



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.  
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769  
www.epa.state.oh.us

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

September 25, 2008

RE: LORAIN COUNTY  
CRESTHAVEN WWTP  
NPDES NO. 3PG00051

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

Dear Commissioners:

On September 3, 2008, a Compliance Evaluation Inspection (CEI) was conducted on the Cresthaven Wastewater Treatment Plant (WWTP). Present during the inspection were Messrs. Jack Januzzi and Steve Canfield, of the Lorain County Sanitary Engineer's Office; Mr. John Sabo of the Lorain County Health Department; and this writer, of Ohio EPA. The inspection was conducted to ascertain the present operation and maintenance condition of the WWTP, and to evaluate its compliance with the terms and conditions of its NPDES permit.

At the time of the September 3<sup>rd</sup> inspection, the following observations were made:

- 1) The extended aeration tank contents were medium brown in color. The suspended solids (MLSS) content appeared to be at a normal operating concentration.
- 2) The settling tank contents were typical, and effluent from the settling tank was slightly turbid. There was no solids deposition in the troughs. The effluent troughs were very rusty, and are planned for replacement with weirs from the abandoned Westview WWTP.
- 3) The skimmer line from the settling tank was operating and returning clear water, and the return sludge line was operating and returning medium brown water.
- 4) Tertiary filtration is accomplished by 2 drum filters, which were operational.
- 5) Final effluent is disinfected with chlorine gas, and dechlorination is accomplished with sodium bisulfite.
- 6) The effluent from the WWTP was slightly turbid, but free of foam.

- 7) The Aerated Sludge Holding tank was well aerated, and contents were chocolate brown with a slight brown foam in the corners. No odors were present.
- 8) Sludge is hauled by Johnson Septic or Father & Son Septic haulers, from the Cresthaven WWTP, to the French Creek WWTP, for treatment and disposal.
- 9) A standby generator is located on site.

The last Compliance Evaluation Inspection (CEI) conducted at the Cresthaven WWTP was on June 21, 2007. Since the last CEI, 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  
 (6/1/07 – 9/1/09)**

Parameter	Limit Type	Limit	Reported Value	Violation Date
Dissolved Oxygen	1D Conc	5.0	4.28	6/1/2007
Dissolved Oxygen	1D Conc	5.0	4.84	6/14/2007
Dissolved Oxygen	1D Conc	5.0	4.89	6/15/2007
Dissolved Oxygen	1D Conc	5.0	4.49	6/18/2007
Dissolved Oxygen	1D Conc	5.0	4.89	6/21/2007
Dissolved Oxygen	1D Conc	5.0	4.92	6/22/2007
Dissolved Oxygen	1D Conc	5.0	4.67	6/25/2007
Dissolved Oxygen	1D Conc	5.0	3.28	7/5/2007
pH	1D Conc	6.5	6.27	7/9/2007
pH	1D Conc	6.5	6.37	7/10/2007
pH	1D Conc	6.5	6.4	7/11/2007
pH	1D Conc	6.5	6.48	7/12/2007
Dissolved Oxygen	1D Conc	5.0	3.98	7/16/2007
Fecal Coliform	30D Conc	1000	13900.	8/1/2007
Fecal Coliform	7D Conc	2000	13900.	8/8/2007
pH	1D Conc	6.5	6.35	8/10/2007
pH	1D Conc	6.5	6.25	10/16/2007
Total Suspended Solids	7D Qty	5.5	6.36088	10/22/2007
CBOD 5 day	7D Qty	4.5	4.88784	10/22/2007
pH	1D Conc	6.5	6.47	10/29/2007
Total Suspended Solids	7D Qty	5.5	7.50263	11/22/2007
Total Suspended Solids	30D Conc	12	19.1	12/1/2007
Total Suspended Solids	30D Qty	3.6	11.0993	12/1/2007

