

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 24-31

HARLEM AVENUE SOLIDS MANAGEMENT AREAS

MONITORING REPORT

FOR SECOND QUARTER 2024



Metropolitan Water Reclamation District of Greater Chicago

CECIL LUE-HING RESEARCH AND DEVELOPMENT COMPLEX 6001 WEST PERSHING ROAD CICERO, ILLINOIS 60804-4112

Edward W. Podczerwinski, P.E.

August 14, 2024

BOARD OF COMMISSIONERS

Kari K. Steele President

Cameron Davis Daniel Pogorzelski

Eira L. Corral Sepúlveda

Mariyana T. Spyropoulos

Patricia Theresa Flynn Vice President Marcelino Garcia Chairman of Finance Precious Brady-Davis Yumeka Brown

Director of Monitoring and Research

Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section Mail Code #19 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9274

Dear Sir or Madam:

Subject: Harlem Avenue Solids Management Area – Stickney Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2023-AO-68852, Monitoring Report for April, May, and June 2024

The attached Discharge Monitoring Report (DMR) contains the monitoring data for the Harlem Avenue Solids Management Area for April, May, and June 2024, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2023-AO-68852. According to the permit, these data are to be reported using the online NetDMR system. However, we are currently unable to submit this report using NetDMR as this permit number is not yet available in the NetDMR system; thus, we are mailing the paper DMRs to the IEPA.

The analytical data for biosolids placed in the solids drying area during the second quarter of 2024 is attached in the DMR form. Quarterly water samples were collected from lysimeters L-1N1, L-2N, and L-3N, and analytical data are included in the attached DMR.

Very truly yours,

Albert Cox, Ph.D.

Albert Con

Environmental Monitoring and Research Manager Monitoring and Research Department

AC:EE:lf Attachments Mr. T. Bennett, IEPA Mr. B. Fleming, IEPA Dr. H. Zhang

Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street Chicago, Illinois 60611-2803 (312) 751-560	
100 East Elle Street Chicago, Illinois 60611-2603 (312) 731-360	U
HARLEM AVENUE SOLIDS MANAGEMENT AREAS MONITORING REPORT FOR SECOND QUARTER 2024	
FOR SECOND QUARTER 2024	
$\mathbf{B}\mathbf{y}$	
D M	
Benjamin Morgan Environmental Soil Scientist	
Albert Cox	
Environmental Monitoring and Research Manager	
g and Research Department V. Podczerwinski, Director	August 2024

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

- 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.

EPA Form 3320-1 (Rev. 3/99)

Form Approved
OMB No. 2040-0004

Metropolitan Water Reclamation District

NAME of Greater Chicago

ADDRESS 100 East Erie Street
Chicago, Illinois 60611

	DISCHARGE MONIT	ORING REP	ORT	(DMR)
2023-AO-68852				
PERMIT NUMBER				DISC

•		
	DISCHARGE NUMBER	

FACILITY Harlem Avenue Solids Management Area
LOCATION 7430 Portage Trail
Forest View, IL 60402

	MONITORING PERIOD										
	YEAR	МО	DAY		YEAR	МО	DAY				
FROM	2024	_ 04	01	то	2024	06	30				

NOTE: Read instructions before

		QUANTITY OR LOADING				QUALITY OR CONCENTRATION					FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMU	м	UNITS	NO. EX	OF ANALYSIS	TYPE
Sludge - pH	SAMPLE						8.06			0	None plac	æd
Siduge - pri	PERMIT REQUIREMENT				None	None	None				Weekly	Grab
Sludge %TS	SAMPLE						16.2	2	0/	0	None place	ed
Sludge - %TS	PERMIT REQUIREMENT				None	None	None		%		Weekly	Grab
01 1 0/1/0	SAMPLE						50.7	4		0	None place	ed
Sludge - %VS	PERMIT REQUIREMENT				None	None	None		%		Weekly	Grab
Lysimeter L-1N1 - pH	SAMPLE						7.6			0	Quarterly	grab
	PERMIT REQUIREMENT			1	None	None	None				Quarterly	Grab
Lysimeter L-1N1	SAMPLE						3.13		mg/L	0	Quarterly	grab
NO ₂ +NO ₃ -N	PERMIT REQUIREMENT				None	None	None				Quarterly	Grab
Lysimeter L-1N1 - Cl-	SAMPLE						73		mg/L	0	Quarterly	grab
	PERMIT REQUIREMENT				None	None	None		IIIg/L		Quarterly	Grab
Lysimeter L-1N1 - SO₄	SAMPLE						25		mg/L	0	Quarterly	grab
	PERMIT REQUIREMENT				None	None	None		mg/L		Quarterly	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFF	supervision in a	penalty of law that this docum ccordance with a system design submitted. Based on my inqui	ed to assure that qualified perso	nnel properly gathe	r and evaluate	Albert Con			TELEPHONE		DATE	<u> </u>
Albert Cox	persons directly and belief, true	responsible for gathering the info , accurate, and complete. I an luding the possibility of fine and	ormation, the information submit n aware that there are significa	ted is, to the best of ant penalties for su	my knowledge ubmitting false	SIGNATURE OF PRINCIPAL EXE	CUTIVE	708	588-40	68	2024 08	13
TYPED OR PRINTED COMMENT AND EXPLANATION OF ANY V						OFFICER OR AUTHORIZED A		AREA	NUMBE		YEAR MO	

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) Biosolids were not placed in drying site during the first quarter of 2024, so there is no analytical data to report for biosolids.

