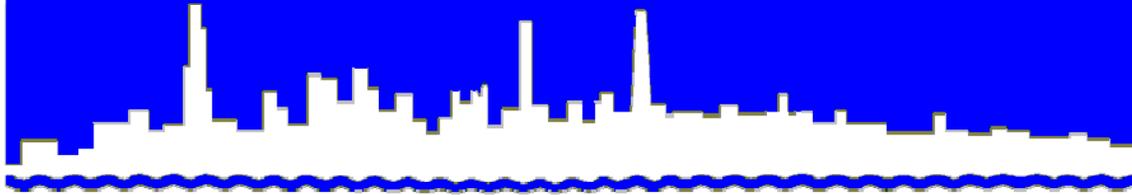


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

*MONITORING AND RESEARCH
DEPARTMENT*

REPORT NO. 14-53

HANOVER PARK WATER RECLAMATION PLANT

FISCHER FARM MONITORING REPORT FOR

THIRD QUARTER 2014

November 2014

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

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November 14, 2014

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 July, August, and September 2014

The attached report includes two tables of the monitoring results for the Hanover Park Fischer Farm site for the third quarter of 2014.

Very truly yours,

Thomas C. Granato, Ph.D.

Director

Monitoring and Research

TCG:DB:cm

Attachment

cc: Mr. J. Patel, Manager, IEPA - 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**

THIRD QUARTER 2014

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

November 2014

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FOREWORD

The data and information in this report fulfill the frequency of monitoring and reporting requirements for the Hanover Park Fischer Farm Site as specified in the Illinois Environmental Protection Agency Permit No. 2012-SC-2255 for the third quarter of 2014.

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 SECOND QUARTER OF 2014

During July, August, and September 2014, 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 Table 1. Drainage water (combined surface and subsurface) returned to the Hanover Park WRP from farm fields was sampled twice each month for July, August, and September. Analytical data for these samples are presented in Table 2. The volumes of drainage water returned to the WRP during the third quarter were estimated at 5.2, 13, and 2.3 million gallons in July, August, and September, respectively.

