

**Environmental
Protection Agency**

John Kasich, Governor
Randy Taylor, Lt. Governor
Scott L. Smith, Director

August 24, 2011

RE: LORAIN COUNTY
CRESTHAVEN WWTP
CEI / NOV
NPDES NO. 3PG00051

CERTIFIED MAIL

Lorain County Commissioners
Administration Building
216 Middle Avenue
Elyria, OH 44035

Dear Commissioners:

On August 11, 2011, a meeting was held at the Lorain County Engineer's Office, with Messrs. Jack Jannuzzi and Steve Hicks, of the Lorain County Engineer's Office; Mr. John Sabo, of the Lorain County Health Department; and this writer, of the Ohio EPA. The purpose of the meeting was to discuss the NPDES permit to discharge compliance status of all four Lorain County owned and operated WWTP's.

Following the meeting, a Compliance Evaluation Inspection (CEI) was conducted on the Cresthaven Wastewater Treatment Plant (WWTP). Present during the Cresthaven WWTP inspection were Mr. Hicks, Mr. Sabo, and this writer.

The August 11th inspection was conducted to evaluate the present operation and maintenance conditions at the WWTP. The last compliance evaluation inspection conducted at the Cresthaven WWTP was on December 9, 2010.

At the time of the August 11th inspection, the following observations were made:

- 1) Contents of the eastern extended aeration tank were medium brown in color, and were being well aerated. The suspended solids (MLSS) concentration appeared to be in a normal operating concentration, and return sludge to the eastern aeration tank was medium brown in color.

The western extended aeration tank contents were being well aerated, and were medium brown in color. The suspended solids concentration appeared to be in the normal operating concentration, and return sludge to the western aeration tank was medium brown in color.

- 2) Settling tank contents were typical, and there was some algae in the effluent troughs. Effluent from the weir was visually clear and free of solids. Effluent weirs / troughs are planned for replacement this fall.

Skimmer lines from both of the settling tanks were operating, and returning clear water.

- 3) Tertiary filtration of the settled effluent is accomplished by 2 drum filters, both of which were online
- 4) Final effluent was being disinfected with chlorine gas, and dechlorinated using sodium bisulfite. Approximately 5 lbs/day of chlorine gas is used, and 55 gallons / 2 weeks of 38% (by weight) sodium bisulfite is used.
- 5) Aerated Sludge Holding tank contents were being well aerated, and were medium brown in color. Sludge is hauled a couple times per year either by Johnson Septic (~3000 gallons), or Father & Son Septic haulers (~3600 gallons), to the French Creek WWTP for treatment and disposal.
- 6) Effluent from the WWTP was visually clear, and free of solids and foam.
- 7) The on-site standby generator is tested every Monday.
- 8) Effluent samples are collected by two operators at the Cresthaven WWTP, and are transported to the French Creek WWTP laboratory for analysis. Chain of Custody forms are utilized as a part of the sample collection/analysis procedure.

The parameters of pH, DO, and temperature are analyzed by Lorain County Engineers personnel at the WWTP; the remainder of required samples is analyzed by the French Creek WWTP lab.

For the time period since the last inspection (December 1, 2010 through August 1, 2011), the Cresthaven WWTP has reported the following NPDES Permit effluent violations in their monthly electronic Discharge Monitoring Reports (eDMR):

**CRESTHAVEN WWTP
 NPDES PERMIT NO. 3PG00051
 EFFLUENT LIMIT VIOLATIONS (Rev. 8/18/11)
 (12/1/10 – 8/1/11)**

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2011	Total Suspended Solids	30D Conc	12	14.85	2/1/2011
February 2011	Total Suspended Solids	30D Qty	3.6	5.24203	2/1/2011
February 2011	Total Suspended Solids	7D Qty	5.5	5.5261	2/15/2011
February 2011	Total Suspended Solids	7D Conc	18	28.7	2/22/2011
February 2011	Total Suspended Solids	7D Qty	5.5	12.2208	2/22/2011

