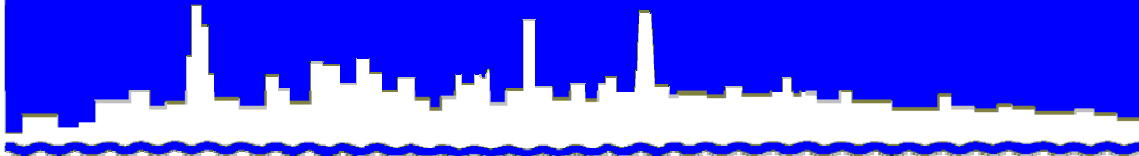


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***RESEARCH AND DEVELOPMENT
DEPARTMENT***

REPORT NO. 07-1

MONTHLY REPORT OF THE FULTON COUNTY

ENVIRONMENTAL PROTECTION SYSTEM

OCTOBER 2006

JANUARY 2007

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Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312-751-5600

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

January 2, 2007

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:

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

Very truly yours,

Louis Kollias
Director
Research and Development

LK:TCG:AC: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
Drs.: Granato
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**ENVIRONMENTAL PROTECTION SYSTEM
REPORT FOR FULTON COUNTY, ILLINOIS
OCTOBER 2006**

**Research and Development Department
G. Tian
A. Cox**

January 2007

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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 October 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
October 2006

DEWATERED BIOSOLIDS REPORT

No dewatered biosolids were applied to fields during the month of October 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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FULTON COUNTY
WATER ANALYSIS REPORT
October 2006

WATER ANALYSIS REPORT

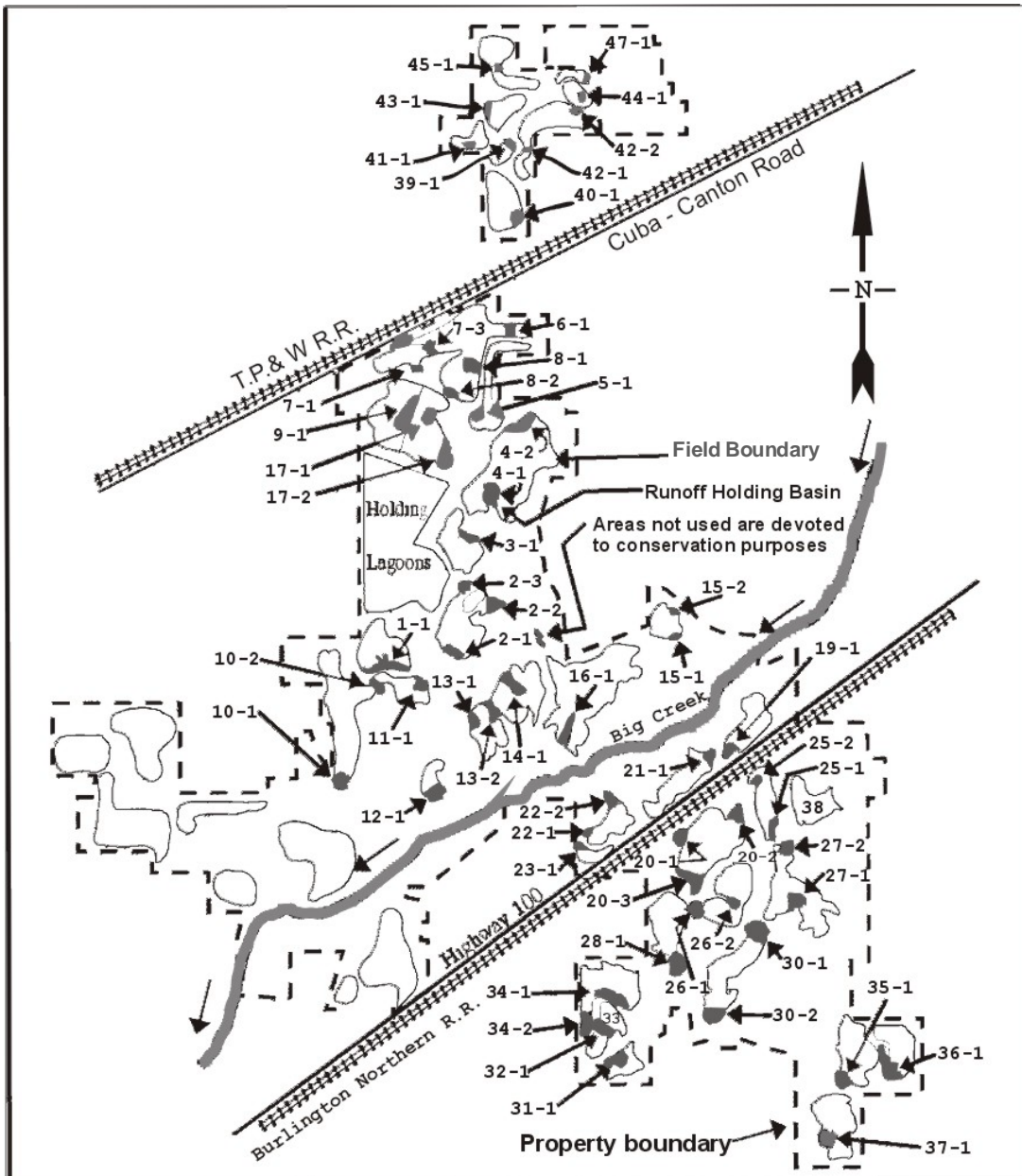
There was no water release and sampling in retention basins during this month. A site plan of farm field and retention basin locations is attached in Figure 1.