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

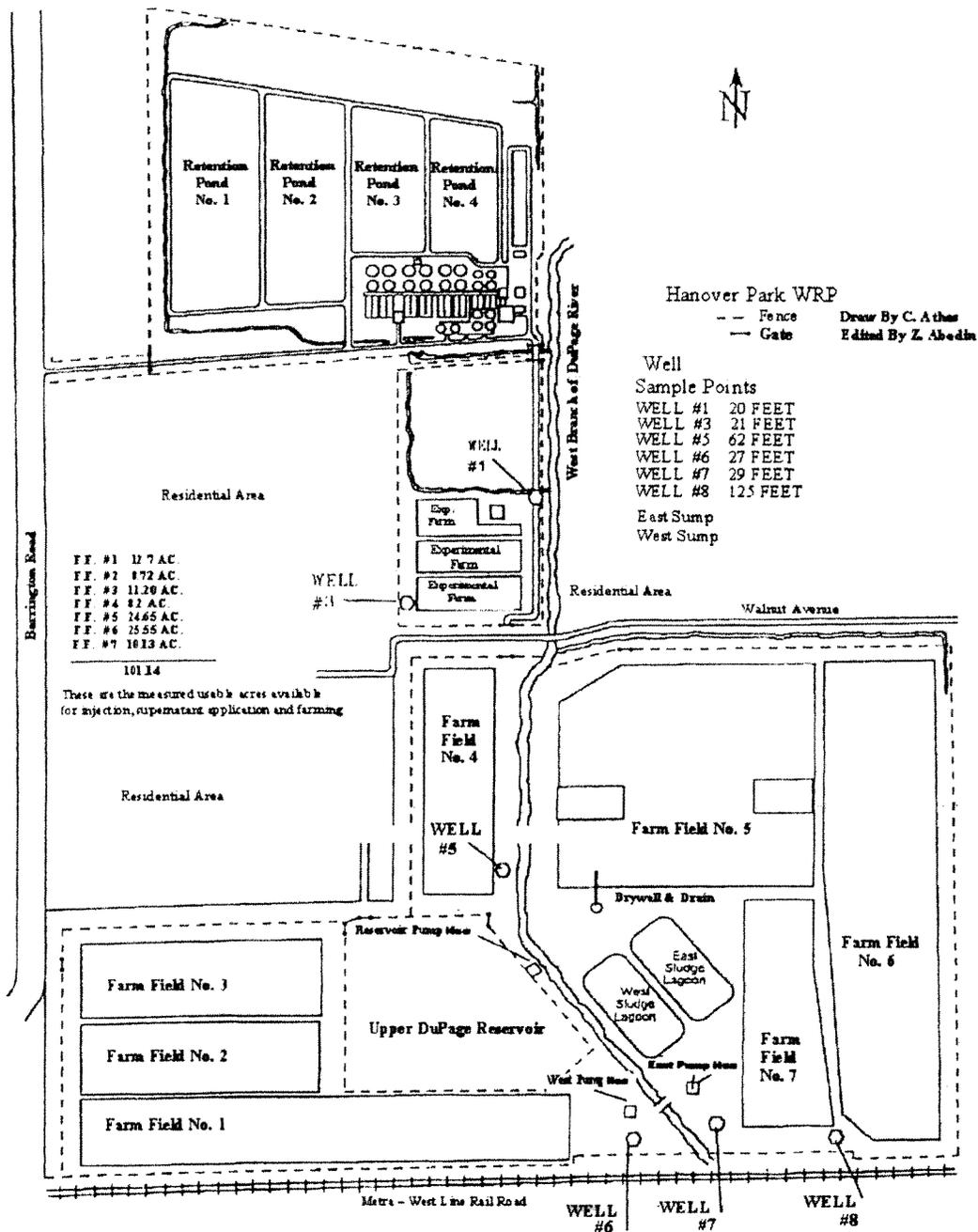


TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS W-3, W-5, W-6, W-7, AND W-8 AT THE HANOVER PARK FISCHER FARM SITE SAMPLED ON SEPTEMBER 9, 2014.

Parameter	Monitoring Well No.				
	W-3	W-5	W-6	W-7	W-8
pH ¹	7.6	7.7	7.6	7.3	8.4
	----- mS m ⁻¹ -----				
EC	84	73	80	154	54
	----- mg L ⁻¹ -----				
Cl ⁻	14	15	31	60	7.0
SO ₄ ²⁻	154	101	121	271	43
Alkalinity as CaCO ₃	325	309	299	533	239
TKN	3.2	<1.0	<1.0	36	<1.0
NH ₃ -N	0.45	0.30	0.23	33	0.44
NO ₂ +NO ₃ -N	0.20	<0.15	<0.15	<0.15	<0.15
Total P	0.24	<0.20	<0.20	0.20	<0.20
Cd	<0.001	<0.001	<0.001	<0.001	<0.001
Cr	<0.005	<0.005	<0.005	<0.005	<0.005
Cu	<0.005	0.02	0.01	<0.005	<0.005
Fe	2.1	3.8	2.5	4.4	0.66
Mn	0.14	0.03	0.04	0.05	0.09
Ni	<0.005	<0.005	<0.005	<0.005	<0.005
Zn	0.01	<0.01	<0.01	0.10	<0.01

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF COMBINED SURFACE AND SUBSURFACE DRAINAGE FROM THE FISCHER FARM SITE RETURNED TO THE HANOVER PARK WATER RECLAMATION PLANT DURING JULY, AUGUST, AND SEPTEMBER 2014

Date	Sump	NH ₃ -N	TSS ¹	BOD ₅
----- mg L ⁻¹ -----				
07/08/2014	East	4.6	5.0	<2.0
07/08/2014	West	<0.10	4.0	<2.0
07/22/2014	East	11.6	8.0	4.0
07/22/2014	West	0.11	<4.0	<2.0
08/05/2014	East	23	5.0	4.0
08/05/2014	West	0.19	4.0	<2.0
08/26/2014	East	0.94	5.0	<2.0
08/26/2014	West	2.6	35	<2.0
09/09/2014	East	4.9	5.0	NRR ²
09/09/2014	West	0.15	6.0	NRR
09/23/2014	East	17	12	NRR
09/23/2014	West	0.28	<4.0	NRR

¹Total suspended solids.

²No reportable results.