

*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***MONITORING AND RESEARCH  
DEPARTMENT***

*REPORT NO. 22-33*

*CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS*

*MONITORING REPORT FOR*

*THIRD QUARTER 2022*

*November 2022*

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## Metropolitan Water Reclamation District of Greater Chicago

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**Edward W. Podczewski, P.E.**  
Director of Monitoring and Research

November 22, 2022

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: Calumet East and West Solids Management Areas – Calumet Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2020-AO-64905, Monitoring Report for July, August, and September 2022

The attached tables contain the monitoring data for the Calumet East and West Solids Management Areas for July, August, and September 2022, as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2020-AO-64905. Biosolids were placed in the Calumet East Solids Management Area in July, August, and September 2022, and in the West Solids Management Areas in July 2022.

Table 1: Analysis of Water from Lysimeters L-1N through L-6N at the Calumet East Solids Management Area Sampled on September 7, 2022.

Table 2: Analysis of Water from Lysimeters L-1N through L-3N at the Calumet West Solids Management Area Sampled on September 7, 2022.

Table 3: Analysis of Biosolids Placed in the Calumet East Solids Management Area During July, August, and September 2022.

Table 4: Analysis of Biosolids Placed in the Calumet West Solids Management Area During July 2022.

Very truly yours,



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

AC:BM:lf  
Attachment

cc: Mr. J. Patel, IEPA/Mr. T. Bennett, IEPA  
Mr. B. Fleming, IEPA/Dr. H. Zhang

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**CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS  
MONITORING REPORT FOR  
THIRD QUARTER 2022**

**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 SEPTEMBER 7, 2022

Parameter	Lysimeter No.					
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH	6.9	6.9	6.9	6.8	7.2	7.2
	-----mg L <sup>-1</sup> -----					
Cl <sup>-</sup>	149	140	32	868	252	19
SO <sub>4</sub> <sup>2-</sup>	2,071	1,866	1,089	2,680	569	721
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	0.46	0.26	<0.25	0.32	0.52	<0.25

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED ON SEPTEMBER 7, 2022

Parameter	Lysimeter No.		
	L-1N	L-2N	L-3N
pH	7.1	7.4	7.1
	-----mg L <sup>-1</sup> -----		
Cl <sup>-</sup>	39	24	63
SO <sub>4</sub> <sup>2-</sup>	1,920	2,025	2,326
NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	<0.25	<0.25	<0.25

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET EAST SOLIDS MANAGEMENT AREA DURING JULY, AUGUST, AND SEPTEMBER 2022

Parameter	July	August	September
pH	7.5	8.1	7.3
	-----%-----		
Total Solids	7.7	8.6	7.7
Total Volatile Solids <sup>1</sup>	50.8	48.9	52.7

<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 JULY 2022

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Parameter	July
pH	7.5
Total Solids	% 8.2
Total Volatile Solids <sup>1</sup>	50.2

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