Only maximum values are reported per permit instructions that "sampling shall consist of a grab sample and be reported as a maximum value."

Form Approved OMB No. 2040-0004

Metropolitan Water Reclamation District NAME of Greater Chicago

ADDRESS 100 East Erie Street Chicago, Illinois 60611

	DISCHARGE MONIT	ORING REP	ORT	(DMR)
2023-AO-68852				
PERMIT NUMBER				DISC

D	ISCHARGE NUMBER	
,	,	

FACILITY Harlem Avenue Solids Management Area **LOCATION** 7430 Portage Trail Forest View, IL 60402

	MONITORING PERIOD										
	YEAR	MO	DAY		YEAR	МО	DAY				
FROM	2024	04	01	то	2024	06	30				

NOTE: Read instructions before

PARAMETER		QU	ANTITY OR LOADING		QUALITY OR CONCENTRATION				NO.	FREQUENCY OF	SAMPLE	
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMU	м	UNITS	EX	ANALYSI	TYPE
Lysimeter L-2N - pH	SAMPLE						7.6			0	Quarter	y grab
Lyonnotor L Ziv pri	PERMIT REQUIREMENT				None	None	None				Quarter	ly grab
Lysimeter L-2N	SAMPLE						<0.50		ma/l	0	Quarter	y grab
NO ₂ -+NO ₃ N	PERMIT REQUIREMENT				None	None	None	е	mg/L -		Quarter	ly grab
Lysimeter L-2N - Cl-	SAMPLE						15		ma/l	0	Quarter	y grab
Lysiniciei L-ZIV - Oi	PERMIT REQUIREMENT				None	None	None		mg/L		Quarter	y grab
Lysimeter L-2N - SO ₄ ²⁻	SAMPLE						1,440		mg/L	0	Quarter	y grab
Lysimeter L-2N - 304	PERMIT REQUIREMENT				None	None	None	Э			Quarter	y grab
	SAMPLE											
	PERMIT REQUIREMENT											
	SAMPLE											
	PERMIT REQUIREMENT											
	SAMPLE											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECUTIVE OFFI	Supervision	n in accordance with a system design	ument and all attachments were gned to assure that qualified person	nnel properly gather	r and evaluate	Albert Con			TELEPHONE			ATE
Albert Cox	persons dir and belief,	ectly responsible for gathering the i true, accurate, and complete. I	quiry of the person or persons when formation, the information submitt am aware that there are significand imprisonment for knowing violating the significant imprisonment for knowing violating the significant in the signif	ted is, to the best of a ant penalties for su	my knowledge	SIGNATURE OF PRINCIPAL EXEC		708	588-40	68	2024	08 13

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER								
Albert Cox								
	TYPED OR PRINTED							

OFFICER OR AUTHORIZED AGENT AREA NUMBER YEAR

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Only maximum values are reported per permit instructions that "sampling shall consist of a grab sample and be reported as a maximum value."

DAY

Form Approved
OMB No. 2040-0004

Metropolitan Water Reclamation District **NAME** of Greater Chicago

ADDRESS 100 East Erie Street Chicago, Illinois 60611

PARAMETER

DISCHAI	RGE MONITORING REPORT (DMR)
2023-AO-68852		
PERMIT NUMBER		DISC

QUANTITY OR LOADING

DISCHARGE NUMBER	

QUALITY OR CONCENTRATION

FACILITY Harlem Avenue Solids Management Area
LOCATION 7430 Portage Trail
Forest View, IL 60402

		MONITORING PERIOD								
	YEAR	MO	DAY		YEAR	МО	DAY			
FROM	2024	04	01	то	2024	06	30			

NOTE: Read instructions before

NO.

FREQUENCY

SAMPLE

PARAMETER			AVERAGE	MAXIMUM	UNITS	MINI	IMUM	AVERAGE	MAXIMU	м	UNITS	EX	ANALYSIS	TYF
Lysimeter L-3N - pH	SAMPLE								7.6			0	Quarte	rly gra
Lyonnotor L ort pri	PERMIT REQUIREME					No	ne	None	None				Quarter	ly gral
Lysimeter L-3N	SAMPLE								<0.50		ma/l		Quarter	y grat
$N\bar{O}_2+N\bar{O}_3-N$	PERMIT REQUIREME					No	ne	None	None	Э	mg/L		Quarter	y gra
Lysimeter L-3N - Cl-	SAMPLE								158		e. /1	0	Quarte	ly gra
	PERMIT REQUIREME					Nor	ne	None	None		mg/L		Quarter	y grat
Lysimeter L-3N - SO ₄ ²	SAMPLE								298		,	0	Quarter	y grat
Lysimeter L-314 - 304	PERMIT REQUIREME					Non	ie	None	None	e mg/L			Quarter	y grat
	SAMPLE													
	PERMIT REQUIREME													
	SAMPLE													
	PERMIT REQUIREME													
	SAMPLE													
	PERMIT REQUIREME													
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER 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								TELEPHONE		г	ATE			
Albert Cox	perso and I	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.			my knowledge	SIGNATURE OF PRINCIPAL EXECUTIVE		UTIVE	708	588-40	68	2024	08 1	
TYPED OR PRINTED							OFFICER OR AUTHORIZED AGENT		AREA	NUMBEI	R	YEAR	ио в	

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Only maximum values are reported per permit instructions that "sampling shall consist of a grab sample and be reported as a maximum value."