

Metropolitan Water Reclamation District of Greater Chicago

# MONITORING AND RESEARCH DEPARTMENT

**REPORT NO. 15- 13** 

HANOVER PARK WATER RECLAMATION PLANT

FISCHER FARM MONITORING REPORT FOR

FIRST QUARTER 2015

June 2015

## **Protecting Our Water Environment**



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May 20, 2015

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 2015

The attached tables contain the monitoring data for the Hanover Park Water Reclamation Plant (WRP) Fischer Farm site for January, February, and March 2015 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2012-SC-2255.

The volumes of drainage water returned to the WRP during the first quarter were estimated at 1.9, 0.35, and 1.3 million gallons in January, February, and March 2015, respectively. No lagoon supernatant or biosolids were applied to the Fischer Farm fields during January, February, and March 2015. Due to heavy snow drifts, the Fischer Farm site was inaccessible for January, February, and most of March, and therefore, only one well could be sampled on March 31, 2015. Data will be reported for all well samples in the second quarter. Fields and water monitoring locations are presented in Figure 1. The data reported are as follows:

- 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 March 31, 2015.
- <u>Table 2</u>, 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 2015.

Mr. S. Alan Keller

- Subject: Hanover Park Water Reclamation Plant Illinois Environmental Protection Agency Permit No. 2012-SC-2255, Monitoring Report for January, February, and March 2015
- Figure 1, Map of Fields and Wells at the Hanover Park Fischer Farm Site of the Metropolitan Water Reclamation District of Greater Chicago.

Very truly yours,

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

TCG:DB:cm

Attachments cc/att: Mr. J. Patel, Manager, IEPA - Des Plaines Mr. V. Aistars, USEPA Region 5 Mr. P. Kuefler, USEPA Region 5

Parameter	Monitoring Well No.						
	Unit	<b>W</b> -3 <sup>1</sup>	$W-5^1$	W-6 <sup>1</sup>	W-7	$W-8^1$	
2							
pH <sup>2</sup>	1			i	7.2	i	
EC	$mS m^{-1}$				139		
Cl	mg L <sup>-1</sup>	I	i i	i	64	i	
$SO_4^{2-}$	"	Ν	Ν	Ν	248	Ν	
Alkalinity as CaCO <sub>3</sub>	"	0	0	0	495	Ο	
TKN	"				27		
NH <sub>3</sub> -N	"	S	S	S	26	S	
NO <sub>2</sub> +NO <sub>3</sub> -N	"	А	А	А	< 0.15	А	
Total P	"	Μ	Μ	Μ	0.20	Μ	
Cd	"	Р	Р	Р	< 0.001	Р	
Cr	"	L	L	L	< 0.005	L	
Cu	"	E	Е	Е	< 0.005	Е	
Fe	"	S	S	S	4.0	S	
Mn	"	1			0.05		
Ni	"		I I		< 0.01		
Zn	"	i		1	0.14	1	

### 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 MARCH 31, 2015

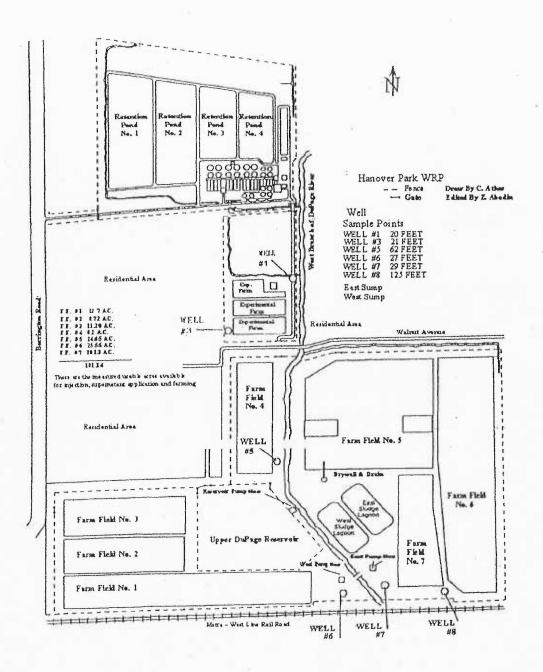
<sup>1</sup>No sample; the farm was inaccessible due to heavy snow drifts. <sup>2</sup>pH analyzed beyond recommended holding time of 15 minutes.

### TABLE 2: ANALYSIS OF COMBINED SURFACE AND SUBSURFACE DRAINAGE FROM THE FISCHER FARM SITE RETURNED TO THE HANOVER PARK WATER RECLAMATION PLANT DURING JANUARY, FEBRUARY, AND MARCH 2015

Date	Sump	NH <sub>3</sub> -N	TSS <sup>1</sup>	BOD <sub>5</sub>
			mg L <sup>-1</sup>	
01/13/2015	East	1.2	9.0	3.0
01/13/2015	West	0.13	32	<2.0
01/20/2015	East	0.66	<4.0	2.0
01/20/2015	West	< 0.10	14	<2.0
03/31/2015	East	121	84	65
03/31/2015	West	0.46	9.0	2.0
1				

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

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



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