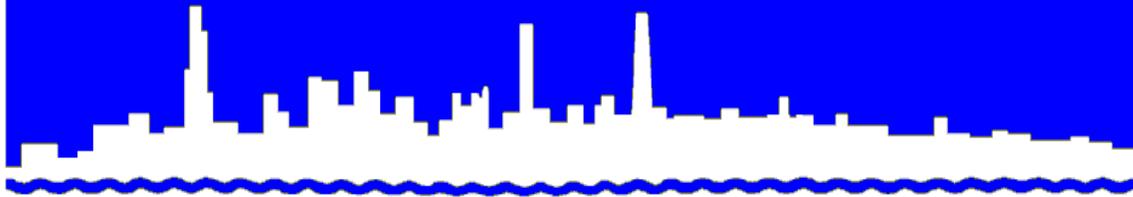


*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***MONITORING AND RESEARCH  
DEPARTMENT***

*REPORT NO. 14-29*

*HANOVER PARK WATER RECLAMATION PLANT*

*FISCHER FARM MONITORING REPORT FOR*

*SECOND QUARTER 2014*

*AUGUST 2014*

**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

**BOARD OF COMMISSIONERS**

Kathleen Therese Meany

*President*

Barbara J McGowan

*Vice President*

Mariyana T. Spyropoulos

*Chairman of Finance*

Michael A. Alvarez

Frank Avila

Cynthia M. Santos

Debra Shore

Kari K. Steele

Patrick D. Thompson

August 12, 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 April, May, and June 2014

The attached report includes two tables of the monitoring results for the Hanover Park Fischer Farm site for the second 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  
SECOND QUARTER 2014**

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

**August 2014**

## TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	ii
LIST OF FIGURES	iii
FOREWORD	iv
ACKNOWLEDGEMENT	v
DISCLAIMER	v
HANOVER PARK WATER RECLAMATION PLANT FISCHER FARM REPORT FOR SECOND QUARTER OF 2014	1

## LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1	Analysis of Water from Monitoring Wells W-3, W-5, W-6, W-7and W-8 at the Hanover Park Fischer Farm Site Sampled on May 6, 2014	3
2	Analysis of Combined Surface and Subsurface Drainage from the Fischer Farm Site Returned to the Hanover Park Water Reclamation Plant During April, May, and June 2014	4

## LIST OF FIGURES

<u>Figure No.</u>		<u>Page</u>
1	Map of Fields and Wells at the Hanover Park Fischer Farm Site of the Metropolitan Water Reclamation District of Greater Chicago	2

## 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 second 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 April, May, and June 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 April, May, and June. Analytical data for these samples are presented in Table 2. The volumes of drainage water returned to the WRP during the second quarter were estimated at 10.1, 4.6, and 6.9 million gallons in April, May, and June, respectively.



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 MAY 6, 2014.

Parameter	Monitoring Well No.				
	W-3	W-5	W-6	W-7	W-8
pH <sup>1</sup>	7.9	7.7	7.6	7.3	8.4
	----- mS m <sup>-1</sup> -----				
EC	83	77	85	139	55
	----- mg L <sup>-1</sup> -----				
Cl <sup>-</sup>	13	15	40	74	7.0
SO <sub>4</sub> <sup>2-</sup>	149	82	101	212	37
Alkalinity as CaCO <sub>3</sub>	288	311	299	445	247
TKN	<1.0	<1.0	<1.0	19	<1.0
NH <sub>3</sub> -N	0.12	0.39	0.23	19	0.44
NO <sub>2</sub> +NO <sub>3</sub> -N	<0.15	<0.15	<0.15	<0.15	<0.15
Total P	<0.20	<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	<0.005	<0.005	<0.005	<0.005
Fe	0.88	1.7	2.2	4.2	0.50
Mn	0.01	0.02	0.04	0.05	0.02
Ni	<0.005	<0.005	<0.005	<0.005	<0.005
Zn	0.02	<0.01	<0.01	0.08	<0.01

<sup>1</sup>pH 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 APRIL, MAY, AND JUNE 2014.

Date	Sump	NH <sub>3</sub> -N	TSS <sup>1</sup>	BOD <sub>5</sub>
		----- mg L <sup>-1</sup> -----		
04/08/2014	East	79	39	27
04/08/2014	West	0.52	8.0	<2.0
04/22/2014	East	11	6.0	7.0
04/22/2014	West	<0.10	<4.0	<2.0
05/06/2014	East	1.1	7.0	5.0
05/06/2014	West	<0.10	5.0	<2.0
05/13/2014	East	3.4	7.0	4.0
05/13/2014	West	<0.10	13	<2.0
06/10/2014	East	0.68	7.0	<2.0
06/10/2014	West	<0.10	<4.0	<2.0
06/24/2014	East	5.2	4.0	3.0
06/24/2014	West	0.27	<4.0	<2.0

<sup>1</sup>Total suspended solids.