

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 24-02

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

January 2024



Metropolitan Water Reclamation District of Greater Chicago

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Edward W. Podczerwinski, P.E.

January 12, 2024

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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 October,

November, and December 2023

The attached table contains the monitoring data for the Hanover Park Water Reclamation Plant (WRP) Fischer Farm site for October, November, and December 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 <u>Table 1</u>.

Since implementing management practices to reduce the loading in adjacent biosolids 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. We will continue to implement these practices and evaluate this trend.

The data reported are as follows:

<u>Table 1</u> Analysis of Water From Monitoring Wells W-5, W-6, W-7, and W-8 at the Hanover Park Fischer Farm Site Sampled in November 2023.

<u>Figure 1</u> 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 Cox, Ph.D.

Environmental Monitoring and Research Manager Monitoring and Research Department

EWP:HZ:AC:lf Attachment

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

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

By

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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 NOVEMBER 2023^1

	Unit	W-5	W-6	W-7	W-8
pH ²		7.9	7.9	8.0	8.3
EC	$mS m^{-1}$	74	73	42	57
Cl ⁻	mg L ⁻¹	19	19	30	11
SO_4^{2-}	"	99	113	61	61
Alkalinity as CaCO ₃	"	312	296	117	265
TKN	"	< 1.00	<1.00	1.29	< 1.00
NH ₃ -N	"	0.30	< 0.300	0.35	0.37
NO_2 - $+NO_3$ - $-N$	"	< 0.50	< 0.50	< 0.50	< 0.50
Total P	"	< 0.15	< 0.15	< 0.15	< 0.15
Cd	"	< 0.002	< 0.002	< 0.002	< 0.002
Cr	"	< 0.004	< 0.004	< 0.004	< 0.004
Cu	"	0.026	0.005	0.006	0.015
Fe	"	3.18	2.16	4.51	1.14
Mn	"	0.035	0.034	0.156	0.022
Ni	"	< 0.002	< 0.002	0.004	< 0.002
Zn	"	< 0.010	< 0.010	0.050	< 0.010

¹Sampled on November 15, 2023. 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

