



State of Ohio Environmental Protection Agency

Northeast District Office

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Ted Strickland, Governor
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July 5, 2007

RE: LORAIN COUNTY
COUNTY OWNED WWTPS
COMPLIANCE EVALUATION INSPECTIONS

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

Dear Commissioners:

On June 21, 2007, Compliance Evaluation Inspections (CEI) were conducted on the six Lorain County owned wastewater treatment plants (WWTP). Present during the inspections were Mr. Jack Januzzi of the Lorain County Sanitary Engineer's Office; Mr. Rick Greenwald of K.E. McCartney; Mr. John Sabo of the Lorain County Health Department; and this writer, of Ohio EPA. The inspections were conducted to ascertain the present operation and maintenance conditions of each WWTP; to review the upgrade status of each WWTP; and to evaluate their compliance with the terms and conditions of their NPDES permits.

The six wastewater treatment plants inspected were:

Brentwood Lake WWTP	(NPDES Permit No. 3PH00024)
Columbia West River WWTP	(NPDES Permit No. 3PG00053)
Cresthaven Homes WWTP	(NPDES Permit No. 3PG00051)
Eaton Homes WWTP	(NPDES Permit No. 3PH00023)
Plum Creek WWTP	(NPDES Permit No. 3PG00052)
Westview Park WWTP	(NPDES Permit No. 3PH00022)

A summary of the findings at each WWTP is detailed below:

Brentwood Lake WWTP

At the time of the inspection the new "Muffin Monster" had been installed, but was not operating; the aeration tank was medium brown in color, with a light brown foam in the corners; the return sludge line was operating and returning brown colored water; the settling tank contents were slightly turbid, but the effluent and troughs were clear; the drum filters had been installed but were not on-line; the new aerated sludge holding tank was installed but not in use yet; the effluent was being chlorinated and dechlorinated; the effluent appeared to be clear.

BRENTWOOD LAKE WWTP
(8/1/06 – 6/1/07)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2006	Dissolved Oxygen	1D Conc	6.0	5.1	8/1/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	5.9	8/2/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	4.9	8/3/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	5.6	8/4/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	5.9	8/8/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	5.9	8/17/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	5.8	8/23/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	5.9	8/25/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	5.4	8/28/2006
August 2006	Dissolved Oxygen	1D Conc	6.0	5.9	8/29/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.93	9/5/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.93	9/6/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	4.64	9/14/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.95	9/15/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.51	9/19/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.41	9/25/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.92	9/26/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.8	9/27/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.12	9/28/2006
September 2006	Dissolved Oxygen	1D Conc	6.0	5.76	9/29/2006
October 2006	Dissolved Oxygen	1D Conc	6.0	5.97	10/2/2006
October 2006	Dissolved Oxygen	1D Conc	6.0	5.93	10/3/2006
October 2006	Dissolved Oxygen	1D Conc	6.0	5.97	10/4/2006
October 2006	Dissolved Oxygen	1D Conc	6.0	4.3	10/11/2006
October 2006	Dissolved Oxygen	1D Conc	6.0	5.27	10/12/2006
October 2006	Dissolved Oxygen	1D Conc	6.0	5.01	10/13/2006
October 2006	Dissolved Oxygen	1D Conc	6.0	5.87	10/20/2006
November 2006	Dissolved Oxygen	1D Conc	6.0	5.22	11/2/2006
November 2006	Dissolved Oxygen	1D Conc	6.0	5.14	11/7/2006
November 2006	Dissolved Oxygen	1D Conc	6.0	5.34	11/8/2006
November 2006	Dissolved Oxygen	1D Conc	6.0	5.36	11/14/2006
November 2006	Dissolved Oxygen	1D Conc	6.0	5.78	11/27/2006
November 2006	Total Suspended Solids	7D Conc	18	30.7	11/15/2006
November 2006	Total Suspended Solids	30D Conc	12	14.8125	11/1/2006
December 2006	Dissolved Oxygen	1D Conc	6.0	5.23	12/18/2006
December 2006	Dissolved Oxygen	1D Conc	6.0	5.15	12/19/2006
December 2006	Dissolved Oxygen	1D Conc	6.0	5.16	12/20/2006
December 2006	Dissolved Oxygen	1D Conc	6.0	5.19	12/21/2006
December 2006	Dissolved Oxygen	1D Conc	6.0	4.71	12/22/2006
March 2007	Total Suspended Solids	7D Conc	18	23.4	3/15/2007
March 2007	Total Suspended Solids	30D Conc	12	14.2777	3/1/2007
April 2007	Dissolved Oxygen	1D Conc	6.0	5.2	4/23/2007

