

Metropolitan Water Reclamation District of Greater Chicago

RESEARCH AND DEVELOPMENT DEPARTMENT

REPORT NO. 06-2

CONTROLLED SOLIDS DISTRIBUTION PROGRAM

NOVEMBER 2005

JANUARY 2006

January 25, 2006

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 - Con-

trolled Solids Distribution Program IEPA Permit No. 2005-SC-3793,

November 2005

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

Flow schematic diagrams for solids processed during November 2005 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 November 2005. The user information report for the Cinder Ridge Golf Course is presented in <u>Table 1</u>, and the analysis of composited biosolids delivered in November to that site is presented in <u>Table 2</u>.

The user information report for the Chalet Hills Golf Course is presented in <u>Table 3</u>, and the analysis of composited biosolids delivered in November to that site is presented in <u>Table 4</u>.

Subject: Metropolitan Water Reclamation District of Greater Chicago - Controlled

Solids Distribution Program IEPA Permit No. 2005-SC-3793, November

2005

The user information report for the Oak Brook Park District is presented in <u>Table 5</u>, and the analysis of composited biosolids delivered in November to that site is presented in <u>Table 6</u>.

Very truly yours,

Richard Lanyon Director Research and Development

RL:GT:spy Attachments

cc w/att.: Aistars (USEPA)

Sulski (IEPA) Sobanski

Levy/Quintanilla Sharma /Conway Staudacher/Collins Granato/O'Connor Cox/Tian/Dennison

J.E. EGAN WRP SOLIDS DISTRIBUTION-

November-05 MB WRV W

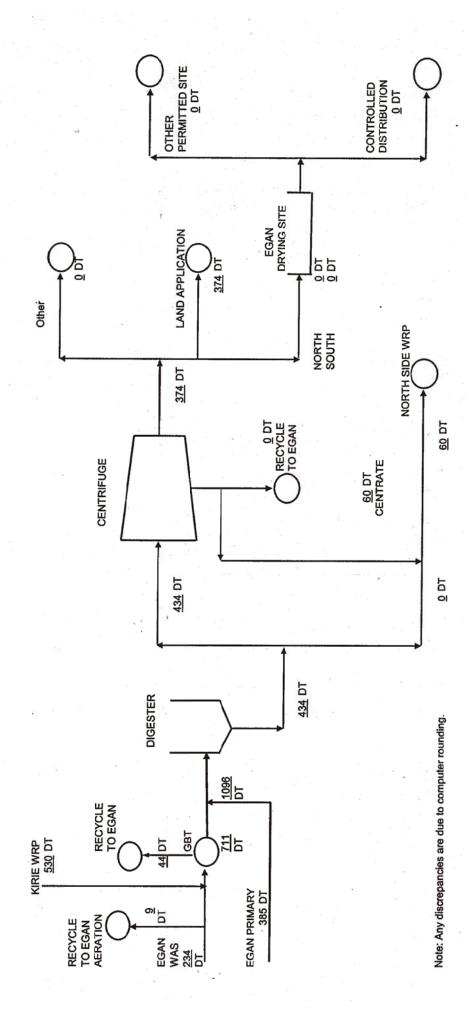
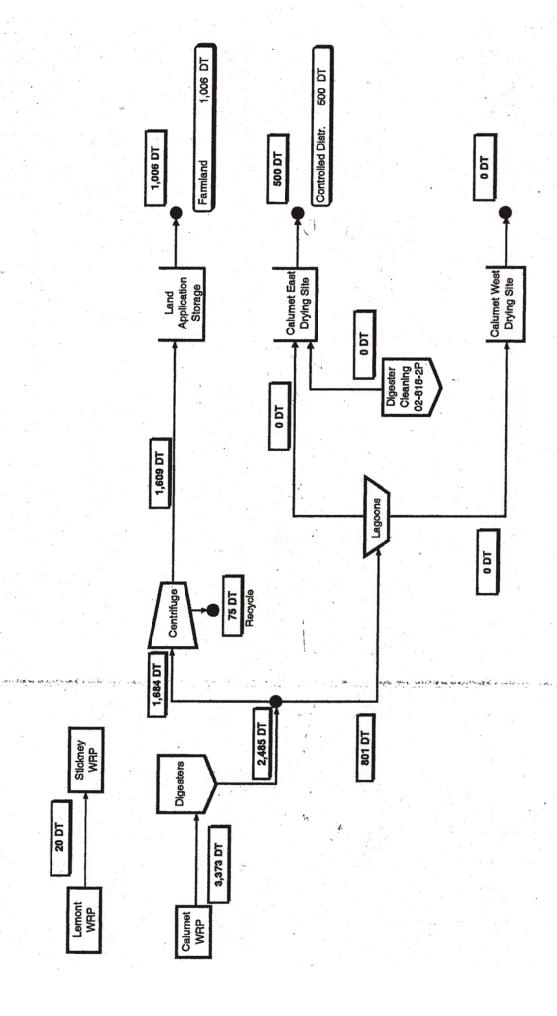
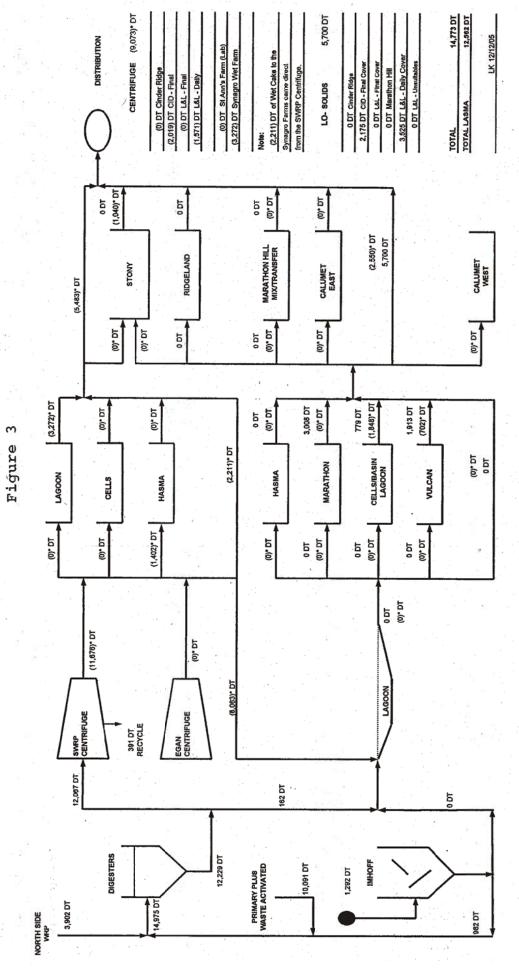


