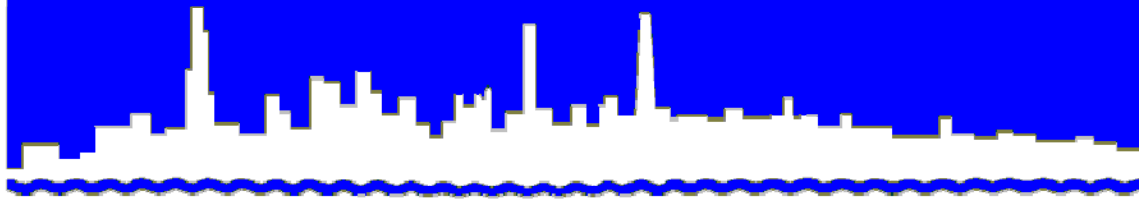


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 13-11

HANOVER PARK WATER RECLAMATION PLANT

FISCHER FARM MONITORING REPORT FOR

FIRST QUARTER 2013

MAY 2013

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street

Chicago, Illinois 60611-3154

312.751.5190

THOMAS C. GRANATO, Ph.D.

Director of Monitoring and Research

312.751.5190 f: 312.751.5194

thomas.granato@mwr.org

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May 24, 2013

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: Hanover Park Water Reclamation Plant - Illinois Environmental Protection Agency Permit No. 2012-SC-2255, Monitoring Report for January, February, and March 2013

The attached report includes three tables of the monitoring results for the Hanover Park Fischer Farm site for the first quarter of 2013.

Very truly yours,

Thomas C. Granato, Ph.D.
Director
Monitoring and Research

TCG:PL:cm

Enclosures

cc: Mr. J. Patel, Manager, IEPA Region 2 - Des Plaines

Mr. V. Aistars, USEPA Region 5

Mr. P. Kuefler, USEPA Region 5

Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street Chicago, Illinois 60611-2803 312-751-5600

**HANOVER PARK WATER RECLAMATION PLANT
FISCHER FARM MONITORING REPORT FOR
FIRST QUARTER 2013**

**Monitoring and Research Department
Thomas C. Granato, Director**

May 2013

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FOREWORD

The data and information in this report fulfill the frequency of monitoring and the reporting requirements for the Hanover Park Fischer Farm Site as specified in the Illinois Environmental Protection Agency Permit No. 2012-SC-2255 for the first quarter of 2013.

ACKNOWLEDGEMENT

The assistance given by Ms. Minaxi Patel, Assistant Environmental Chemist, of the Environmental Monitoring and Research Division, and Mr. John Chavich, Supervising Environmental Chemist, of the John E. Egan Analytical Laboratory Section, is greatly appreciated.

DISCLAIMER

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

HANOVER PARK WATER RECLAMATION PLANT FISCHER FARM REPORT FOR FIRST QUARTER OF 2013

During January, February, and March 2013, activities at the Hanover Park Water Reclamation Plant (WRP) Fischer Farm included well and field drainage water sampling, and flow measurements. These monitoring activities are required by the Illinois Environmental Protection Agency Operating Permit No. 2012-SC-2255. Fields and water monitoring locations are presented in Figure 1.

Analytical data for well water samples collected during the quarter are presented in Tables 1 and 2.

Drainage water (combined surface and subsurface) returned to the Hanover Park WRP from the farm fields was sampled twice per month in January, February, and March. Analytical data for these samples are presented in Table 3. The volumes of drainage water returned to the WRP during the first quarter were estimated as 5.88, 5.60, and 11.86 million gallons in January, February, and March, respectively.

FIGURE 1: MAP OF FIELDS AND WELLS AT THE HANOVER PARK FISCHER FARM SITE OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