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Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
April 2007	Total Suspended Solids	7D Conc	18	30.9	4/1/2007
April 2007	Total Suspended Solids	7D Conc	18	25.5	4/8/2007
April 2007	Total Suspended Solids	30D Conc	12	18.95	4/1/2007
April 2007	CBOD 5 day	7D Conc	15	17.85	4/1/2007
May 2007	pH	1D Conc	6.5	6.44	5/15/2007
May 2007	Fecal Coliform	7D Conc	2000	4800	5/1/2007
May 2007	Fecal Coliform	7D Conc	2000	8200	5/8/2007
May 2007	Fecal Coliform	7D Conc	2000	5800	5/15/2007

Columbia West River WWTP

The WWTP has been abandoned, the pump station and force main connected, and the WWTP eliminated.

COLUMBIA WEST RIVER WWTP
(8/1/06 – 6/1/07)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2006	Phosphorus, Total (P)	30D Conc	1.0	1.58	8/1/2006
August 2006	Phosphorus, Total (P)	7D Conc	1.5	1.58	8/1/2006
September 2006	Total Suspended Solids	7D Conc	18	21	9/1/2006
October 2006	Total Suspended Solids	7D Conc	18	35.85	10/8/2006
October 2006	Total Suspended Solids	30D Conc	12	13.7888	10/1/2006
October 2006	Phosphorus, Total (P)	30D Conc	1.0	1.16	10/1/2006
November 2006	Total Suspended Solids	7D Conc	18	33.15	11/15/2006
November 2006	Total Suspended Solids	7D Qty	11.6	19.0312	11/15/2006
November 2006	Total Suspended Solids	30D Conc	12	17.75	11/1/2006
November 2006	Total Suspended Solids	30D Qty	7.7	8.37928	11/1/2006
November 2006	Nitrogen, Ammonia (NH3-N)	7D Conc	5.9	11.1	11/8/2006
November 2006	Nitrogen, Ammonia (NH3-N)	30D Conc	3.9	6.59	11/1/2006
November 2006	Phosphorus, Total (P)	30D Conc	1.0	4.06	11/1/2006
November 2006	Phosphorus, Total (P)	7D Conc	1.5	4.06	11/8/2006
November 2006	Phosphorus, Total (P)	30D Qty	0.64	.69152	11/1/2006
December 2006	Nitrogen, Ammonia (NH3-N)	7D Conc	5.9	7.46	12/8/2006
December 2006	Phosphorus, Total (P)	30D Conc	1.0	2.03	12/1/2006
December 2006	Phosphorus, Total (P)	7D Conc	1.5	2.03	12/8/2006
January 2007	Total Suspended Solids	7D Conc	18	29.5	1/22/2007
January 2007	Total Suspended Solids	30D Conc	12	18.5888	1/1/2007
February 2007	Total Suspended Solids	7D Conc	18	29	2/1/2007
February 2007	Total Suspended Solids	7D Conc	18	30.65	2/8/2007
February 2007	Total Suspended Solids	7D Conc	18	45	2/15/2007
February 2007	Total Suspended Solids	30D Conc	12	31.4125	2/1/2007
February 2007	Total Suspended Solids	7D Conc	18	21	2/22/2007

