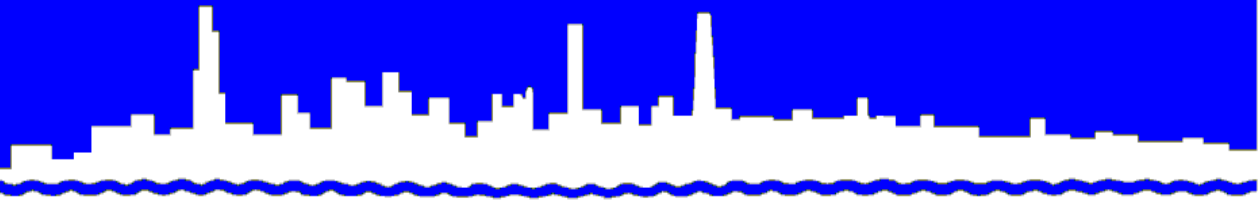


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 20-04

CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS

MONITORING REPORT FOR

FOURTH QUARTER 2019

May 2020

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Edward W. Podczewinski, P.E.

Director of Monitoring and Research

May 21, 2020

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

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 October, November, and December 2019

The attached tables contain the monitoring data for the Calumet East and West Solids Management Areas for October, November, and December 2019 as required by Illinois Environmental Protection Agency (IEPA) Operating Permit No. 2015-AO-59622. Biosolids were placed in both the Calumet East and Calumet West Solids Management Areas in October, November, and December.

Table 1 Analysis of Water From Lysimeters L-1N through L-6N at the Calumet East Solids Management Area Sampled on November 20, 2019.

Table 2 Analysis of Water From Lysimeters L-1N through L-3N at the Calumet West Solids Management Area Sampled on November 20, 2019.

Table 3 Analysis of Biosolids Placed in the Calumet East Solids Management Area During October, November, and December.

Table 4 Analysis of Biosolids Placed in the Calumet West Solids Management Area During October, November, and December.

Very truly yours,



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

AC:BM:cm

Attachments

cc/att: Mr. J. Patel, IEPA/Records Unit, 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 FOURTH QUARTER 2019**

Monitoring and Research Department
Edward W. Podczewinski, Director

May 2020

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-6N AT THE CALUMET EAST SOLIDS MANAGEMENT AREA SAMPLED ON NOVEMBER 20, 2019

Parameter	Lysimeter No.					
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH	7.2	7.8	7.2	7.3	7.5	7.7
	----- mg L ⁻¹ -----					
Cl ⁻	151	127	37	849	247	20
SO ₄ ²⁻	1,986	1,639	1,372	2,500	557	715
NO ₂ ⁻ +NO ₃ ⁻ -N	0.38	<0.25	<0.25	<0.25	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 NOVEMBER 20, 2019

Parameter	Lysimeter No.		
	L-1N	L-2N	L-3N
pH ¹	7.5	8.5	7.6
	----- mg L ⁻¹ -----		
Cl ⁻	40	24	65
SO ₄ ²⁻	1,817	1,926	2,308
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 OCTOBER, NOVEMBER, AND DECEMBER 2019

Parameter	October	November	December
pH	7.7	7.6	7.6
	----- % -----		
Total Solids	6.5	6.7	7.1
Total Volatile Solids ¹	54.6	53.7	53.4

¹Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET WEST SOLIDS MANAGEMENT AREA DURING OCTOBER, NOVEMBER, AND DECEMBER 2019

Parameter	October	November	December
pH	7.5	7.6	7.6
	----- % -----		
Total Solids	4.2	7.1	7.1
Total Volatile Solids ¹	53.7	52.8	52.8

¹Total volatile solids as a percentage of total solids.