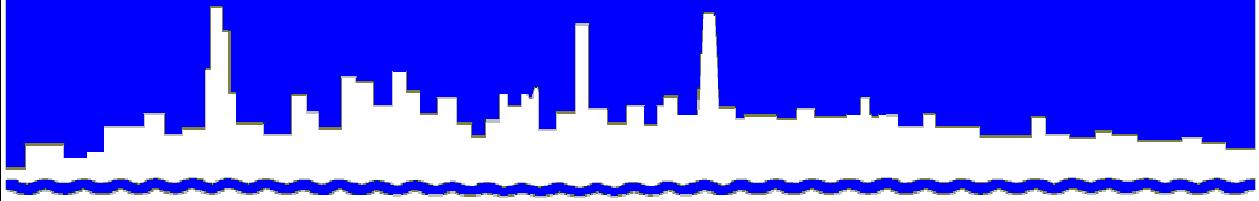


Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 18-28

CALUMET EAST AND WEST SOLIDS MANAGEMENT AREAS

MONITORING REPORT FOR

SECOND QUARTER 2018

October 2018

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

August 27, 2018

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 2018

The attached tables contain the monitoring data for the Calumet East and West Solids Management Areas for April, May, and June 2018 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 30, 2018.

Table 2 Analysis of Water From Lysimeters L-1N through L-3N at the Calumet West Solids Management Area Sampled on May 30, 2018.

Table 3 Analysis of Biosolids Placed in the Calumet East Solids Management Area During April 2018.

Table 4 Analysis of Biosolids Placed in the Calumet East Solids Management Area During May 2018.

Table 5 Analysis of Biosolids Placed in the Calumet East Solids Management Area During June 2018.

Mr. Roger Callaway

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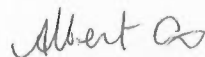
August 27, 2018

Subject: Calumet East and West Solids Management Areas - Calumet Water Reclamation Plant, Illinois Environmental Protection Agency Permit Nos. 2015-AO-59622, Monitoring Report for April, May, and June 2018

Table 6 Analysis of Biosolids Placed in the Calumet West Solids Management Area During May 2018.

Table 7 Analysis of Biosolids Placed in the Calumet West Solids Management Area During June 2018.

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
Dr. G. Tian
Dr. D. Brose

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 2018**

Monitoring and Research Department
Edward W. Podczewinski, Director

October 2018

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-6N AT THE CALUMET EAST SOLIDS MANAGEMENT AREA SAMPLED ON MAY 30, 2018

Parameter	Lysimeter No.					
	L-1N	L-2N	L-3N	L-4N	L-5N	L-6N
pH ¹	7.3	7.4	7.5	7.2	7.7	7.9
	----- mg L ⁻¹ -----					
Cl ⁻	171	130	36	848	227	18
SO ₄ ²⁻	2,018	1,858	1,336	2,600	569	732
NO ₂ +NO ₃ -N	0.62	<0.15	<0.15	<0.15	0.47	0.17

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS L-1N THROUGH L-3N AT THE CALUMET WEST SOLIDS MANAGEMENT AREA SAMPLED ON MAY 30, 2018

Parameter	Lysimeter No.		
	L-1N	L-2N	L-3N
pH ¹	8.0	8.0	7.6
	----- mg L ⁻¹ -----		
Cl ⁻	34	23	59
SO ₄ ²⁻	1,847	1,969	2,245
NO ₂ +NO ₃ -N	<0.15	<0.15	0.35

¹pH analyzed beyond recommended holding time of 15 minutes.

TABLE 3: ANALYSIS OF BIOSOLIDS PLACED IN THE
CALUMET EAST SOLIDS MANAGEMENT
AREA DURING APRIL 2018

Parameter	Analysis ¹
pH	8.3
	---- % ----
Total Solids	22
Total Volatile Solids ²	63

¹Mean of two samples.

²Total volatile solids as a percentage of total solids.

TABLE 4: ANALYSIS OF BIOSOLIDS PLACED IN THE
 CALUMET EAST SOLIDS MANAGEMENT
 AREA DURING MAY 2018

Parameter	Analysis ¹
pH	7.7
	---- % ----
Total Solids	11
Total Volatile Solids ²	56

¹Mean of four samples.

²Total volatile solids as a percentage of total solids.

TABLE 5: ANALYSIS OF BIOSOLIDS PLACED IN THE
CALUMET EAST SOLIDS MANAGEMENT
AREA DURING JUNE 2018

Parameter	Analysis ¹
pH	7.6
	---- % ----
Total Solids	8.0
Total Volatile Solids ²	50

¹Mean of three samples.

²Total volatile solids as a percentage of total solids.

TABLE 6: ANALYSIS OF BIOSOLIDS PLACED IN THE
CALUMET WEST SOLIDS MANAGEMENT
AREA DURING MAY 2018

Parameter	Analysis ¹
pH	7.6
	---- % ----
Total Solids	9.0
Total Volatile Solids ²	51

¹Mean of two samples.

²Total volatile solids as a percentage of total solids.

TABLE 7: ANALYSIS OF BIOSOLIDS PLACED IN THE
CALUMET WEST SOLIDS MANAGEMENT
AREA DURING JUNE 2018

Parameter	Analysis ¹
pH	7.8
	---- % ----
Total Solids	6.9
Total Volatile Solids ²	54

¹Mean of two samples.

²Total volatile solids as a percentage of total solids.