

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 22-36

HANOVER PARK WATER RECLAMATION PLANT

FISCHER FARM MONITORING REPORT

FOR THIRD QUARTER 2022:

SPECIAL CONDITION 2

December 2022

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

October 25, 2022

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 July, August,
and September 2022

The attached table contains the monitoring data for the Hanover Park Water Reclamation Plant (WRP) Fischer Farm site for July, August, and September 2022, 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 (NH₃-N) plus nitrite+nitrate nitrogen (NO₂⁻+NO₃⁻-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 NH₃-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), NH₃-N plus NO₂⁻+NO₃⁻-N in Well 7 has shown a decreasing trend, but with some 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 September 2022.

[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. A. Gronski/Dr. H. Zhang

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**HANOVER PARK WATER RECLAMATION PLANT
FISCHER FARM MONITORING REPORT
FOR THIRD QUARTER 2022:
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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 APRIL 2022¹

	Unit	W-5	W-6	W-7	W-8
pH ²		7.8	7.8	8.1	8.3
EC	mS m ⁻¹	78	78	44	57
Cl ⁻	mg L ⁻¹	18	16	36	10
SO ₄ ²⁻	"	101	116	45	53
Alkalinity as CaCO ₃	"	307	293	116	248
TKN	"	<1.0	<1.0	<1.0	<1.0
NH ₃ -N	"	0.39	0.36	0.40	0.42
NO ₂ ⁻ +NO ₃ ⁻ -N	"	<0.25	<0.25	<0.25	<0.25
Total P	"	<0.15	<0.15	0.31	<0.15
Cd	"	<0.002	<0.002	<0.002	<0.002
Cr	"	<0.004	<0.004	0.008	<0.004
Cu	"	0.006	0.011	0.025	0.002
Fe	"	2.3	4.6	11	0.84
Mn	"	0.020	0.045	0.168	0.018
Ni	"	<0.002	<0.002	0.015	<0.002
Zn	"	<0.010	<0.010	0.292	<0.01

¹Sampled on September 28, 2022.

²pH 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

