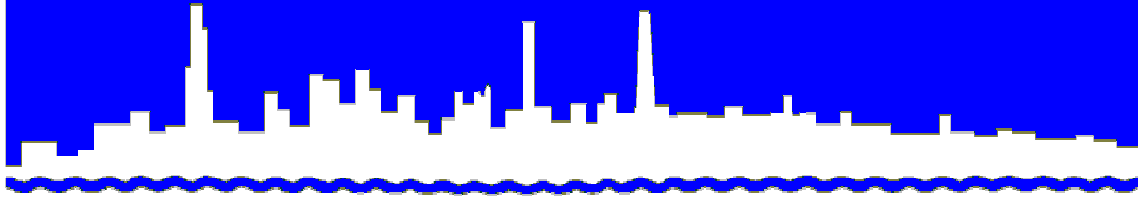


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 12-21

HANOVER PARK WATER RECLAMATION PLANT

FISCHER FARM MONITORING REPORT FOR

FIRST QUARTER 2012

JUNE 2012

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 2012

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

June 2012

Protecting Our Water Environment

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June 1, 2012

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. 2007-SC-2951-1, Monitoring Report for January, February, and March 2012

The attached report includes three tables of the monitoring results for the Hanover Park Fischer Farm site for the first quarter of 2012.

Very truly yours,

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

TCG:PL:cm

Enclosures

cc: J. Patel, Manager

IEPA Region 2 - Des Plaines
V. Aistars, USEPA Region 5
A. Sajjad, USEPA Region 5
T. Liston
C. O'Connor

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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 2012.

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ACKNOWLEDGEMENT

The assistance given by Ms. Minaxi Patel, Assistant Environmental Chemist, of the Environmental Monitoring and Research Division, and Mr. John Chavich, Supervisory 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 2012

During January, February, and March 2012, 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. 2007-SC-2951-1. 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 3.125, 2.981, and 2.131 million gallons in January, February, and March, respectively.

No biosolids were applied to the Fischer Farm fields during the first quarter.