The surface water sites (streams, reservoirs, and SP sites) were sampled during the month. A site plan of water monitoring locations is attached in Figure 2. Analytical data of water samples from the surface water sites are presented in Tables 1 through 3.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 1

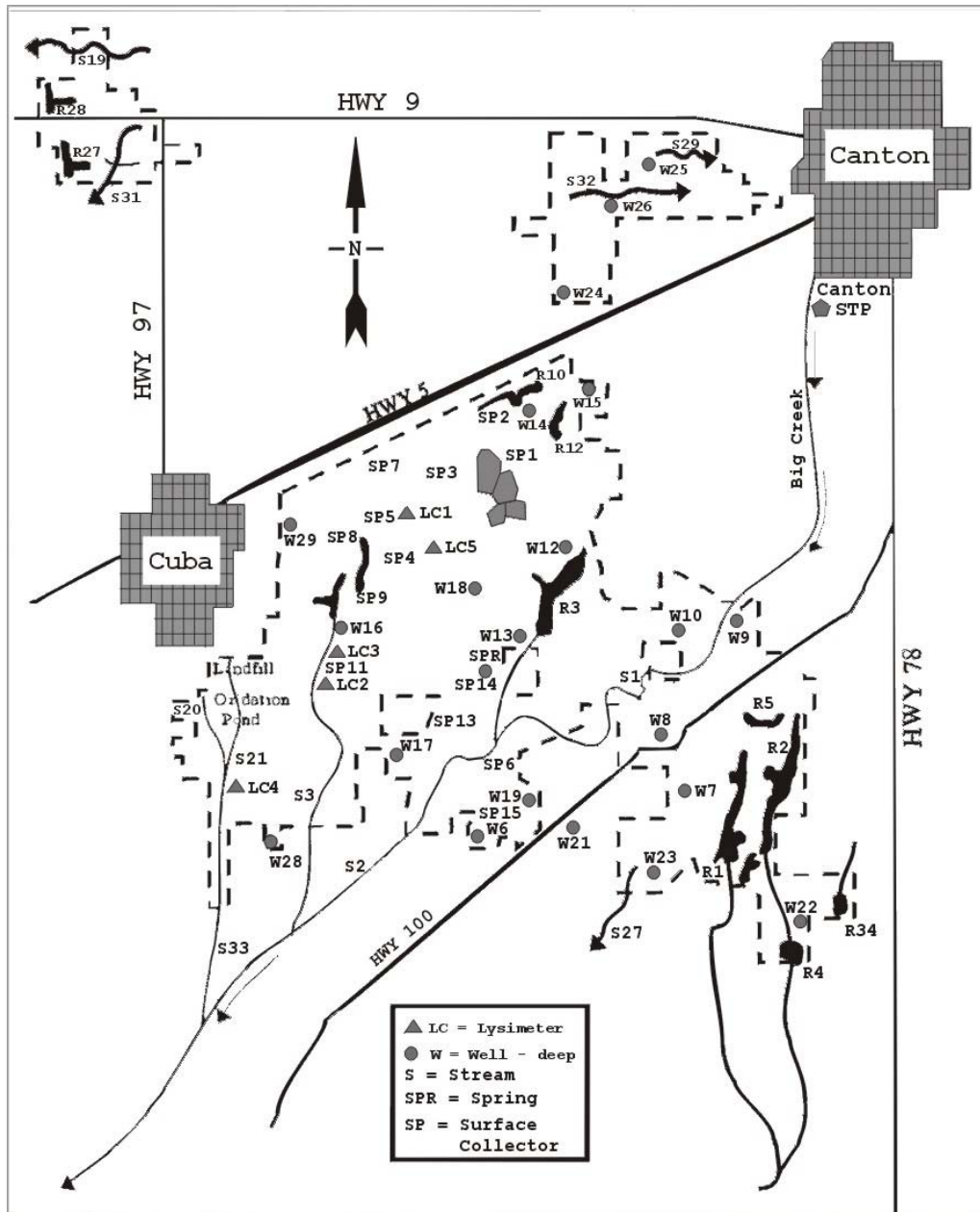
FARM FIELDS AND RUNOFF BASINS AT THE LAND RECLAMATION PROJECT AT FULTON COUNTY, ILLINOIS