Lorain County Commissioners  
 Cresthaven WWTP  
 September 25, 2008  
 Page 3

Parameter	Limit Type	Limit	Reported Value	Violation Date
CBOD 5 day	30D Qty	3.0	4.40516	12/1/2007
Total Suspended Solids	7D Qty	5.5	24.2938	12/8/2007
CBOD 5 day	7D Qty	4.5	8.86636	12/8/2007
Total Suspended Solids	7D Conc	18	22.5	12/15/2007
Total Suspended Solids	7D Qty	5.5	9.59781	12/15/2007
CBOD 5 day	7D Qty	4.5	6.27057	12/15/2007
Total Suspended Solids	7D Conc	18	33.2	12/22/2007
Total Suspended Solids	7D Qty	5.5	8.54502	12/22/2007
Total Suspended Solids	30D Conc	12	12.88	1/1/2008
Total Suspended Solids	30D Qty	3.6	5.9907	1/1/2008
CBOD 5 day	30D Qty	3.0	3.36955	1/1/2008
Total Suspended Solids	7D Qty	5.5	14.6308	1/8/2008
CBOD 5 day	7D Qty	4.5	8.5644	1/8/2008
Total Suspended Solids	7D Conc	18	20.	1/15/2008
Total Suspended Solids	7D Qty	5.5	6.01058	1/15/2008
Total Suspended Solids	30D Conc	12	58.075	2/1/2008
Total Suspended Solids	7D Conc	18	132.	2/1/2008
Total Suspended Solids	30D Qty	3.6	71.8772	2/1/2008
Total Suspended Solids	7D Qty	5.5	255.955	2/1/2008
Nitrogen, Ammonia (NH3-N)	30D Conc	3.5	7.75	2/1/2008
Nitrogen, Ammonia (NH3-N)	30D Qty	1.1	1.91175	2/1/2008
CBOD 5 day	30D Conc	10	24.375	2/1/2008
CBOD 5 day	7D Conc	15	15.2	2/1/2008
CBOD 5 day	30D Qty	3.0	13.4265	2/1/2008
CBOD 5 day	7D Qty	4.5	29.4736	2/1/2008
Total Suspended Solids	7D Conc	18	29.3	2/8/2008
Total Suspended Solids	7D Qty	5.5	7.82958	2/8/2008
Nitrogen, Ammonia (NH3-N)	7D Conc	5.0	6.55	2/8/2008
Nitrogen, Ammonia (NH3-N)	7D Qty	1.5	1.7503	2/8/2008
CBOD 5 day	7D Conc	15	32.5	2/8/2008
CBOD 5 day	7D Qty	4.5	8.68468	2/8/2008
Total Suspended Solids	7D Conc	18	39.	2/15/2008
Total Suspended Solids	7D Qty	5.5	16.3114	2/15/2008
CBOD 5 day	7D Conc	15	21.5	2/15/2008
CBOD 5 day	7D Qty	4.5	8.99221	2/15/2008
Total Suspended Solids	7D Conc	18	32.	2/22/2008
Total Suspended Solids	7D Qty	5.5	7.41254	2/22/2008
Nitrogen, Ammonia (NH3-N)	7D Conc	5.0	8.95	2/22/2008
Nitrogen, Ammonia (NH3-N)	7D Qty	1.5	2.0732	2/22/2008
CBOD 5 day	7D Conc	15	28.3	2/22/2008
CBOD 5 day	7D Qty	4.5	6.55547	2/22/2008
Total Suspended Solids	30D Conc	12	67.6	3/1/2008
Total Suspended Solids	7D Conc	18	23.2	3/1/2008
Total Suspended Solids	30D Qty	3.6	35.0065	3/1/2008

