

Metropolitan Water Reclamation District of Greater Chicago

RESEARCH AND DEVELOPMENT DEPARTMENT

REPORT NO. 07-3

MONTHLY REPORT OF THE FULTON COUNTY

ENVIRONMENTAL PROTECTION SYSTEM

NOVEMBER 2006

JANUARY 2007

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

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January 30, 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 November 2006 monthly report of the Fulton County Environmental Protection System.

Very truly yours,

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

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	ENVIRON	MENTAL PROTECTION S	SYSTEM	
	REPORT F	OR FULTON COUNTY, II	LLINOIS	
		NOVEMBER 2006		
Researc G. Tian	ch and Development Dep	artment		
A. Cox	ı		January 2	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 November 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.

Metropolitan Water Reclamation District of Greater Chicago
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FULTON COUNTY
DEWATERED BIOSOLIDS REPORT
November 2006

DEWATERED BIOSOLIDS REPORT

No dewatered biosolids were applied to fields during the month of November 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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100 East Erie Street	Reclamation District of Gl Chicago, IL 60611-2803	(312) 751-5600	
	FULTON COUNTY		
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WA	TER ANALYSIS REPORT		
	November 2006		

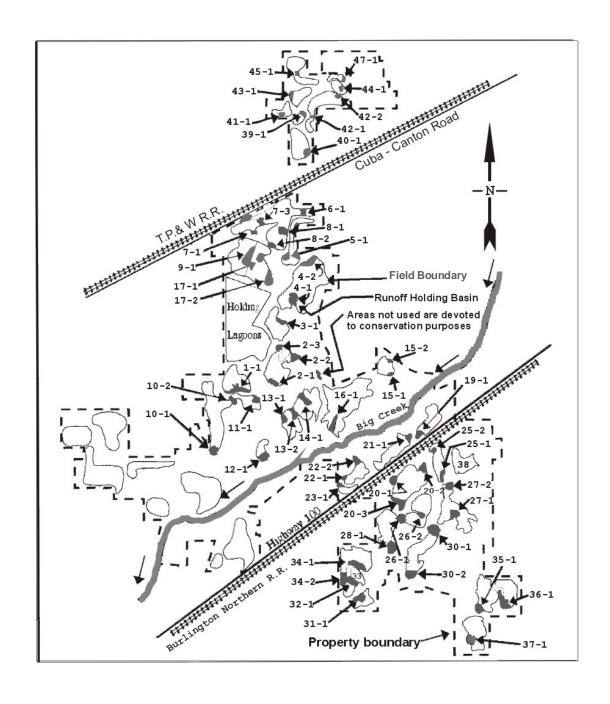
WATER ANALYSIS REPORT

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 <u>Figure 1</u>.

The surface water sites (streams, reservoirs, and SP sites) were also not sampled during the month. The wells were sampled during the month. A site plan of water monitoring locations is attached in <u>Figure 2</u>. Analytical data of water samples from the wells are presented in <u>Table 1</u>.

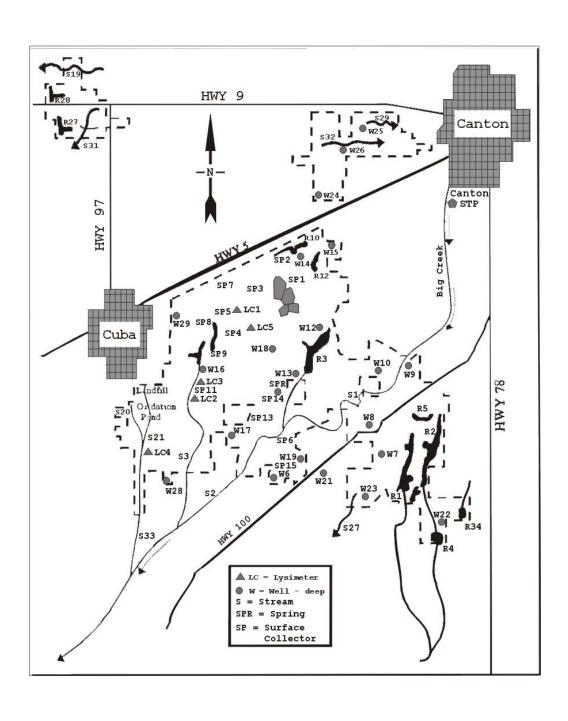
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO FIGURE 1

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



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO FIGURE 2

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



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO ${\it TABLE~1}$ FULTON COUNTY LAND RECLAMATION PROJECT WELL DATA NOVEMBER 2006