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Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2007	Phosphorus, Total (P)	30D Conc	1.0	2.48	2/1/2007
February 2007	Phosphorus, Total (P)	7D Conc	1.5	2.48	2/8/2007
February 2007	CBOD 5 day	7D Conc	15	15.8	2/1/2007
February 2007	CBOD 5 day	7D Conc	15	17.45	2/8/2007
February 2007	CBOD 5 day	7D Conc	15	19.	2/15/2007
February 2007	CBOD 5 day	30D Conc	10	15.4375	2/1/2007
March 2007	Total Suspended Solids	7D Conc	18	19.85	3/1/2007
March 2007	Total Suspended Solids	7D Qty	11.6	19.8258	3/1/2007
March 2007	Total Suspended Solids	30D Conc	12	15.1	3/1/2007
March 2007	Total Suspended Solids	30D Qty	7.7	8.90932	3/1/2007
March 2007	Phosphorus, Total (P)	30D Conc	1.0	1.54	3/1/2007
March 2007	Phosphorus, Total (P)	7D Conc	1.5	1.54	3/8/2007
March 2007	CBOD 5 day	7D Conc	15	15.75	3/22/2007
April 2007	Total Suspended Solids	7D Conc	18	24.25	4/1/2007
April 2007	Total Suspended Solids	7D Conc	18	23.45	4/8/2007
April 2007	Total Suspended Solids	30D Conc	12	15.275	4/1/2007
April 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	3.9	5.09	4/1/2007
April 2007	Phosphorus, Total (P)	30D Conc	1.0	1.48	4/1/2007
April 2007	CBOD 5 day	7D Conc	15	42.25	4/1/2007
April 2007	CBOD 5 day	7D Qty	9.6	11.3564	4/1/2007
April 2007	CBOD 5 day	30D Conc	10	15.75	4/1/2007
May 2007	Total Suspended Solids	30D Conc	12	12.76	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	11.7	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	7D Qty	1.9	3.45419	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	14.4	5/15/2007
May 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	2.0	10.5433	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	30D Qty	1.3	1.9873	5/1/2007
May 2007	Phosphorus, Total (P)	30D Conc	1.0	2.89	5/1/2007
May 2007	Phosphorus, Total (P)	7D Conc	1.5	2.89	5/15/2007
May 2007	CBOD 5 day	7D Conc	15	15.5	5/15/2007

Cresthaven Homes WWTP

At the time of the inspection the aeration tank contents were typical medium brown with no foam present. The return sludge and skimmer lines were operating and typical in color; the settling tank effluent and troughs were clear. The drum filters were installed but not on-line yet, and the aerated sludge holding tank was not yet in use. The effluent was being chlorinated and dechlorinated; the effluent appeared to be clear.