Lorain County Commissioners
 Cresthaven WWTP
 August 24, 2011
 Page 3

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2011	CBOD 5 day	7D Qty	4.5	4.85426	2/22/2011
March 2011	Total Suspended Solids	30D Qty	3.6	7.25029	3/1/2011
March 2011	Total Suspended Solids	7D Qty	5.5	14.3443	3/1/2011
March 2011	CBOD 5 day	30D Qty	3.0	3.34225	3/1/2011
March 2011	Total Suspended Solids	7D Qty	5.5	7.894	3/8/2011
March 2011	Total Suspended Solids	7D Qty	5.5	6.46894	3/15/2011
March 2011	Total Suspended Solids	7D Qty	5.5	6.39665	3/22/2011
March 2011	CBOD 5 day	7D Qty	4.5	5.16849	3/22/2011
April 2011	Total Suspended Solids	30D Conc	12	23.825	4/1/2011
April 2011	Total Suspended Solids	7D Conc	18	30.8	4/1/2011
April 2011	Total Suspended Solids	30D Qty	3.6	17.8525	4/1/2011
April 2011	Total Suspended Solids	7D Qty	5.5	17.6848	4/1/2011
April 2011	CBOD 5 day	30D Conc	10	13.25	4/1/2011
April 2011	CBOD 5 day	7D Conc	15	22.5	4/1/2011
April 2011	CBOD 5 day	30D Qty	3.0	9.23805	4/1/2011
April 2011	CBOD 5 day	7D Qty	4.5	12.9191	4/1/2011
April 2011	Total Suspended Solids	7D Qty	5.5	12.6850	4/15/2011
April 2011	CBOD 5 day	7D Qty	4.5	6.34252	4/15/2011
April 2011	Total Suspended Solids	7D Conc	18	47.3	4/22/2011
April 2011	Total Suspended Solids	7D Qty	5.5	39.8700	4/22/2011
April 2011	CBOD 5 day	7D Conc	15	19.5	4/22/2011
April 2011	CBOD 5 day	7D Qty	4.5	16.4369	4/22/2011
May 2011	CBOD 5 day	30D Conc	10	13.14	5/1/2011
May 2011	CBOD 5 day	30D Qty	3.0	8.16912	5/1/2011
May 2011	Total Suspended Solids	30D Conc	12	28.74	5/1/2011
May 2011	Total Suspended Solids	7D Conc	18	44.	5/1/2011
May 2011	Total Suspended Solids	30D Qty	3.6	21.4259	5/1/2011
May 2011	Total Suspended Solids	7D Qty	5.5	18.4692	5/1/2011
May 2011	Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	4.57	5/1/2011
May 2011	Nitrogen, Ammonia (NH3-N)	30D Qty	0.45	2.33128	5/1/2011
May 2011	Nitrogen, Ammonia (NH3-N)	7D Conc	2.3	7.64	5/8/2011
May 2011	Nitrogen, Ammonia (NH3-N)	7D Qty	0.70	1.80734	5/8/2011
May 2011	CBOD 5 day	7D Conc	15	18.7	5/15/2011
May 2011	CBOD 5 day	7D Qty	4.5	9.30043	5/15/2011
May 2011	Total Suspended Solids	7D Conc	18	26.7	5/15/2011
May 2011	Total Suspended Solids	7D Qty	5.5	13.2792	5/15/2011
May 2011	CBOD 5 day	7D Qty	4.5	19.6058	5/22/2011
May 2011	Total Suspended Solids	7D Conc	18	33.3	5/22/2011
May 2011	Total Suspended Solids	7D Qty	5.5	63.3857	5/22/2011
May 2011	Nitrogen, Ammonia (NH3-N)	7D Qty	0.70	2.85521	5/22/2011
June 2011	Total Suspended Solids	7D Conc	18	20.	6/1/2011
June 2011	Total Suspended Solids	30D Qty	3.6	5.50957	6/1/2011
June 2011	Total Suspended Solids	7D Qty	5.5	17.0930	6/1/2011

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
June 2011	Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	2.925	6/1/2011
June 2011	CBOD 5 day	30D Qty	3.0	3.77867	6/1/2011
June 2011	CBOD 5 day	7D Qty	4.5	10.8540	6/1/2011
June 2011	Nitrogen, Ammonia (NH3-N)	7D Conc	2.3	5.85	6/8/2011
June 2011	Nitrogen, Ammonia (NH3-N)	7D Qty	0.70	.84362	6/8/2011

NOTE: A review of the REVISED electronic Discharge Monitoring Reports (eDMRs) submitted to the Ohio EPA for the WWTP, for the period of Dec. 1, 2010 through Aug. 1, 2011, found no frequency reporting violations.

