

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 21-33

CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS

MONITORING REPORT FOR

SECOND QUARTER 2021

August 2021

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Edward W. Podczerwinski, P.E.
Director of Monitoring and Research

August 12, 2021

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 April, May, and June 2021

The attached tables contain the monitoring data for the Calumet East and West Solids Management Areas for April, May, and June 2021 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 April, May, and June 2021.

- Table 1 Analysis of Water From Lysimeters L-1N through L-6N at the Calumet East Solids Management Area Sampled on May 17, 2021.
- Table 2 Analysis of Water From Lysimeters L-1N through L-3N at the Calumet West Solids Management Area Sampled on May 17, 2021.
- Table 3 Analysis of Biosolids Placed in the Calumet East Solids Management Area During April, May, and June 2021.
- Table 4 Analysis of Biosolids Placed in the Calumet West Solids Management Area During April, May, and June 2021.

Very truly yours,



Albert Cox
Environmental Monitoring and Research Manager
Monitoring and Research Department

AC:BM:lf
Attachments

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 SECOND QUARTER 2021

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-6N AT THE CALUMET EAST SOLIDS MANAGEMENT AREA SAMPLED ON MAY 17, 2021

Parameter	Lysimeter No.					
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH	7.0	6.9	7.0	6.8	7.3	7.6
	-----mg L ⁻¹ -----					
Cl	139	140	31	823	232	18
SO ₄	1,914	1,830	1,118	2,179	524	700
NO ₂ ⁻ +NO ₃ ⁻ -N	0.50	<0.25	<0.25	<0.25	0.32	<0.25

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED ON MAY 17, 2021

Parameter	Lysimeter No.		
	L-1N	L-2N	L-3N
pH	7.4	8.0	7.5
	-----mg L ⁻¹ -----		
Cl	37	23	54
SO ₄	1,789	1,960	2,026
NO ₂ ⁻ +NO ₃ ⁻ -N	<0.25	<0.25	<0.25

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET EAST SOLIDS MANAGEMENT AREA DURING APRIL, MAY, AND JUNE 2021

Parameter	April	May	June
pH	7.9	7.3	7.4
		-----%-----	
Total Solids	7.3	7.6	8.2
Total Volatile Solids	51.4	50.4	49.6

¹Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET WEST SOLIDS MANAGEMENT AREA DURING APRIL, MAY, AND JUNE 2021

Parameter	April	May	June
pH	7.1	7.4	7.4
		-----%-----	
Total Solids	33.7	20.1	8.6
Total Volatile Solids	44.8	48.8	49.3

¹Total volatile solids as a percentage of total solids.