Figure 2



STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR NOVEMBER 2005



(CENTRIFUGE CAKE)*

TABLE 1

CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT

1. Name of User: Cinder Ridge Golf Course

2. Address of User: 24801 Lakepoint Drive

Wilmington, Illinois 60481

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 area.

4. Quantity Received

(November 2005):

326 dry tons

Cumulative Quantity

Received in 2005:

326 dry tons

5. Date Biosolids Received: November 2 - 4, 2005

6. Use of Biosolids at Site: Used as top dressing in golf course turf areas.

7. Size of Application

Area:

75 acres

8. Application Rate: 4.3 dry tons/acre

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO ${\sf TABLE~2}$

ANALYSIS* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE CINDER RIDGE GOLF COURSE FROM THE CALUMET EAST DRYING AREA DURING NOVEMBER 2005

Constituent	Units	Concentration
рН		6.9
Total Solids	%	63.2
Total Volatile Solids	"	41.0
Volatile Acids as Acetic Acid	mg/dry kg	155
Total Kjeldahl-N	"	15,749
NH ₃ -N	II .	980
Total P	"	21,883
K	"	2,493
Cd	"	7.7
Cr	"	118
Cu	"	441
Pb	"	141
Hg	"	1.57
Mo	II .	12.7
As	"	7.0
Mn	"	779
Ni	"	35.5
Se	"	13.4
Zn	"	1,404

^{*}Results based on one sample.

TABLE 3

CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT

1. Name of User: Chalet Hills Golf Course 2. Address of User: 945 Rawson Bridge Road Cary, IL 60013 Type of Solids and 3. Agitation dried lagooned anaerobically digested Source: biosolids from the Calumet WRP. Drying was done at the Calumet East solids drying area. 4. Quantity Received 163 dry tons (November 2005): 177 dry tons **Cumulative Quantity** Received in 2005: 5. Date Biosolids Received: November 1, 2005 6. Use of Biosolids at Site: Used as top dressing in golf course turf areas.

10 acres

16.3 dry tons/acre

Size of Application

Application Rate:

Area:

7.

8.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO ${\sf TABLE}\ 4$

ANALYSIS* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE CHALET HILLS GOLF COURSE FROM THE CALUMET EAST DRYING AREA DURING NOVEMBER 2005

Constituent	Units	Concentration
рН		5.8
Total Solids	%	65.0
Total Volatile Solids	11	40.1
Volatile Acids as Acetic Acid	mg/dry kg	179
Total Kjeldahl-N	"	15,749
NH ₃ -N	"	1,510
Total P	"	21,883
K	"	1,653
Cd	"	7.8
Cr	"	113
Cu	u u	438
Pb	"	148
Hg	"	1.65
Mo	"	11.2
As	n .	3.5
Mn	n .	772
Ni	"	33.1
Se	"	13.4
Zn	"	1,416

^{*}Results based on one sample.

TABLE 5

CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT

1.	Name of User:	Oak Brook Park District
2.	Address of User:	1450 Forest Gate Road Oak Brook, IL 60523
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 area.
4.	Quantity Received (November 2005):	11.1 dry tons
	Cumulative Quantity Received in 2005:	11.1 dry tons
5.	Date Biosolids Received:	November 17, 2005
6.	Use of Biosolids at Site:	Used as top dressing in soccer field turf areas.
7.	Size of Application Area:	2 acres
8.	Application Rate:	5.6 dry tons/acre

TABLE 6

ANALYSIS* OF DIGESTED BIOSOLIDS APPLIED TO LAND AT THE

OAK BROOK PARK DISTRICT SOCCER FIELDS DURING NOVEMBER 2005

Constituent	Units	Concentration
рН		6.9
Total Solids	%	63.2
Total Volatile Solids	"	41.0
Volatile Acids as Acetic Acid	mg/dry kg	155
Total Kjeldahl-N	"	15,749
NH ₃ -N	11	1,510
Total P	n	21,883
K	"	2,493
Cd	"	7.7
Cr	"	118
Cu	u	441
Pb	u	141
Hg	"	1.57
Mo	"	12.7
As	"	7.0
Mn	"	779
Ni	"	35.5
Se	11	13.4
Zn	"	1,404

^{*}Results based on one sample.