CRESTHAVEN WWTP
(8/1/06 – 6/1/07)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2006	Dissolved Oxygen	1D Conc	5.0	4.8	8/3/2006
August 2006	pH	1D Conc	6.5	6.46	8/1/2006
September 2006	Dissolved Oxygen	1D Conc	5.0	4.63	9/7/2006
September 2006	Dissolved Oxygen	1D Conc	5.0	4.97	9/15/2006
September 2006	Dissolved Oxygen	1D Conc	5.0	4.93	9/18/2006
September 2006	Dissolved Oxygen	1D Conc	5.0	4.62	9/25/2006
October 2006	Dissolved Oxygen	1D Conc	5.0	4.96	10/4/2006
October 2006	Dissolved Oxygen	1D Conc	5.0	4.8	10/11/2006
October 2006	Dissolved Oxygen	1D Conc	5.0	4.83	10/12/2006
October 2006	Total Suspended Solids	7D Conc	18	41.	10/15/2006
October 2006	Total Suspended Solids	7D Qty	5.5	18.4204	10/15/2006
October 2006	Total Suspended Solids	30D Conc	12	12.36	10/1/2006
October 2006	Total Suspended Solids	30D Qty	3.6	4.29968	10/1/2006
November 2006	Dissolved Oxygen	1D Conc	5.0	4.08	11/2/2006
November 2006	Dissolved Oxygen	1D Conc	5.0	4.94	11/20/2006
November 2006	Dissolved Oxygen	1D Conc	5.0	4.63	11/29/2006
November 2006	Dissolved Oxygen	1D Conc	5.0	4.58	11/30/2006
December 2006	Dissolved Oxygen	1D Conc	5.0	4.21	12/18/2006
December 2006	Dissolved Oxygen	1D Conc	5.0	4.62	12/20/2006
December 2006	pH	1D Conc	6.5	6.41	12/18/2006
December 2006	pH	1D Conc	6.5	6.47	12/19/2006
January 2007	Total Suspended Solids	7D Conc	18	21.6	1/15/2007
January 2007	Total Suspended Solids	7D Conc	18	42.7	1/22/2007
January 2007	Total Suspended Solids	7D Qty	5.5	6.25467	1/22/2007
January 2007	Total Suspended Solids	30D Conc	12	25.42	1/1/2007
January 2007	Total Suspended Solids	30D Qty	3.6	3.90908	1/1/2007
January 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	3.5	3.71333	1/1/2007
January 2007	CBOD 5 day	7D Conc	15	17.3	1/15/2007
January 2007	CBOD 5 day	7D Conc	15	15.2	1/22/2007
January 2007	CBOD 5 day	30D Conc	10	13.08	1/1/2007
February 2007	Total Suspended Solids	7D Conc	18	42.4	2/1/2007
February 2007	Total Suspended Solids	7D Qty	5.5	7.71928	2/1/2007
February 2007	Total Suspended Solids	7D Qty	5.5	7.69188	2/15/2007
February 2007	Total Suspended Solids	30D Conc	12	21.55	2/1/2007
February 2007	Total Suspended Solids	30D Qty	3.6	5.81806	2/1/2007
February 2007	Total Suspended Solids	7D Qty	5.5	5.53897	2/22/2007
February 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	5.0	15.2	2/8/2007
February 2007	Nitrogen, Ammonia (NH3-N)	7D Qty	1.5	2.35306	2/8/2007
February 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	3.5	10.2	2/1/2007
February 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	5.0	5.2	2/22/2007
February 2007	Nitrogen, Ammonia (NH3-N)	30D Qty	1.1	2.50998	2/1/2007
February 2007	Nitrogen, Ammonia (NH3-N)	7D Qty	1.5	2.66691	2/22/2007

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Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2007	CBOD 5 day	7D Conc	15	21.5	2/1/2007
February 2007	CBOD 5 day	30D Conc	10	11.325	2/1/2007
March 2007	Total Suspended Solids	7D Conc	18	40.8	3/1/2007
March 2007	Total Suspended Solids	7D Conc	18	23.5	3/8/2007
March 2007	Total Suspended Solids	7D Conc	18	33.3	3/15/2007
March 2007	Total Suspended Solids	30D Conc	12	34.4	3/1/2007
March 2007	Total Suspended Solids	7D Conc	18	40.	3/22/2007
March 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	5.0	5.42	3/8/2007
March 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	3.5	6.315	3/1/2007
March 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	5.0	7.21	3/22/2007
March 2007	CBOD 5 day	7D Conc	15	25.7	3/1/2007
March 2007	CBOD 5 day	7D Conc	15	20.5	3/8/2007
March 2007	CBOD 5 day	7D Conc	15	21.	3/15/2007
March 2007	CBOD 5 day	30D Conc	10	23.3	3/1/2007
March 2007	CBOD 5 day	7D Conc	15	26.	3/22/2007
April 2007	Dissolved Oxygen	1D Conc	5.0	4.18	4/17/2007
April 2007	Total Suspended Solids	7D Conc	18	80.	4/1/2007
April 2007	Total Suspended Solids	7D Qty	5.5	18.9552	4/1/2007
April 2007	Total Suspended Solids	7D Conc	18	24.8	4/8/2007
April 2007	Total Suspended Solids	30D Conc	12	36.525	4/1/2007
April 2007	Total Suspended Solids	7D Conc	18	24.	4/22/2007
April 2007	Total Suspended Solids	30D Qty	3.6	8.88162	4/1/2007
April 2007	Total Suspended Solids	7D Qty	5.5	7.47613	4/22/2007
April 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	5.0	11.3	4/8/2007
April 2007	Nitrogen, Ammonia (NH3-N)	7D Qty	1.5	2.31816	4/8/2007
April 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	3.5	11.5	4/1/2007
April 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	5.0	11.7	4/22/2007
April 2007	Nitrogen, Ammonia (NH3-N)	30D Qty	1.1	2.98139	4/1/2007
April 2007	Nitrogen, Ammonia (NH3-N)	7D Qty	1.5	3.64461	4/22/2007
April 2007	CBOD 5 day	7D Conc	15	41.	4/1/2007
April 2007	CBOD 5 day	7D Qty	4.5	9.71458	4/1/2007
April 2007	CBOD 5 day	30D Conc	10	17.675	4/1/2007
April 2007	CBOD 5 day	30D Qty	3.0	4.23818	4/1/2007
May 2007	Dissolved Oxygen	1D Conc	5.0	4.82	5/23/2007
May 2007	Dissolved Oxygen	1D Conc	5.0	4.28	5/29/2007
May 2007	Total Suspended Solids	7D Conc	18	18.7	5/8/2007
May 2007	Total Suspended Solids	7D Conc	18	19.	5/15/2007
May 2007	Total Suspended Solids	30D Conc	12	16.64	5/1/2007

