

*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***MONITORING AND RESEARCH  
DEPARTMENT***

***REPORT NO. 24-33***

***CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS***

***MONITORING REPORT***

***FOR SECOND QUARTER 2024***

***September 2024***

# Protecting Our Water Environment

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### Edward W. Podczewinski, P.E.

Director of Monitoring and Research  
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September 3, 2024

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

Dear Sir or Madam:

Subject: Calumet East and West Solids Management Areas – Calumet Water Reclamation Plant,  
Illinois Environmental Protection Agency Permit No. 2020-AO-64905, Monitoring  
Report for April, May, and June 2024

The attached tables contain the monitoring data for the Calumet East and West Solids Management Areas for April, May, and June 2024, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2020-AO-64905. Biosolids were placed in both the Calumet East and West Solids Management Areas in May and June 2024.

Table 1 Analysis of Water from Lysimeters L-1N through L-6N at the Calumet East Solids Management Area Sampled on June 4, 2024.

Table 2 Analysis of Water from Lysimeters L-1N through L-3N at the Calumet West Solids Management Area Sampled on June 4, 2024.

Table 3 Analysis of Biosolids Placed in the Calumet East Solids Management Area During May and June 2024.

Table 4 Analysis of Biosolids Placed in the Calumet West Solids Management Area During May and June 2024.

Very truly yours,



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

AC:EE:lf

Attachment

cc: 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 SECOND QUARTER 2024**

**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 JUNE 4, 2024

Parameter	Lysimeter No.					
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH	7.2	7.7	7.0	6.9	7.2	7.5
	-----mg L <sup>-1</sup> -----					
Cl <sup>-</sup>	143	140	29	808	254	19
SO <sub>4</sub> <sup>2-</sup>	2,022	1,873	867	2,541	554	692
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	NRR <sup>1</sup>	NRR	NRR	NRR	NRR	NRR

<sup>1</sup>No reportable result due to sample contamination.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED ON JUNE 4, 2024

Parameter	Lysimeter No.		
	L-1N	L-2N	L-3N
pH	7.6	7.6	7.5
	-----mg L <sup>-1</sup> -----		
Cl <sup>-</sup>	39	24	65
SO <sub>4</sub> <sup>2-</sup>	1,970	1,987	2,363
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	NRR <sup>1</sup>	NRR	NRR

<sup>1</sup>No reportable result due to sample contamination.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET EAST SOLIDS MANAGEMENT AREA DURING MAY AND JUNE 2024

Parameter	May	June
pH	7.3	7.3
	-----%-----	
Total Solids	9.0	6.8
Total Volatile Solids <sup>1</sup>	46.5	53.3

<sup>1</sup>Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET WEST SOLIDS MANAGEMENT AREA DURING MAY AND JUNE 2024

Parameter	May	June
pH	7.3	7.3
	-----%-----	
Total Solids	9.3	8.8
Total Volatile Solids <sup>1</sup>	46.7	48.3

<sup>1</sup>Total volatile solids as a percentage of total solids.