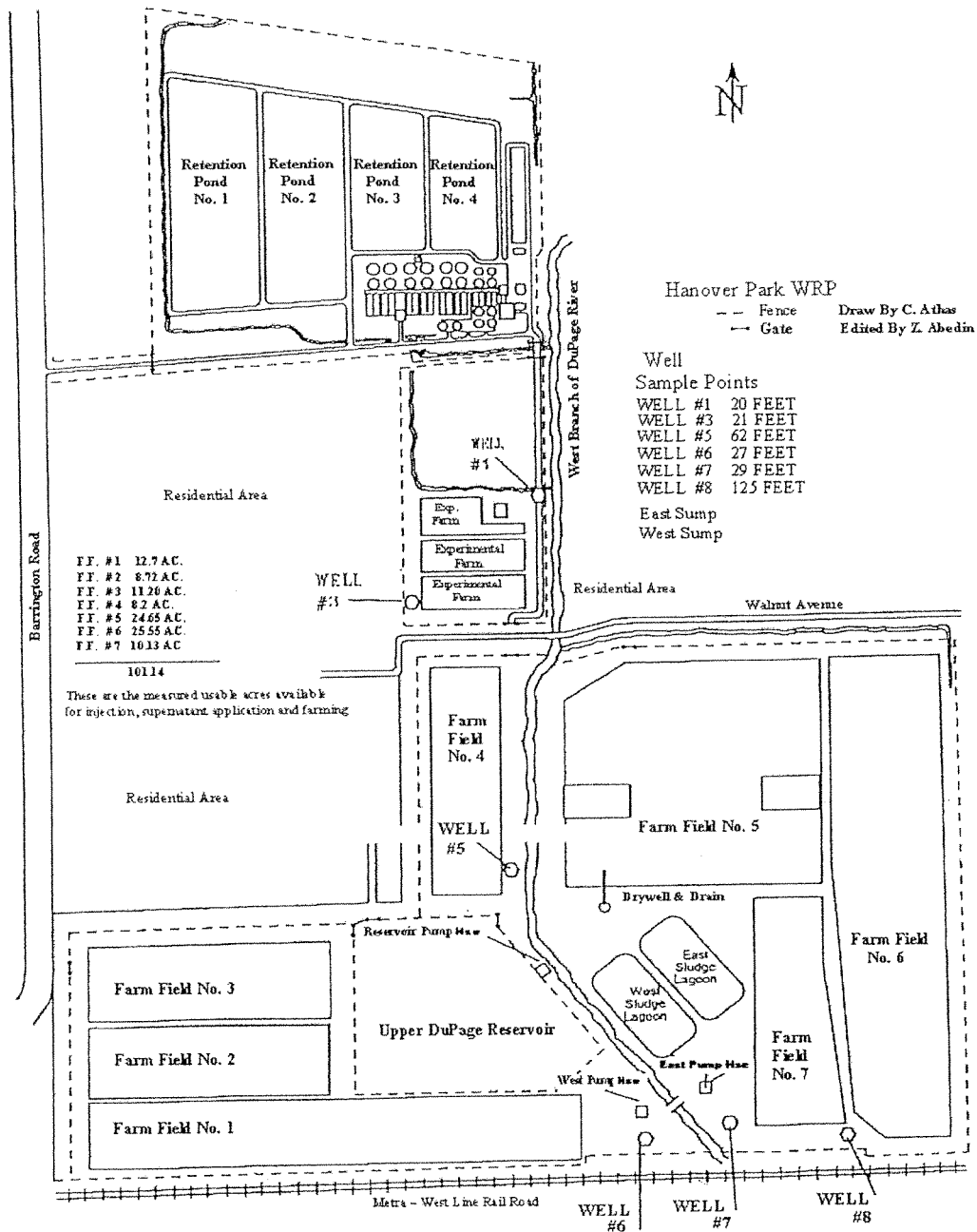


TABLE 1: ANALYSIS OF WATER FROM MONITORING WELL W-7
 AT THE HANOVER PARK FISCHER FARM SITE
 SAMPLED DURING JANUARY, FEBRUARY, AND MARCH 2013

Parameter	Unit	Date Sampled			
		01/08/13	01/15/13	02/05/13	02/13/13
pH ¹					
EC	mS/m				
Cl ⁻	mg/L				
SO ₄ ⁼	"	W	W	W	W
Alkalinity as CaCO ₃	"	E	E	E	E
TKN	"	L	L	L	L
		L	L	L	L
NH ₃ -N	"				
NO ₂ + NO ₃ -N	"	F	F	F	F
Total P	"	R	R	R	R
Cd	"	O	O	O	O
Cr	"	Z	Z	Z	Z
		E	E	E	E
Cu	"	N	N	N	N
Fe	"				
Mn	"				
Ni	"				
Zn	"				

TABLE 1 (Continued): ANALYSIS OF WATER FROM MONITORING WELL W-7
 AT THE HANOVER PARK FISCHER FARM SITE
 SAMPLED DURING JANUARY, FEBRUARY, AND MARCH 2013

Parameter	Unit	Date Sampled	
		03/12/13	03/19/13
pH ¹		7.2	7.3
EC	mS/m	155	155
Cl ⁻	mg/L	59	61
SO ₄ ⁼	"	213	229
Alkalinity as CaCO ₃	"	538	539
TKN	"	26	25
NH ₃ -N	"	26	24
NO ₂ + NO ₃ -N	"	< 0.15	< 0.15
Total P	"	< 0.2	< 0.2
Cd	"	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005
Fe	"	4	5
Mn	"	0.053	0.062
Ni	"	< 0.005	< 0.005
Zn	"	0.11	0.18

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF WATER FROM MONITORING WELLS
W-3, W-5, W-6 AND W-8 AT THE
HANOVER PARK FISCHER FARM SITE SAMPLED ON MARCH 12, 2013

Parameter	Unit	Monitoring Well No.			
		W-3	W-5	W-6	W-8
pH ¹		7.7	7.6	7.5	8.4
EC	mS/m	86	79	84	57
Cl ⁻	mg/L	20	15	28	< 10
SO ₄ ⁼	"	158	90	107	43
Alkalinity as CaCO ₃	"	253	312	303	251
TKN	"	< 1	< 1	< 1	< 1
NH ₃ -N	"	< 0.1	0.4	0.2	0.5
NO ₂ + NO ₃ -N	"	1.6	< 0.15	< 0.15	< 0.15
Total P	"	< 0.20	< 0.20	< 0.20	< 0.20
Cd	"	< 0.001	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005	< 0.005
Cu	"	0.011	0.010	< 0.005	< 0.005
Fe	"	3	2	3	0.5
Mn	"	0.024	0.025	0.038	0.022
Ni	"	< 0.005	< 0.005	< 0.005	< 0.005
Zn	"	0.02	< 0.01	< 0.01	< 0.01

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 3: ANALYSIS OF COMBINED SURFACE AND SUBSURFACE DRAINAGE FROM THE FISCHER FARM SITE RETURNED TO THE HANOVER PARK WATER RECLAMATION PLANT DURING JANUARY, FEBRUARY, AND MARCH 2013

Date	Sump	NH ₃ -N	TSS ¹	BOD ₅
..... mg/L				
01/08/13	East	11	5	7
01/08/13	West	<0.10	4	<2
01/15/13	East	2	<4	<2
01/15/13	West	3	10	4
02/19/13	East	2	23	5
02/19/13	West	2	38	7
02/25/13	East	51	6	5
02/25/13	West	0.2	4	<2
03/12/13	East	3	11	4
03/12/13	West	1	16	4
03/19/13	East	34	7	2
03/19/13	West	0.5	17	11
03/20/13	West	0.3	10	4

¹Total suspended solids.