Eaton Homes WWTP

At the time of the inspection the WWTP aeration tank was medium brown in color, and the water surface contained some light brown foam. The return sludge lines from the settling tank were operating, and the settling tank contents were a turbid gray in color. Effluent from the settling tank was slightly turbid. The drum filters were being delivered

via flat bed truck. However, installation was being delayed as the roof had been put on the building before the drum filters were installed.

The aerated sludge holding tank has been constructed, but is not yet in use. Floating scum / solids were observed on the water surface of the chlorine contact tank, and the effluent was being chlorinated, dechlorinated, and post aerated. Effluent from the WWTP was relatively clear and at the time, and free of visible solids.

The receiving stream, however, had massive amounts of solids buildup on the stream bed, and appeared to be almost black in color in the area upstream of the effluent discharge mixing zone. Downstream of the effluent mixing zone also demonstrated large amounts of solids deposition.

EATON HOMES WWTP
(8/1/06 – 6/1/07)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
September 2006	Fecal Coliform	7D Conc	2000	3000	9/22/2006
January 2007	Total Suspended Solids	7D Conc	18	43.35	1/15/2007
January 2007	Total Suspended Solids	7D Qty	13.6	20.9829	1/15/2007
January 2007	Total Suspended Solids	30D Conc	12	18.9888	1/1/2007
February 2007	Total Suspended Solids	7D Conc	18	30.35	2/15/2007
February 2007	Total Suspended Solids	30D Conc	12	21.525	2/1/2007
February 2007	Total Suspended Solids	7D Conc	18	34.65	2/22/2007
March 2007	Total Suspended Solids	7D Conc	18	21.7	3/15/2007
March 2007	Total Suspended Solids	30D Conc	12	15.2888	3/1/2007
April 2007	Dissolved Oxygen	1D Conc	6.0	5.65	4/11/2007
April 2007	Total Suspended Solids	7D Conc	18	19.3	4/8/2007
April 2007	Total Suspended Solids	30D Conc	12	20.7125	4/1/2007
April 2007	Total Suspended Solids	7D Conc	18	40.2	4/22/2007
April 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	6.8	14.71	4/1/2007
April 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	10.2	24.3	4/22/2007
April 2007	CBOD 5 day	30D Conc	10	23.5375	4/1/2007
April 2007	CBOD 5 day	7D Conc	15	69.25	4/22/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	3.82	5/1/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	4.98	5/2/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	5.87	5/4/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	5.73	5/9/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	4.99	5/10/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	3.29	5/11/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	3.27	5/14/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	3.3	5/15/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	3.4	5/16/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	3.87	5/17/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	3.92	5/18/2007

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Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
May 2007	Dissolved Oxygen	1D Conc	6.0	2.3	5/21/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	1.02	5/22/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	.58	5/23/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	2.77	5/24/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	2.91	5/25/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	1.7	5/29/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	2.11	5/30/2007
May 2007	Dissolved Oxygen	1D Conc	6.0	1.99	5/31/2007
May 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	2.3	12.5	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	4.16667	5/1/2007
May 2007	Fecal Coliform	7D Conc	2000	8400.	5/1/2007

Plum Creek WWTP

At the time of the inspection the aeration tank contents were typical medium brown; there was no foam in the aeration tank; the return sludge and skimmer lines were operating and typical in color; the mechanical flights in the settling tank were operating, and there were no solids in the effluent from the settling tank. The effluent from the WWTP appeared clear and free of solids, and had been chlorinated and dechlorinated.