Items discussed with Messrs. Jannuzzi and Hicks include the following:

- 1) A list of effluent and reporting frequency violations for this, and the 3 other Lorain County owned and operated WWTPs, was presented for discussion.
- 2) The effluent numeric violations were acknowledged as being, for the most part, correct. However, the reporting frequency violations were unexplainable by Messrs. Jannuzzi and Hicks. It was agreed upon that the reporting frequency and numeric violations would be reviewed, verified or corrected, and the District Office would be informed of any corrections resubmitted in the eDMR data.
- 3) Recent improvements made at the Cresthaven WWTP, which were constructed to correct prior NPDES permit effluent violations, were discussed. Also discussed was the fact that the Cresthaven WWTP is subject to Inflow and/or Infiltration (I/I) during periods of heavy precipitation.
- 4) The entire sanitary sewer collection system tributary to the Cresthaven WWTP has been recently relined by the Insituform Company, with the exception of laterals from the street to each individual home. Manhole covers in the streets also have solid lids.

At the direction of the new Ohio EPA Director, wastewater treatment plants that are in Significant Non-Compliance (SNC) with their NPDES permit effluent limits, should be returned to compliance in a timely manner.

The means by which an entity in SNC is brought back into compliance, and kept in compliance, is through a Compliance and Enforcement Plan developed by the District Office with jurisdiction over that entity.

Lorain County Commissioners
Cresthaven WWTP
August 24, 2011
Page 5

SNC is defined by the USEPA as a 40% exceedance of specific conventional pollutant limits (1.4 x parameter effluent limit), or a 20% exceedance of toxic pollutant limits (1.2 x parameter effluent limit), at a given discharge point for any two or more months, during any two consecutive quarter period reviewed.

- a) Conventional pollutants include: BOD/CBOD; total suspended solids; nutrients such as nitrogen (ammonia) and phosphorus; oil & grease.
- b) Toxic pollutants include: total chlorine residual; heavy metals; cyanide.

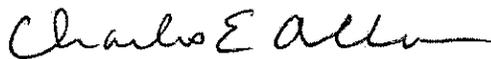
Utilizing data submitted for the Cresthaven WWTP, the facility is in SNC for total suspended solids, ammonia nitrogen, and CBOD. The attached document details the parameters in SNC for the last 6 month period (January 2011 through June 2011).

This correspondence is serving as one of the initial, formal steps in the development of the Compliance and Enforcement Plan for this entity. For violations that are not, or cannot, be resolved within 45 days of the receipt of this letter, a compliance conference should be held between the Ohio EPA District Office and the County Engineer's Office.

The compliance conference meeting is to be held to discuss the facility's violations, and the County's efforts at coming into compliance with its NPDES permit effluent limits. Results of the meeting may require additional enforcement actions be taken by the Ohio EPA should compliance not be attained.

If there are any comments or questions concerning this document, you may contact me at (330) 963-1110.

Respectfully,



Charles E. Allen
Environmental Engineer
Division of Surface Water

CEA/mt

cc: Mr. Ken Carney, P.E., County Engineer, Lorain County Engineer's Office

File: MUNI/Lorain/Cresthaven P&C

CRESTHAVEN WWTP

NPDES PERMIT NO. 3PG00051

(REV. 8/18/11)

Get Detail
for Selected
Permit

Facilities in Significant Non-Compliance **

Period: Jan-11 Jun-11

Permit #	Facility Name	Station	Reporting Code	Parameter Name	Value Exceeded	# Months Significant Exceed (1)**	# Months Exceed (2)**
3PG00051	Cresthaven Homes WWTP	1	00530	Total Suspended Solids	1052.5	5	5
3PG00051	Cresthaven Homes WWTP	1	00610	Nitrogen, Ammonia (NH3)	418.1	2	2
3PG00051	Cresthaven Homes WWTP	1	80082	CBOD 5 day	335.7	3	5

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