolids at Site: Used as fertilizer top dressing to improve turf growth on

soccer fields at Blue Island Park District, Blue Island.

7. Size of Application

Area:

2 acres

8. Application Rate: 6.64 dry tons/acre

TABLE 4: ANALYSIS\* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE BLUE ISLAND PARK DISTRICT SOCCER FIELDS, BLUE ISLAND, IL DURING MAY 2008

Constituent	Units	Concentration
рН		6.8
Total Solids	%	68.1
Total Volatile Solids	"	27.7
Volatile Acids as Acetic Acid	mg/dry kg	48
Total Kjeldahl-N	"	12,595
NH3-N	"	43
Total P	"	18,254
K	"	7323
Cd	"	5.0
Cr	"	107
Cu	"	310
Pb	"	97
Hg	"	0.84
Mo	"	11.2
As	"	10.8
Mn	"	930
Ni	"	37.6
Se	"	1.4
Zn	"	733

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

## TABLE 5: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER 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

(May 2008):

25.64 dry tons

**Cumulative Quantity** 

Received in 2008:

25.64 dry tons

Date Biosolids

5. Received:

May 29, 2008

6. Use of Biosolids at Site: Used as fertilizer top dressing to improve turf growth

at White Pines Golf Club, Bensenville.

7. Size of Application

Area:

3 acres

8. Application Rate: 8.55 tons/acre

TABLE 6: ANALYSIS\* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT WHITE PINES GOLF CLUB, 500 W. JEFFERSON ST., BENSENVILLE, IL DURING MAY 2008

Constituent	Units	Concentration
pH		6.8
Total Solids	%	68.1
Total Volatile Solids	"	27.7
Volatile Acids as Acetic Acid	mg/dry kg	48
Total Kjeldahl-N	"	12,595
NH3-N	"	43
Total P	"	18,254
K	"	7,323
Cd	"	5.0
Cr	"	107
Cu	"	310
Pb	"	97
Hg	"	0.84
Mo	"	11.2
As	"	10.8
Mn	"	930
Ni	"	37.6
Se	"	1.4
Zn	11	733

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