Well	Sample						
Number	Date	NH ₃ -N	NO ₂ -N	NO ₃ -N	Cd	Cu	Hg
				mg/L			μg/L
W 6	11/14	0.52	0.000	0.000	0.0000	0.000	0.10
W 7	11/14	1.38	0.000	0.041	0.0000	0.000	0.11
W 8	11/14	0.78	0.000	0.170	0.0000	0.000	0.10
W 9	11/14	1.12	0.000	0.034	0.0000	0.000	0.09
W10	11/14	0.54	0.000	0.150	0.0000	0.000	0.08
W12	11/14	0.38	0.000	0.021	0.0000	0.000	0.09
W14	11/14	0.75	0.000	0.048	0.0000	0.000	0.10
W15	11/14	0.87	0.000	0.075	0.0000	0.004	0.09
W16	11/14	0.02	0.000	0.008	0.0000	0.008	0.11
W17	11/14	0.00	0.000	4.23	0.0000	0.004	0.09
W18	11/14	0.99	0.000	0.014	0.0000	0.004	0.09
W19	11/14	0.91	0.000	0.050	0.0000	0.000	0.10
W21	11/14	1.50	0.000	0.000	0.0000	0.011	0.11
W22	11/14	6.95	0.000	0.010	0.0000	0.000	0.10
W23	11/14	0.04	0.000	0.014	0.0000	0.004	0.16
W25	11/14	1.65	0.000	0.019	0.0000	0.000	0.07
W26	11/14	0.20	0.000	0.007	0.0000	0.000	0.08
W28	11/14	2.38	0.000	0.000	0.0000	0.000	0.10
W29	11/14	0.00	0.000	0.000	0.0000	0.000	0.00
· · · · -							
MDL*		0.02	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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CLIMAT	OLOGICAL OBSERVAT	IONS	
	November 2006		
	November 2000		

CLIMATOLOGICAL OBSERVATIONS

The daily climatological observations for November 2006 are summarized in <u>Table 2</u>. The total precipitation recorded for the month was 3.19 inches.

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

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

	7	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	7.8	-3.4	1.2	0.00		1.9	9.4	NW
2	7.1	-5.5	-0.6	0.01		3.1	14.3	W
3	12.1	-7.1	1.9	0.00		1.3	5.8	W
4	10.2	3.1	5.9	0.00		3.1	9.4	SE
5	14.8	3.3	8.7	0.00		1.6	7.2	SE
6	14.9	6.3	9.6	0.00		2.0	6.3	Е
7	18.2	3.9	9.8	0.00		0.4	4.0	Е
8	21.7	4.7	11.9	0.00		2.4	9.8	SE
9	25.6	6.7	15.2	0.00		1.5	5.8	N
10	11.9	2.3	8.0	0.71		4.6	13.9	NE
11	5.6	-3.3	1.3	0.00		2.8	11.2	NW
12	9.7	-3.9	2.1	0.00		2.6	10.7	Е
13	8.7	0.2	4.3	0.08		2.1	7.2	W
14	7.0	1.8	4.9	0.00		2.5	8.9	NE
15	8.9	5.0	6.6	0.08		4.2	13.4	N
16	7.7	1.4	3.7	0.00		4.8	13.9	NW
17	9.9	-1.7	2.7	0.00		1.6	7.2	NE
18	7.4	-2.2	1.9	0.00		2.2	8.5	NW
19	7.9	-2.6	2.7	0.00		2.4	7.6	NW
20	10.1	-5.3	1.0	0.00		1.7	8.0	W
21	12.6	-2.4	4.3	0.00		3.0	11.6	SE
22	15.4	0.1	6.4	0.00		2.6	7.6	Е
23	17.4	1.2	8.1	0.00		2.2	6.3	Е
24	19.6	3.2	10.0	0.00		2.5	6.7	SE
25	19.7	5.6	11.2	0.00		1.4	8.9	SE
26	19.5	7.8	12.7	0.00		2.1	6.7	SE
27	20.2	11.0	14.8	0.00		3.0	8.0	SE
28	19.9	13.0	15.3	0.01		4.6	13.0	SE
29	15.9	1.8	10.2	2.05		3.7	14.3	NW
30	2.0	-5.6	-3.4	0.25		4.2	11.6	NW
Sum				3.19	0.0	Observer:	Josh DeWe	ees
Avg	13.0	1.3	6.4			Station: R&D Lab		
Extreme	25.6	-7.1		2.05	0.0			

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RECLAMATION OF CO	AL REFUSE PILES WITH	BIOSOLIDS	
RECLAMATION OF CO	AL REFUSE PILES WITH	BIOSOLIDS	
		BIOSOLIDS	
	OAL REFUSE PILES WITH November 2006	BIOSOLIDS	
		BIOSOLIDS	

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 <u>Figure 3</u>.

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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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 3
ST. DAVID COAL REFUSE PILE RECLAMATION SITE

