

Metropolitan Water Reclamation District of Greater Chicago

RESEARCH AND DEVELOPMENT DEPARTMENT

REPORT NO. 06-41

MONTHLY REPORT OF THE FULTON COUNTY

ENVIRONMENTAL PROTECTION SYSTEM

MAY 2006

JULY 2006



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Metropolitan Water Reclamation District of Greater Chicago

CHICAGO, ILLINOIS 60611-3154

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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 P.O. Box 19276 Springfield, IL 62794-9276

Dear Mr. Keller:

Attached for your information and use is the May 2006 monthly report of the Fulton County Environmental Protection System.

Very truly yours,

312.751.5600

July 31, 2006

Louis Kollias Director Research and Development

LK:GT:spy Attachment cc w/enc.:

Mr. Valdis Aistars, USEPA Region V Mr. Ash Sajjad, USEPA Region V Mr. Matthew Williams, USEPA Region V IEPA Permit Section, Springfield IEPA Surveillance Section, Peoria Chairman of the Fulton County Board Fulton County Board of Health Fulton County Zoning Office

cc via MWRDGC web site:

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ENVIRONMENTAL PROTECTION SYSTEM

REPORT FOR FULTON COUNTY, ILLINOIS

May 2006

Research and Development Department G. Tian A. Cox

April 2006

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FOREWORD

The data and information in this report fulfill the frequency of monitoring and the reporting requirements for the Land Application of Biosolids at the Fulton County Land Reclamation Project as specified in the Illinois Environmental Protection Agency Permit No. 2005-SC-5073 for May 2006.

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ACKNOWLEDGMENT

Thanks are due to the staff of the Analytical Laboratories Division for assistance in conducting analyses and Ms. Sabina Yarn for typing this report.

DISCLAIMER

Mention of proprietary equipment and chemicals in this report does not constitute endorsement by the Metropolitan Water Reclamation District of Greater Chicago.

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FULTON COUNTY

DEWATERED BIOSOLIDS REPORT

May 2006

DEWATERED BIOSOLIDS REPORT

No dewatered biosolids were applied to fields during the month of May 2006. In addition, no supernatant was available for application to fields during this month. The last supernatant application was made in 1995, and the last biosolids application was made in 2004.

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WATER ANALYSIS REPORT

May 2006

WATER ANALYSIS REPORT

Water monitoring in May 2006 was conducted for the runoff basin only. A site plan of farm field and runoff basin locations is attached in <u>Figure 1</u>.

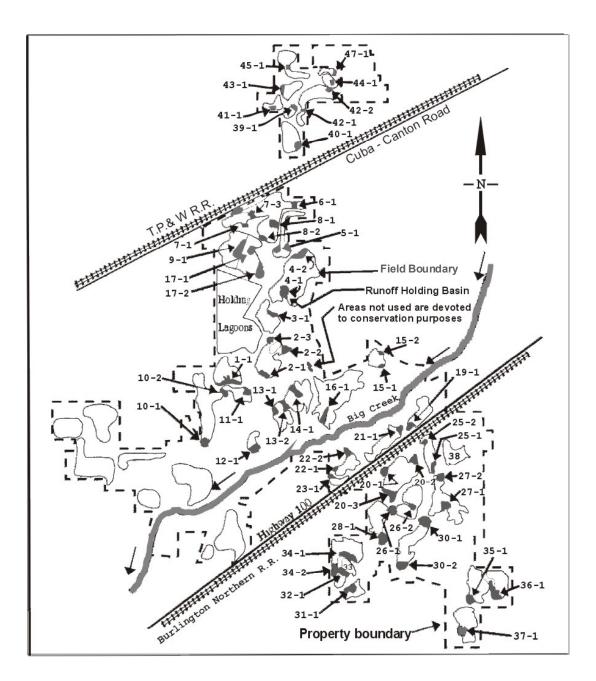
During the month, discharges from runoff basins totaled 13.39 million gallons. Analytical data of water samples are presented in <u>Table 1</u>. A log of runoff basin discharge information is presented in <u>Table 2</u>.

