

*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***MONITORING AND RESEARCH  
DEPARTMENT***

***REPORT NO. 23-10***

***HANOVER PARK WATER RECLAMATION PLANT***

***FISCHER FARM MONITORING REPORT***

***FOR FIRST QUARTER 2023:***

***SPECIAL CONDITION 2***

***April 2023***

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## Metropolitan Water Reclamation District of Greater Chicago

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**Edward W. Podczewski, P.E.**  
Director of Monitoring and Research

April 17, 2023

Ms. Catherine Siders  
Illinois Environmental Protection Agency  
Bureau of Water  
DWPC Compliance Section #19  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9274

Dear Ms. Siders:

Subject: Hanover Park Water Reclamation Plant - Illinois Environmental Protection Agency  
Permit No. 2022-SC-66896, Special Condition 2 Monitoring Report for January,  
February, and March 2023

The attached table contains the monitoring data for the Hanover Park Water Reclamation Plant (WRP) Fischer Farm site for January, February, and March 2023, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2022-SC-66896, Special Condition 2. Analytical data for well water samples collected during the quarter are presented in [Table 1](#).

Based on the investigation of historical high levels of ammonia nitrogen ( $\text{NH}_3\text{-N}$ ) plus nitrite+nitrate nitrogen ( $\text{NO}_2^-+\text{NO}_3^- \text{-N}$ ) in Well 7 during past monitoring, it appears that the source of these high levels is seepage from adjacent lagoons and subsurface drainage associated with supernatant application, both of which have high  $\text{NH}_3\text{-N}$  levels. Since implementing management practices to reduce the loading in adjacent lagoons and stop all applications of supernatant and biosolids in the closest farm field (Field 7),  $\text{NH}_3\text{-N}$  plus  $\text{NO}_2^-+\text{NO}_3^- \text{-N}$  in Well 7 has shown a decreasing trend, but with some significant fluctuation. We will continue to implement these practices and evaluate this trend.

The data reported are as follows:

[Table 1](#) Analysis of Water From Monitoring Wells W-5, W-6, W-7, and W-8 at the Hanover Park Fischer Farm Site Sampled in March 2023.

[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,



Albert E. Cox, Ph.D.  
Environmental Monitoring and Research Manager  
Monitoring and Research Department

AC:lf

Attachment

cc: Mr. J. Patel, Manager, IEPA – Des Plaines  
Mr. T. Bennett, IEPA  
Mr. B. Fleming, IEPA  
Mr. K. Middleton, USEPA, Region 5  
Mr. J. Chavich/Mr. B. Kaunelis  
Mr. P. Desai/H. Zhang

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**HANOVER PARK WATER RECLAMATION PLANT  
FISCHER FARM MONITORING REPORT  
FOR FIRST QUARTER 2023:  
SPECIAL CONDITION 2**

TABLE 1: ANALYSIS OF WATER FROM MONITORING WELLS W-5, W-6, W-7, AND W-8 AT THE HANOVER PARK FISCHER FARM SITE SAMPLED IN MARCH 2023<sup>1</sup>

	Unit	W-5	W-6	W-7	W-8
pH <sup>2</sup>		7.8	7.9	7.7	8.1
EC	mS m <sup>-1</sup>	73	75	72	54
Cl <sup>-</sup>	mg L <sup>-1</sup>	18	24	62	10
SO <sub>4</sub> <sup>2-</sup>	"	96	112	123	50
Alkalinity as CaCO <sub>3</sub>	"	308	292	125	248
TKN	"	<1.0	<1.0	2.1	<1.0
NH <sub>3</sub> -N	"	0.41	0.32	<0.30	0.42
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	"	<0.50	<0.50	12	<0.50
Total P	"	<0.15	<0.15	0.53	<0.15
Cd	"	<0.002	<0.002	<0.002	<0.002
Cr	"	<0.004	<0.004	0.008	<0.004
Cu	"	0.022	0.015	0.035	0.009
Fe	"	3.1	5.3	47	0.85
Mn	"	0.028	0.053	0.69	0.018
Ni	"	<0.002	<0.002	0.022	<0.002
Zn	"	0.014	0.014	0.35	<0.010

<sup>1</sup>Sampled on March 28, 2023.

<sup>2</sup>pH was measured beyond 15-minute holding time.

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

