

Metropolitan Water Reclamation District of Greater Chicago

## MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 21-14

CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS

MONITORING REPORT FOR

FIRST QUARTER 2021



## 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.

**Director of Monitoring and Research** 

May 13, 2021

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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 January, February, and March 2021

The attached tables contain the monitoring data for the Calumet East and West Solids Management Areas for January, February, and March 2021 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2020-AO-64905. Biosolids were not placed in either the Calumet East or West Solids Management Areas in the first quarter of 2021.

<u>Table 1</u> Analysis of Water From Lysimeters L-1N through L-6N at the Calumet East Solids Management Area Sampled in March 2021.

<u>Table 2</u> Analysis of Water From Lysimeters L-1N through L-3N at the Calumet West Solids Management Area Sampled in March 2021.

Very truly yours,

Albert E. Cox, Ph.D.

Albert Cox

Environmental Monitoring and Research Manager Monitoring and Research Department

AC:BM:cm Attachments

cc/att: Mr. J. Patel, IEPA

Mr. T. Bennett, IEPA Mr. B. Fleming, IEPA

Dr. H. Zhang

Metropolitan Water Reclamation District 100 East Erie Street Chicago, Illinois 60611-26			
CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS			
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TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-6N AT THE CALUMET EAST SOLIDS MANAGEMENT AREA SAMPLED IN MARCH  $2021^1$ 

	Lysimeter No.					
Parameter	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH	7.2	7.1	7.6	7.6	7.6	7.8
	mg $L^{-1}$					
Cl <sup>-</sup>	151	134	34	821	238	20
$SO_4^{2-}$	2,051	1,794	1,216	2,491	573	750
$NO_{2}^{-}+NO_{3}^{-}-N$	0.40	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25

<sup>&</sup>lt;sup>1</sup>Sampled on March 4, 2021

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED IN MARCH  $2021^1$ 

Parameter	Lysimeter No. L-1N L-2N L-3N			
pH <sup>1</sup>	8.2	8.5 mg L <sup>-1</sup>	7.9	
Cl <sup>-</sup> SO <sub>4</sub> <sup>2-</sup> NO <sub>2</sub> <sup>-</sup> +NO <sub>3</sub> <sup>-</sup> -N	117 1,242 <0.25	25 2,038 <0.25	62 2,323 0.39	

<sup>&</sup>lt;sup>1</sup>Lysimeters were sampled on March 4, 2021, but L-2N was frozen shut and L-3N was dry, both lysimeters were resampled on March 17, 2021.