

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 23-15

CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS

MONITORING REPORT FOR

FIRST QUARTER 2023

May 2023

Protecting Our Water Environment

BOARD OF COMMISSIONERS

Kari K. Steele
President

Marcelino Garcia
Chairman of Finance

Yumeka Brown

Cameron Davis

Patricia Theresa Flynn

Daniel Pogorzelski

Eira L. Corral Sepúlveda

Mariyana T. Spyropoulos

Metropolitan Water Reclamation District of Greater Chicago

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

May 25, 2023

Edward W. Podczewski, P.E.

Director of Monitoring and Research

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

Subject: Calumet East and West Solids Management Areas – Calumet Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2020-AO-64905, Monitoring Report for January, February, and March 2023

The attached tables contain the monitoring data for the Calumet East and West Solids Management Areas for January, February, and March 2023, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2020-AO-64905. Biosolids were not placed in the Calumet East or West Solids Management Areas in the first quarter of 2023.

Table 1 Analysis of Water from Lysimeters L-1N Through L-6N at the Calumet East Solids Management Area Sampled on March 17, 2023.

Table 2 Analysis of Water from Lysimeters L-1N Through L-3N at the Calumet West Solids Management Area Sampled on March 17, 2023.

Yours very truly,

Albert Cox

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

AC:lf
Attachments
Mr. J. Patel, IEPA
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) 751-5600

**CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS
MONITORING REPORT FOR
FIRST QUARTER 2023**

By

**Benjamin Morgan
Environmental Soil Scientist**

**Albert Cox
Environmental Monitoring and Research Manager**

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-6N AT THE CALUMET EAST SOLIDS MANAGEMENT AREA SAMPLED ON MARCH 17, 2023

Parameter	Lysimeter No.					
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH	7.0	7.0	7.1	6.8	7.6	7.2
	-----mg L ⁻¹ -----					
Cl ⁻	157	140	32	874	229	23
SO ₄ ²⁻	2,130	1,872	1,056	2,708	516	762
NO ₂ ⁻ +NO ₃ ⁻ -N	<0.50	0.53	<0.50	<0.50	<0.50	<0.50

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED ON MARCH 17, 2023¹

Parameter	Lysimeter No.		
	L-1N	L-2N	L-3N
pH	7.3	7.6	7.4
	-----mg L ⁻¹ -----		
Cl ⁻	38	24	63
SO ₄ ²⁻	1,921	2,091	2,394
NO ₂ ⁻ +NO ₃ ⁻ -N	<0.50	<0.50	<0.50

¹Lysimeter L-2N did not produce adequate sample volume for analysis on March 17, 2023, and was resampled on March 30, 2023.