PLUM CREEK WWTP
(8/1/06 – 6/1/07)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2006	Dissolved Oxygen	1D Conc	5.0	4.7	8/2/2006
August 2006	Dissolved Oxygen	1D Conc	5.0	4.9	8/3/2006
August 2006	Dissolved Oxygen	1D Conc	5.0	4.8	8/7/2006
August 2006	Dissolved Oxygen	1D Conc	5.0	4.8	8/10/2006
August 2006	Dissolved Oxygen	1D Conc	5.0	4.9	8/11/2006
September 2006	Dissolved Oxygen	1D Conc	5.0	4.28	9/13/2006
September 2006	Dissolved Oxygen	1D Conc	5.0	3.1	9/18/2006
September 2006	Dissolved Oxygen	1D Conc	5.0	3.82	9/22/2006
September 2006	Total Suspended Solids	7D Conc	18	44.	9/1/2006
September 2006	Total Suspended Solids	7D Conc	18	19.5	9/8/2006
September 2006	Total Suspended Solids	7D Conc	18	21.3	9/15/2006
September 2006	Total Suspended Solids	30D Conc	12	23.8	9/1/2006
October 2006	Dissolved Oxygen	1D Conc	5.0	4.4	10/4/2006
October 2006	Dissolved Oxygen	1D Conc	5.0	4.09	10/11/2006
October 2006	Dissolved Oxygen	1D Conc	5.0	4.69	10/13/2006
October 2006	Total Suspended Solids	7D Conc	18	19.	10/15/2006
October 2006	Total Suspended Solids	30D Conc	12	16.575	10/1/2006
October 2006	Total Suspended Solids	7D Conc	18	25.3	10/22/2006
November 2006	Total Suspended Solids	30D Qty	1.8	2.33907	11/1/2006

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Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
December 2006	Dissolved Oxygen	1D Conc	5.0	4.29	12/20/2006
January 2007	Total Suspended Solids	7D Conc	18	24.7	1/8/2007
January 2007	Total Suspended Solids	7D Qty	2.7	4.20703	1/8/2007
January 2007	Total Suspended Solids	7D Conc	18	44.	1/15/2007
January 2007	Total Suspended Solids	7D Qty	2.7	11.2414	1/15/2007
January 2007	Total Suspended Solids	30D Conc	12	25.325	1/1/2007
January 2007	Total Suspended Solids	7D Conc	18	23.3	1/22/2007
January 2007	Total Suspended Solids	30D Qty	1.8	4.65149	1/1/2007
January 2007	CBOD 5 day	7D Conc	15	19.5	1/22/2007
February 2007	Total Suspended Solids	7D Conc	18	25.3	2/1/2007
February 2007	Total Suspended Solids	7D Conc	18	39.	2/8/2007
February 2007	Total Suspended Solids	7D Conc	18	33.3	2/15/2007
February 2007	Total Suspended Solids	30D Conc	12	28.825	2/1/2007
February 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	5.5	12.175	2/1/2007
February 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	8.3	16.3	2/15/2007
February 2007	CBOD 5 day	7D Conc	15	25.5	2/1/2007
February 2007	CBOD 5 day	30D Conc	10	15.275	2/1/2007
March 2007	Total Suspended Solids	7D Qty	2.7	21.5835	3/1/2007
March 2007	Total Suspended Solids	7D Conc	18	22.	3/8/2007
March 2007	Total Suspended Solids	7D Qty	2.7	3.07266	3/8/2007
March 2007	Total Suspended Solids	7D Conc	18	138.	3/15/2007
March 2007	Total Suspended Solids	7D Conc	18	26.7	3/22/2007
March 2007	Total Suspended Solids	7D Qty	2.7	5.18435	3/22/2007
March 2007	Total Suspended Solids	30D Conc	12	44.68	3/1/2007
March 2007	Total Suspended Solids	30D Qty	1.8	6.31211	3/1/2007
March 2007	CBOD 5 day	7D Qty	2.3	4.0769	3/1/2007
March 2007	CBOD 5 day	7D Conc	15	15.3	3/15/2007
April 2007	Total Suspended Solids	7D Conc	18	29.3	4/8/2007
April 2007	Total Suspended Solids	7D Qty	2.7	3.09412	4/8/2007
April 2007	Total Suspended Solids	30D Conc	12	18.625	4/1/2007
April 2007	Total Suspended Solids	7D Conc	18	18.7	4/22/2007
April 2007	Total Suspended Solids	30D Qty	1.8	2.83208	4/1/2007
April 2007	Total Suspended Solids	7D Qty	2.7	6.75236	4/22/2007
May 2007	Dissolved Oxygen	1D Conc	5.0	4.87	5/8/2007
May 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	18.5	5/15/2007
May 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	2.0	6.56333	5/1/2007