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 2

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



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 1

FULTON COUNTY LAND RECLAMATION PROJECT SPRING AND STREAM DATA
OCTOBER 2006

Stream Number	Sample Date	Total P	NH ₃ -N	NO ₂ -N	NO ₃ -N	Cd	Cu	Hg
		----- mg/L -----						µg/L
Spring 01	10/18	0.00	0.000	0.000	0.019	0.0000	0.005	0.00
S1	10/18	1.66	0.040	0.000	5.58	0.0000	0.007	0.00
S2	10/18	1.90	0.040	0.000	5.05	0.0000	0.006	0.00
S3	10/18	0.10	0.000	0.000	0.040	0.0000	0.005	0.00
S20	10/18	3.63	0.000	0.000	23.2	0.0000	0.011	0.00
S21	10/18	0.19	1.470	0.000	0.035	0.0000	0.006	0.00
S27	10/18	0.85	0.640	0.000	0.333	0.0005	0.022	0.00
S29	10/18	0.26	0.100	0.000	0.137	0.0000	0.009	0.00
S32	10/18	0.28	0.830	0.000	0.043	0.0000	0.007	0.00
S33	10/18	1.44	0.030	0.000	13.0	0.0000	0.011	0.00
MDL*		0.09	0.020	0.150	0.004	0.0004	0.003	0.05

*MDL = Method detection limit of laboratory; values less than these are reported as zeros.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2

FULTON COUNTY LAND RECLAMATION PROJECT RESERVOIR DATA
OCTOBER 2006

Reservoir Number	Sample Date	Total P	NH ₃ -N	NO ₂ -N	NO ₃ -N	Cd	Cu	Hg	
		----- mg/L -----							μg/L
R 1	10/18	0.12	0.250	0.000	0.173	0.0000	0.006	0.00	
R 2	10/18	0.21	0.370	0.000	0.171	0.0000	0.004	0.00	
R 3	10/18	0.18	0.000	0.000	0.046	0.0000	0.007	0.00	
R 4	10/18	0.18	0.180	0.180	5.43	0.0000	0.010	0.00	
R 5	10/18	0.11	0.020	0.000	0.032	0.0000	0.006	0.00	
R 10	10/18	0.00	0.040	0.000	0.013	0.0000	0.006	0.00	
R 12	10/18	0.00	0.020	0.000	0.007	0.0000	0.006	0.00	
R 34	10/18	0.33	0.150	0.480	7.67	0.0000	0.011	0.00	
MDL*		0.09	0.020	0.150	0.004	0.0004	0.003	0.05	

