

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 23-03

HANOVER PARK WATER RECLAMATION PLANT

FISCHER FARM MONITORING REPORT

FOR FOURTH QUARTER 2022:

SPECIAL CONDITION 4

January 2023

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 FOURTH QUARTER 2022:
SPECIAL CONDITION 4**

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Director of Monitoring and Research

January 18, 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 4 Monitoring Report for October,
November, and December 2022–Discharge Monitoring Report (DMR)

This Discharge Monitoring Report (DMR) is to report analyses of biosolids applied to the Hanover Park Water Reclamation Plant (WRP) Fischer Farm site for October, November, and December 2022, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2022-SC-66896, Special Condition 4. We are currently unable to submit this report to the NetDMR system as directed in Special Condition 4, as this permit number is not yet available in the NetDMR system per communication with IEPA staff.

The attached DMR presents analytical data for lagoon supernatant applied to Hanover Park WRP Fischer Farm fields during October 2022 (pages 1 – 2) and for liquid biosolids applied to those fields during November 2022 (pages 3 – 4).

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
Dr. H. Zhang

Paperwork Reduction Act Notice

Public reporting burden for this collection of information is estimated to vary from a range of 10 hours as an average per response for some minor facilities, to 110 hours as an average per response for some major facilities, with a weighted average for major and minor facilities of 18 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including strategies for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

General Instructions

1. If form has been partially completed by preprinting, disregard instructions directed at entry of that information already preprinted.
2. Enter "*Permittee Name/Mailing Address* (and facility name/location, if different)," "Permit Number," and "Discharge Number" where indicated. (A separate form is required for each discharge.)
3. Enter dates beginning and ending "*Monitoring Period*" covered by form where indicated.
4. Enter each "*Parameter*" as specified in monitoring requirements of permit.
5. Enter "*Sample Measurement*" data for each parameter under "*Quantity*" and "*Quality*" in units specified in permit. "*Average*" is normally arithmetic average (geometric average for bacterial parameters) of all sample measurements for each parameter obtained during "*Monitoring Period*"; "*Maximum*" and "*Minimum*" are normally extreme high and low measurements obtained during "*Monitoring Period*." (Note to municipals with secondary treatment requirement: Enter 30-day average of sample measurements under "*Average*," and enter maximum 7-day average of sample measurements obtained during monitoring period under "*Maximum*.")
6. Enter "*Permit Requirement*" for each parameter under "*Quantity*" and "*Quality*" as specified in permit.
7. Under "*No Ex*" enter number of sample measurements during monitoring period that exceed maximum (and/or minimum or 7-day average as appropriate) permit requirement for each parameter. If none, enter "0."
8. Enter "*Frequency of Analysis*" both as "*Sample Measurement*" (actual frequency of sampling and analysis used during monitoring period) and as "*Permit Requirement*" specified in permit. (e.g., Enter "*Cont*," for continuous monitoring, "*1/7*" for one day per week, "*1/30*" for one day per month, "*1/90*" for one day per quarter, etc.)
9. Enter "*Sample Type*" both as "*Sample Measurement*" (actual sample type used during monitoring period) and as "*Permit Requirement*," (e.g., Enter "*Grab*" for individual sample, "*24HC*" for 24-hour composite, "*N/A*" for continuous monitoring, etc.)
10. Where violations of permit requirements are reported, attach a brief explanation to describe cause and corrective actions taken, and reference each violation by date.
11. If "*no discharge*" occurs during monitoring period, enter "No Discharge" across form in place of data entry.
12. Enter "*Name/Title of Principal Executive Officer*" with "*Signature of Principal Officer of Authorized Agent*," "*Telephone Number*," and "*Date*" at bottom of form.
13. Mail signed Report to Office(s) by date(s) specified in permit. Retain copy for your records.
14. More detailed instructions for use of this *Discharge Monitoring Report (DMR)* form may be obtained from Office(s) specified in permit.