The surface water sites (streams, reservoirs, and SP sites) and wells were not sampled during the month. A site plan of water monitoring locations is attached in <u>Figure 2</u>.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 1

FARM FIELDS AND RUNOFF BASINS AT THE LAND RECLAMATION PROJECT AT FULTON COUNTY, ILLINOIS



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 1

FULTON COUNTY LAND RECLAMATION PROJECT FIELD RUNOFF BASIN DIS-CHARGE DATA MAY 2006

Basin No.	Sample Date	рН	TSS (mg/L)	BOD5 (mg/L)	F. coli. per 100 mL	Discharge Date	Discharge Amount (MG)
3-1	5/4	9.0	4.4	2	10	5/5	3.10
13-2	5/4	8.0	2.8	2	10	5/5	1.12
15-1	5/4	8.0	8.4	2	10	5/5	0.70
39-1	5/4	8.1	6.0	3	10	5/5	0.68
43-1	5/4	9.0	33.0	16	10	5/5	4.15
3-1*	5/22	8.2	4.4	3	20	5/23	3.64

*RB 3-1 sample collected on 5/22 contained water pumped from HB-1.

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TABLE 2

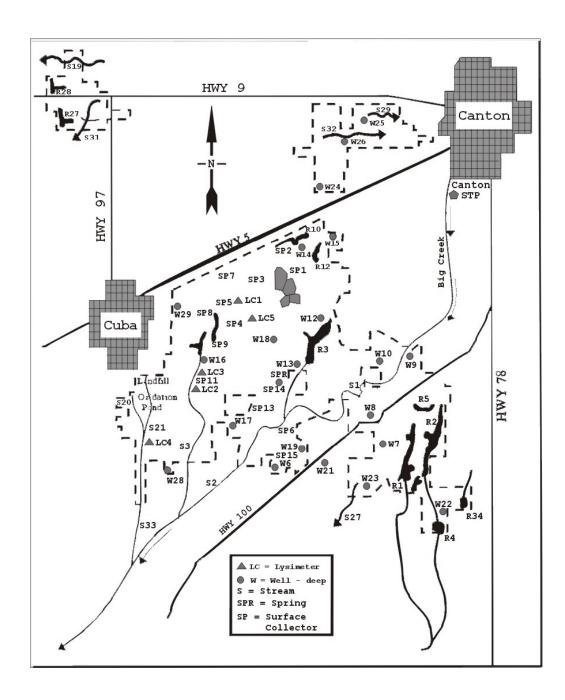
FIELD RUNOFF BASIN LOG AT THE FULTON COUNTY LAND RECLAMATION PROJECT FOR MAY 2006

R & D Dept. Sample	YES YES YES YES YES YES
R & D Dept. OK	YES YES YES YES YES YES
Reason Closed	Empty Regular Empty Empty Regular Regular
Release Type	Regular Regular Regular Regular Regular Regular
Volume Released (MG)	3.10 1.12 0.70 0.68 4.15 3.64
Time Open (Hours)	69.00 69.10 69.45 69.50 91.40 70.92
Closing Stage (feet)	0.00 2.50 0.00 2.00 0.00 0.00
Opening Stage (feet)	4.00 5.00 5.00 7.00 7.00
Time Closed	12:00 12:01 12:15 12:00 10:00 13:30
Date Closed	5/8/06 5/8/06 5/8/06 5/9/06 5/9/06 5/9/06
Time Opened	15:00 14:55 14:55 14:36 14:30 14:36
Date Opened	5/5/06 5/5/06 5/5/06 5/5/06 5/5/06 5/23/06
Basin No.	3 - 1 13 - 2 15 - 1 39 - 1 3 - 1 3 - 1