*MDL = Method detection limit of laboratory; values less than these are reported as zeros.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 3

FULTON COUNTY LAND RECLAMATION PROJECT, SURFACE WATERS -
 PUTNAM TOWNSHIP, DISTRICT PROPERTY (WESTERN SECTION)
 OCTOBER 2006

Surface Water	Sample Date	Total P	NH ₃ -N	NO ₂ -N	NO ₃ -N	Cd	Cu	Hg
		-----mg/L-----						µg/L
SP 6	10/18	0.10	0.000	0.000	0.038	0.0000	0.007	0.00
SP 14	10/18	0.00	0.000	0.000	0.031	0.0000	0.004	0.00
MDL*		0.09	0.020	0.150	0.004	0.0004	0.003	0.05

*MDL = Method detection limit of laboratory; values less than these are reported as zeros.

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FULTON COUNTY
CLIMATOLOGICAL OBSERVATIONS
October 2006

CLIMATOLOGICAL OBSERVATIONS

The daily climatological observations for October 2006 are summarized in Table 4. The total precipitation recorded for the month was 2.00 inches.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 4

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

Date	Temperature °C			Precipitation		Wind		
	Max	Min	Avg	rain, melted snow	snow, sleet, hail	m/S	m/S	Dir
				(inches & hundredths)	(inches & tenths)	Avg	Max	
1	31.6	9.1	19.5	0.00		1.7	7.2	SE
2	32.2	17.4	24.1	0.00		3.6	12.5	SE
3	33.7	17.9	25.4	0.00		2.2	9.8	SE
4	31.9	13.8	21.6	0.00		3.6	11.6	N
5	21.6	8.4	14.5	0.00		2.3	8.9	N
6	20.9	4.6	11.8	0.00		1.7	8.0	NE
7	23.8	5.2	14.2	0.00		1.9	8.0	E
8	27.1	7.3	15.6	0.00		1.4	7.2	SE
9	28.8	6.9	16.7	0.00		0.9	8.5	SE
10	15.8	8.0	12.0	0.20		1.2	6.3	N
11	12.9	-0.2	8.1	0.40		4.4	16.1	W
12	9.2	-1.7	2.9	0.00		4.8	14.3	SW
13	13.2	-1.4	5.2	0.00		4.9	15.2	SW
14	13.3	-1.0	5.6	0.00		2.9	11.6	SW
15	12.6	0.4	7.4	0.02		1.6	7.6	E
16	13.2	9.3	10.8	0.43		4.2	13.4	NE
17	16.9	9.2	12.5	0.40		2.1	7.2	SW
18	15.7	4.7	10.9	0.09		2.1	13.0	W
19	6.7	-0.1	4.1	0.00		2.0	8.5	W
20	16.0	1.4	7.2	0.00		1.9	8.5	W
21	23.3	4.4	10.1	0.01		2.2	11.2	SE
22	6.6	-1.1	2.5	0.00		4.9	14.3	W
23	7.9	-2.9	1.8	0.00		3.4	11.6	SW
24	11.2	-3.6	3.4	0.00		1.0	5.4	SW
25	12.8	3.2	6.5	0.00		3.9	11.6	NE
26	9.7	4.7	7.7	0.43		3.0	7.6	NE
27	9.3	2.1	6.8	0.02		3.0	10.7	N
28	14.2	1.6	7.1	0.00		4.4	15.2	SW
29	17.5	-0.3	9.1	0.00		1.5	6.7	SW
30	22.1	8.4	15.0	0.00		4.0	14.3	SE
	13.7	0.2	4.5	0.00		3.8	13.4	W
Sum				2.00	0.0	Observer: Josh DeWees Station: R&D Lab		
Avg	17.6	4.4	10.5					
Extreme	33.7	-3.6		0.43	0.0			

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FULTON COUNTY
RECLAMATION OF COAL REFUSE PILES WITH BIOSOLIDS
October 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.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 3

ST. DAVID COAL REFUSE PILE RECLAMATION SITE