Lorain County Commissioners  
 Cresthaven WWTP  
 September 25, 2008  
 Page 4

Parameter	Limit Type	Limit	Reported Value	Violation Date
Total Suspended Solids	7D Qty	5.5	15.7007	3/1/2008
Nitrogen, Ammonia (NH3-N)	30D Qty	1.1	1.46474	3/1/2008
CBOD 5 day	30D Conc	10	34.1	3/1/2008
CBOD 5 day	30D Qty	3.0	18.7712	3/1/2008
CBOD 5 day	7D Qty	4.5	6.02315	3/1/2008
Total Suspended Solids	7D Conc	18	190.	3/8/2008
Total Suspended Solids	7D Qty	5.5	73.2094	3/8/2008
CBOD 5 day	7D Conc	15	84.	3/8/2008
CBOD 5 day	7D Qty	4.5	32.3662	3/8/2008
Total Suspended Solids	7D Conc	18	23.2	3/15/2008
Total Suspended Solids	7D Qty	5.5	39.0060	3/15/2008
Nitrogen, Ammonia (NH3-N)	7D Qty	1.5	2.28656	3/15/2008
CBOD 5 day	7D Conc	15	16.	3/15/2008
CBOD 5 day	7D Qty	4.5	26.9007	3/15/2008
Total Suspended Solids	7D Conc	18	34.	3/22/2008
Total Suspended Solids	7D Qty	5.5	12.1097	3/22/2008
CBOD 5 day	7D Conc	15	27.5	3/22/2008
CBOD 5 day	7D Qty	4.5	9.79463	3/22/2008
Total Suspended Solids	30D Conc	12	28.4	4/1/2008
Total Suspended Solids	7D Conc	18	24.5	4/1/2008
Total Suspended Solids	30D Qty	3.6	6.5363	4/1/2008
Total Suspended Solids	7D Qty	5.5	7.2795	4/1/2008
Nitrogen, Ammonia (NH3-N)	30D Conc	3.5	4.1	4/1/2008
CBOD 5 day	30D Conc	10	13.98	4/1/2008
CBOD 5 day	7D Conc	15	21.3	4/1/2008
CBOD 5 day	30D Qty	3.0	3.30027	4/1/2008
CBOD 5 day	7D Qty	4.5	6.32871	4/1/2008
Total Suspended Solids	7D Conc	18	23.3	4/8/2008
Total Suspended Solids	7D Qty	5.5	5.6001	4/8/2008
CBOD 5 day	7D Conc	15	19.8	4/8/2008
CBOD 5 day	7D Qty	4.5	4.75888	4/8/2008
Total Suspended Solids	7D Conc	18	77.2	4/15/2008
Total Suspended Solids	7D Qty	5.5	17.2107	4/15/2008
Fecal Coliform	30D Conc	1000	2500.	5/1/2008
Fecal Coliform	7D Conc	2000	2500.	5/1/2008
CBOD 5 day	7D Conc	15	25.3	6/1/2008
CBOD 5 day	7D Qty	4.5	4.58693	6/1/2008
CBOD 5 day	7D Conc	15	16.5	7/15/2008
pH	1D Conc	6.5	6.21	7/28/2008
pH	1D Conc	6.5	6.36	8/11/2008
pH	1D Conc	6.5	6.14	8/12/2008

A review of the eDMRs for the same period also found the following monitoring frequency violations:

Lorain County Commissioners  
Cresthaven WWTP  
September 25, 2008  
Page 5

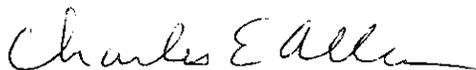
**CRESTHAVEN WWTP  
NPDES PERMIT NO. 3PG00051  
FREQUENCY VIOLATIONS  
(6/1/07 – 9/1/09)**

<u>Violation Date</u>	<u>Station</u>	<u>Parameter</u>	<u>Sample Frequency</u>	<u>Expected</u>	<u>Reported</u>
8/15/2007	001	Total Suspended Solids	1/Week	1	0
8/15/2007	001	CBOD 5 day	1/Week	1	0

The County should continue with all efforts that will enable the Cresthaven WWTP to consistently meet its NPDES Permit limits. Please submit a report to this office detailing the reasons for the significant amount effluent numeric violations, and what actions will be taken to prevent further exceedances.

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

File: MUNI/Lorain/Cresthaven P&C