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 2

WATER MONITORING LOCATIONS AT THE LAND RECLAMATION PROJECT AT FULTON COUNTY, ILLINOIS



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	FULTON COUNTY		
CLIMAT	OLOGICAL OBSERVATI	ONS	
	May 2006		
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CLIMATOLOGICAL OBSERVATIONS

The daily climatological observations for May 2006 are summarized in <u>Table 3</u>. The total precipitation recorded for the month was 2.87 inches.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 3

RECORD OF CLIMATOLOGICAL OBSERVATIONS FOR MAY 2006, FULTON COUNTY, ILLINOIS, STATION SEQ, SEC.10, R3E, T6N

	Г	Temperatur	e	Precip	oitation		Wind	
		°C		rain, melted snow	snow, sleet, hail	m/S	m/S	
Date	Max	Min	Avg	(inches & hundredths)	(inches & tenths)	Avg	Max	Dir
1	21.7	10.9	15.1	0.08		2.8	8.5	SE
2	25.4	8.3	16.8	0.01		1.1	7.6	SW
3	23.7	12.0	16.5	0.11		1.0	7.6	SE
4	21.2	10.3	15.3	0.00		1.9	8.5	W
5	18.5	4.7	11.2	0.00		2.6	11.6	W
6	21.0	2.4	11.2	0.00		1.2	7.2	NW
7	23.9	5.6	15.2	0.00		1.0	6.7	NE
8	23.5	9.9	16.6	0.00		2.5	10.7	S
9	24.1	12.4	17.2	0.00		2.5	8.9	SE
10	23.6	12.3	16.9	0.00		1.6	9.4	W
11	17.3	9.8	12.7	0.00		6.2	17.9	W
12	10.3	6.4	8.1	0.07		5.5	17.9	W
13	9.6	4.8	6.8	0.20		2.5	8.9	SW
14	13.9	6.1	9.1	0.00		1.9	7.6	W
15	21.2	7.2	11.9	0.87		2.3	10.7	NW
16	20.9	10.2	13.6	0.36		1.9	9.8	W
17	25.2	9.7	16.6	0.00		3.5	13.9	W
18	21.6	7.7	14.6	0.00		3.0	14.8	NW
19	25.7	9.4	17.2	0.00		1.6	7.6	NW
20	24.1	7.7	16.2	0.00		1.2	6.3	NE
21	24.3	11.7	16.8	0.00		2.1	10.3	NE
22	25.7	9.6	16.0	0.00		1.5	6.3	NE
23	27.1	9.3	18.7	0.00		2.2	7.6	SE
24	32.1	16.3	22.3	0.19		3.0	24.1	SE
25	27.8	16.9	21.9	0.00		3.9	13.9	SW
26	32.6	17.6	23.9	0.00		1.9	8.0	SW
27	34.2	18.4	26.1	0.00		2.0	10.7	SE
28	34.1	21.2	27.6	0.00		2.8	9.8	SE
29	34.5	21.2	27.1	0.00		2.0	8.9	SE
30	33.1	19.4	23.8	0.04		0.8	8.9	SW
31	32.4	18.5	23.1	0.94		1.2	9.4	NW
Sum				2.87	0.0	Observer: Josh DeWees		
Avg	24.3	11.2	17.0			Station: R&D Lab		
Extreme	34.5	2.4		0.94	0.0			

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FULTON COUNTY

RECLAMATION OF COAL REFUSE PILES WITH BIOSOLIDS

May 2006

RECLAMATION OF COAL REFUSE PILES WITH BIOSOLIDS

Lysimeters and drainage tiles at the St. David coal refuse pile reclamation site were not sampled during the month. Locations for all lysimeters and drainage tile sampling sites are shown in Figure 3.

Lysimeters at the Big Ten (Morgan Mine) and the United Electric coal refuse pile sites were also not sampled during the month.

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FIGURE 3

ST. DAVID COAL REFUSE PILE RECLAMATION SITE

