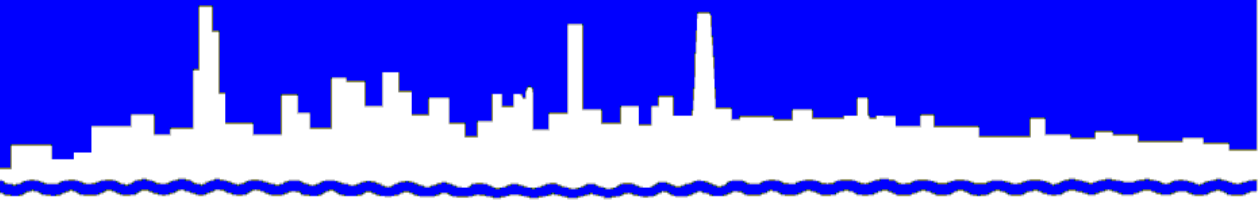


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 19-24

CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS

MONITORING REPORT FOR

SECOND QUARTER 2019

September 2019

Kari K. Steele
President
Barbara J. McGowan
Vice President
Frank Avila
Chairman of Finance
Cameron Davis
Kimberly Du Buclet
Marcelino Garcia
Josina Morita
Debra Shore
Mariyana T. Spyropoulos

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

September 11, 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, Illinois 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 April, May, and June 2019

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

Table 1 Analysis of Water From Lysimeters L-1N through L-6N at the Calumet East Solids Management Area Sampled on May 15, 2019.

Table 2 Analysis of Water From Lysimeters L-1N through L-3N at the Calumet West Solids Management Area Sampled on May 15, 2019.

Table 3 Analysis of Biosolids Placed in the Calumet East Solids Management Area During April, May, and June 2019.

Table 4 Analysis of Biosolids Placed in the Calumet West Solids Management Area During May and June 2019.

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 SECOND QUARTER 2019**

Monitoring and Research Department
Edward W. Podczewinski, Director

September 2019

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-6N AT THE CALUMET EAST SOLIDS MANAGEMENT AREA SAMPLED ON MAY 15, 2019

Parameter	Lysimeter No.					
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH	6.9	7.6	7.0	6.7	7.3	7.5
	----- mg L ⁻¹ -----					
Cl ⁻	140	141	37	881	244	19
SO ₄ ²⁻	1,855	1,790	1,277	2,513	542	676
NO ₂ ⁻ +NO ₃ ⁻ -N	0.86	<0.25	<0.25	<0.25	0.392	<0.25

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED ON MAY 15, 2019

Parameter	Lysimeter No.		
	L-1N	L-2N	L-3N
pH ¹	7.3	8.4	7.5
	----- mg L ⁻¹ -----		
Cl ⁻	36	24	51
SO ₄ ²⁻	1,616	1,908	1,782
NO ₂ ⁻ +NO ₃ ⁻ -N	<0.25	<0.25	0.43

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET EAST SOLIDS MANAGEMENT AREA DURING APRIL, MAY, AND JUNE 2019

Parameter	April ¹	May ¹	June ²
pH	8.2	7.2	7.5
	----- % -----		
Total Solids	22.8	7.82	8.52
Total Volatile Solids ³	62.7	50.5	49.8

¹One sample.

²Mean of five samples.

³Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE CALUMET WEST SOLIDS MANAGEMENT AREA DURING MAY AND JUNE 2019

Parameter	May ¹	June ²
pH	7.3	7.4
	----- % -----	
Total Solids	9.75	8.42
Total Volatile Solids ³	49.3	50.5

¹Mean of five samples.

²Mean of six samples.

³Total volatile solids as a percentage of total solids.