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

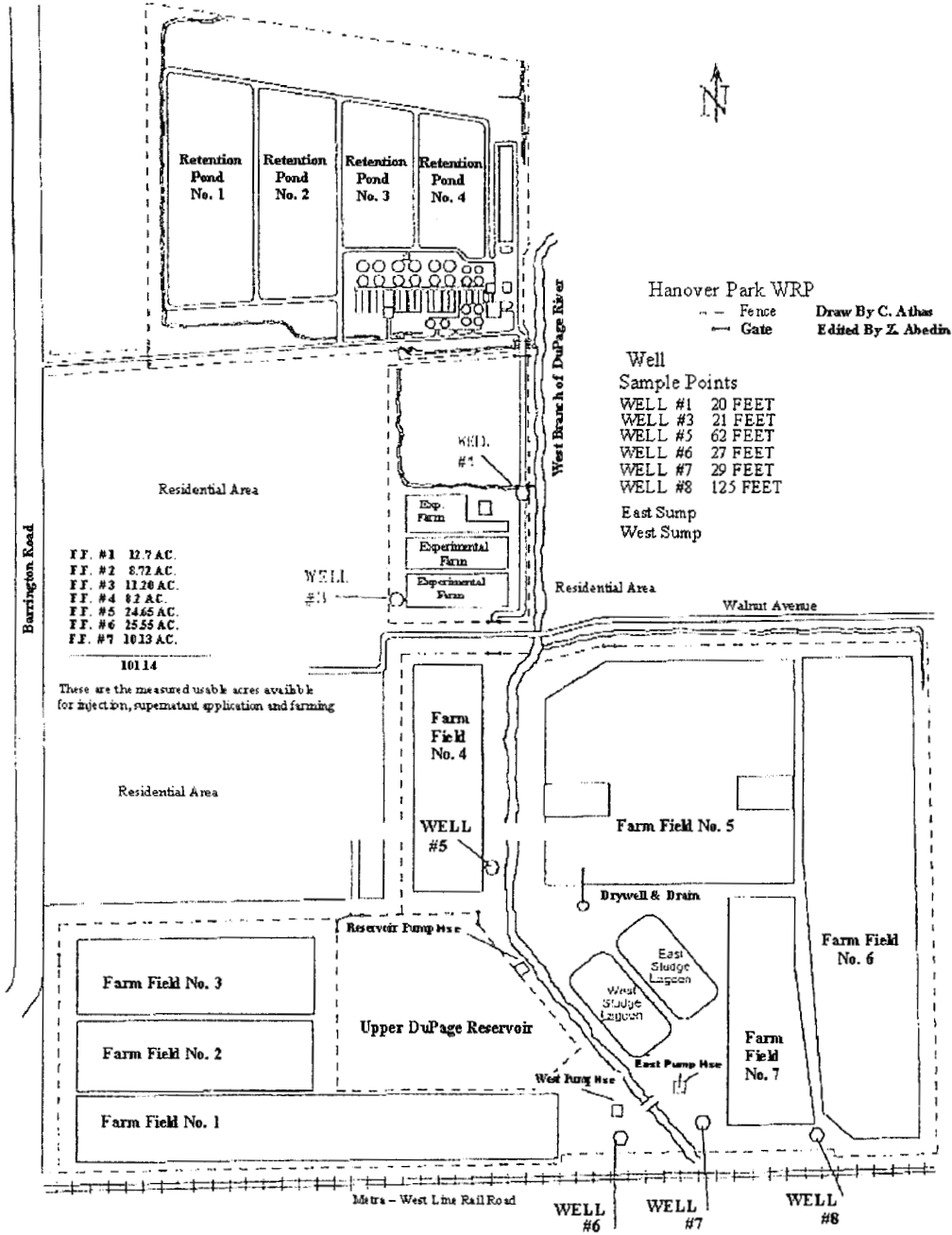


TABLE 1: ANALYSIS OF WATER FROM MONITORING WELL W-7
 AT THE HANOVER PARK FISCHER FARM SITE
 SAMPLED DURING JANUARY, FEBRUARY, AND MARCH 2012

Parameter	Unit	Date Sampled			
		01/10/12	01/24/12	02/07/12	02/21/12
pH ²		7.0	6.9	7.8	6.7
EC	mS/m	120	137	139	130
Cl ⁻	mg/L	63	56	64	63
SO ₄ ⁼	"	241	248	242	248
Alkalinity as CaCO ₃	"	458	460	458	468
TKN	"	15	15	14	12
NH ₃ -N	"	15	14	12	11
NO ₂ + NO ₃ -N	"	< 0.15	< 0.15	< 0.15	< 0.15
Total P	"	< 0.10	< 0.10	< 0.10	< 0.10
Cd	"	< 0.001	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005	< 0.005	< 0.005
Fe	"	5	5	5	5
Mn	"	0.057	0.056	0.055	0.066
Ni	"	< 0.005	< 0.005	< 0.005	< 0.005
Zn	"	0.08	0.07	0.05	0.14
Fecal coliform	MPN ³	< 1	< 1	< 1	< 1

TABLE 1 (Continued): ANALYSIS OF WATER FROM MONITORING WELL W-7
 AT THE HANOVER PARK FISCHER FARM SITE
 SAMPLED DURING JANUARY, FEBRUARY, AND MARCH 2012

Parameter	Unit	Date Sampled	
		03/06/12	03/20/12
pH ²		7.0	6.8
EC	mS/m	143	143
Cl ⁻	mg/L	63	69
SO ₄ ⁼	"	249	232
Alkalinity as CaCO ₃	"	466	471
TKN	"	12	11
NH ₃ -N	"	11	10
NO ₂ + NO ₃ -N	"	< 0.15	< 0.15
Total P	"	< 0.10	< 0.10
Cd	"	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005
Cu	"	< 0.005	< 0.005
Fe	"	5	4
Mn	"	0.055	0.059
Ni	"	< 0.005	< 0.005
Zn	"	0.07	0.10
Fecal coliform	MPN ³	< 1	< 1

¹Limit of quantitation (LOQ) instead of minimum detection limit (MDL) used as a reporting limit.

²pH analyzed beyond recommended holding time of 15 minutes.

³Most probable number per 100 mL.

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 6, 2012

Parameter ¹	Unit	Monitoring Well No.			
		W-3	W-5	W-6	W-8
pH ²		7.0	7.2	7.2	8.0
EC	mS/m	95	79	89	59
Cl ⁻	mg/L	16	14	29	7
SO ₄ ⁼	"	157	94	119	48
Alkalinity as CaCO ₃	"	344	313	313	263
TKN	"	< 1	< 1	< 1	< 1
NH ₃ -N	"	< 0.1	0.3	0.2	0.5
NO ₂ + NO ₃ -N	"	< 0.15	< 0.15	< 0.15	< 0.15
Total P	"	< 0.10	< 0.10	0.11	< 0.10
Cd	"	< 0.001	< 0.001	< 0.001	< 0.001
Cr	"	< 0.005	< 0.005	< 0.005	< 0.005
Cu	"	< 0.005	0.013	0.011	< 0.005
Fe	"	2	2	3	0.7
Mn	"	0.031	0.021	0.040	0.016
Ni	"	< 0.005	< 0.005	< 0.005	< 0.005
Zn	"	0.02	< 0.01	< 0.01	< 0.01
Fecal coliform	MPN ³	3	< 1	< 1	< 1

¹Limit of quantitation (LOQ) instead of minimum detection limit (MDL) used as a reporting limit.

²pH analyzed beyond recommended holding time of 15 minutes.

³Most probable number per 100 mL.

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 2012

Date	Sump	NH ₃ -N	TSS ¹	BOD ₅
	 mg/L		
01/10/12	East	8	6	5
01/10/12	West	0.6	6	4
01/24/12	East	1	10	3
01/24/12	West	2	9	9
02/07/12	East	4	2	<2
02/07/12	West	5	6	2
02/21/12	East	11	5	3
02/21/12	West	0.3	5	<2
03/06/12	East	3	3	2
03/06/12	West	2	5	<2
03/20/12	East	5	3	4
03/20/12	West	<0.1	138	<2

¹Total suspended solids.