Legal Notice

This report is required by law (33 U.S.C. 1318; 40 C.F.R. 125.27). Failure to report or failure to report truthfully can result in civil penalties not to exceed \$10,000 per day of violation; or in criminal penalties not to exceed \$25,000 per day of violation, or by imprisonment for not more than one year, or by both.

DISCHARGE MONITORING REPORT (DMR)

NAME Metropolitan Water Reclamation District
of Greater Chicago
ADDRESS 100 East Erie Street
Chicago, Illinois 60611

2022-SC-66896 Special Condition 4
PERMIT NUMBER


DISCHARGE NUMBER

FACILITY Hanover Park Water Reclamation Plant
Fischer Farm Site
LOCATION 1220 Sycamore Avenue
Hanover Park, Illinois 60133

MONITORING PERIOD						
FROM			TO			
YEAR	MO	DAY	YEAR	MO	DAY	
2022	10	01	2022	12	31	

NOTE: Read instructions before

PARAMETER	SAMPLE PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION ¹				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
pH	SAMPLE				7.7	7.7	7.7			1	1WkC ²
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS ³
% Total solids (by weight)	SAMPLE				0.15	0.15	0.15	%		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
% Volatile solids (% of total solids)	SAMPLE				59.7	59.7	59.7	%		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Volatile acids	SAMPLE				<5	<5	<5	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Total Kjeldahl nitrogen	SAMPLE				777	777	777	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Ammonia nitrogen	SAMPLE				709	709	709	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Total phosphorus	SAMPLE				74	74	74	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Albert Cox TYPED OR PRINTED	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
			708	588-4068	2023	01	18
			AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)¹ Pages 1 and 2 present analytical results for lagoon supernatant applied in October 2022.

²One-week composite: composite of lagoon supernatant applied on October 12-13, 2022.

³Sample type not specified. The permit requirement is to "analyze the sludge applied from the storage lagoons or digesters on a quarterly basis..."

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YEAR	MO	DAY		YEAR	MO	DAY
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			TO			

NOTE: Read instructions before

PARAMETER	SAMPLE PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION ¹				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Cadmium	SAMPLE				<0.002	<0.002	<0.002	mg/L		1	1WkC ²
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS ³
Chromium	SAMPLE				<0.004	<0.004	<0.004	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Copper	SAMPLE				0.115	0.115	0.115	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Manganese	SAMPLE				0.312	0.312	0.312	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Nickel	SAMPLE				0.028	0.028	0.028	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Lead	SAMPLE				0.002	0.002	0.002	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Zinc	SAMPLE				0.214	0.214	0.214	mg/L		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS

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		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
pH	SAMPLE				7.4	7.5	7.6			1	1WkC ²
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS ³
% Total solids (by weight)	SAMPLE				2.44	2.61	2.77	%		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
% Volatile solids (% of total solids)	SAMPLE				70.7	70.9	71.0	%		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Volatile acids	SAMPLE				<181	679	1,230	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Total Kjeldahl nitrogen	SAMPLE				88,274	91,686	95,098	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Ammonia nitrogen	SAMPLE				35,437	38,595	41,754	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Total phosphorus	SAMPLE				27,653	28,056	28,459	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS

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²Two one-week composites of biosolids applied on November 2-5 and November 6-9, 2022.

³Sample type not specified. The permit requirement is to "analyze the sludge applied from the storage lagoons or digesters on a quarterly basis..."

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Cadmium	SAMPLE				1.29	1.35	1.40	mg/kg		1	1WkC ²
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS ³
Chromium	SAMPLE				32.0	34.1	36.3	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Copper	SAMPLE				731	744	757	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Manganese	SAMPLE				670	695	720	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Nickel	SAMPLE				26.5	27.7	28.9	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Lead	SAMPLE				18.5	19.9	21.4	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS
Zinc	SAMPLE				843	860	876	mg/kg		1	1WkC
	PERMIT REQUIREMENT				N/A	N/A	N/A			1 / 90	NS

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