

*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***MONITORING AND RESEARCH  
DEPARTMENT***

*REPORT NO. 19-08*

*CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS*

*MONITORING REPORT FOR*

*FIRST QUARTER 2019*

*June 2019*

**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 2019**

**Monitoring and Research Department**  
**Edward W. Podczewinski, Director**

**June 2019**

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

June 3, 2019

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

Dear Mr. Callaway:

Subject: Calumet East and West Solids Management Areas - Calumet Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2015-AO-59622, Monitoring Report for January, February, and March 2019

The attached tables contain the monitoring data for the Calumet East and West Solids Management Areas for January, February, and March 2019 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2015-AO-59622. Biosolids were placed in the Calumet East Solids Management Area in January and February, and none were placed in the Calumet West Solids Management Area.

Table 1 Analysis of Water From Lysimeters L-1N through L-6N at the Calumet East Solids Management Area Sampled on March 6, 2019.

Table 2 Analysis of Water From Lysimeters L-1N through L-3N at the Calumet West Solids Management Area Sampled on March 14, 2019.

Table 3 Analysis of Biosolids Placed in the Calumet East Solids Management Area During January 2019.

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Subject: Calumet East and West Solids Management Areas - Calumet Water Reclamation Plant, Illinois Environmental Protection Agency Permit No. 2015-AO-59622, Monitoring Report for January, February, and March 2019

Table 4 Analysis of Biosolids Placed in the Calumet East Solids Management Area During February 2019.

Very truly yours,



Albert E. Cox  
Environmental Monitoring and Research Manager  
Monitoring and Research Department

AC:DB:cm

Attachments

cc/att: Mr. J. Patel, IEPA/Records Unit, IEPA  
Dr. H. Zhang

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-6N AT THE CALUMET EAST SOLIDS MANAGEMENT AREA SAMPLED ON MARCH 6, 2019

Parameter	Lysimeter No.					
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH	8.0	7.4	7.5	7.8	7.2	7.5
	----- mg L <sup>-1</sup> -----					
Cl <sup>-</sup>	125	126	32	797	244	19
SO <sub>4</sub> <sup>2-</sup>	1,659	NRR <sup>1</sup>	1,128	2,192	534	670
NO <sub>2</sub> +NO <sub>3</sub> -N	0.60	<0.25	<0.25	<0.25	<0.25	<0.25

<sup>1</sup>NRR=No reportable results; sample analysis canceled due to instrument issues and was unable to be rerun due to holding time exceedance.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED ON MARCH 14, 2019

Parameter	Lysimeter No.		
	L-1N	L-2N	L-3N
pH <sup>1</sup>	7.6	8.0	7.5
	----- mg L <sup>-1</sup> -----		
Cl <sup>-</sup>	39	24	52
SO <sub>4</sub> <sup>2-</sup>	1,763	1,919	1,854
NO <sub>2</sub> +NO <sub>3</sub> -N	<0.25	<0.25	0.42

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET EAST SOLIDS  
MANAGEMENT AREA DURING JANUARY 2019

Parameter	Analysis <sup>1</sup>
pH	8.3
	---- % ----
Total Solids	23
Total Volatile Solids <sup>2</sup>	58

<sup>1</sup>One sample.

<sup>2</sup>Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET EAST SOLIDS MANAGEMENT AREA DURING FEBRUARY 2019

Parameter	Analysis <sup>1</sup>
pH	8.4
	---- % ----
Total Solids	23
Total Volatile Solids <sup>2</sup>	64

<sup>1</sup>One sample.

<sup>2</sup>Total volatile solids as a percentage of total solids.