Westview Park WWTP

At the time of the inspection the force main which will eliminate the WWTP had been constructed. Work on the pump station electrical equipment was being performed. The aeration tank contents were a medium brown in color, with a light brown foam in the corners. The return sludge line was operating and returning brown colored water. The settling tank contents were turbid, and floating scum was evident behind the effluent trough baffle. Although the effluent troughs were free of solids buildup, the settling tank

effluent did contain some pinfloc.

Effluent from the WWTP was being chlorinated and dechlorinated, and the surface of the tank contents was covered with floating scum / solids. The aerated sludge holding tank was full and being aerated, and the sludge beds were full of vegetation.

Operation and Maintenance of the Westview WWTP appeared worse than the other four WWTPs. The WWTP is scheduled for abandonment in the very near future.

WESTVIEW PARK WWTP
(8/1/06 – 6/1/07)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2006	Phosphorus, Total (P)	30D Conc	1.0	1.58	8/1/2006
August 2006	Phosphorus, Total (P)	7D Conc	1.5	1.58	8/1/2006
September 2006	Total Suspended Solids	7D Conc	18	21.	9/1/2006
October 2006	Total Suspended Solids	7D Conc	18	35.85	10/8/2006
October 2006	Total Suspended Solids	30D Conc	12	13.7888	10/1/2006
October 2006	Phosphorus, Total (P)	30D Conc	1.0	1.16	10/1/2006
November 2006	Total Suspended Solids	7D Conc	18	33.15	11/15/2006
November 2006	Total Suspended Solids	7D Qty	11.6	19.0312	11/15/2006
November 2006	Total Suspended Solids	30D Conc	12	17.75	11/1/2006
November 2006	Total Suspended Solids	30D Qty	7.7	8.37928	11/1/2006
November 2006	Nitrogen, Ammonia (NH3-N)	7D Conc	5.9	11.1	11/8/2006
November 2006	Nitrogen, Ammonia (NH3-N)	30D Conc	3.9	6.59	11/1/2006
November 2006	Phosphorus, Total (P)	30D Conc	1.0	4.06	11/1/2006
November 2006	Phosphorus, Total (P)	7D Conc	1.5	4.06	11/8/2006
November 2006	Phosphorus, Total (P)	30D Qty	0.64	.69152	11/1/2006
December 2006	Nitrogen, Ammonia (NH3-N)	7D Conc	5.9	7.46	12/8/2006
December 2006	Phosphorus, Total (P)	30D Conc	1.0	2.03	12/1/2006
December 2006	Phosphorus, Total (P)	7D Conc	1.5	2.03	12/8/2006
January 2007	Total Suspended Solids	7D Conc	18	29.5	1/22/2007
January 2007	Total Suspended Solids	30D Conc	12	18.5888	1/1/2007
February 2007	Total Suspended Solids	7D Conc	18	29.	2/1/2007
February 2007	Total Suspended Solids	7D Conc	18	30.65	2/8/2007
February 2007	Total Suspended Solids	7D Conc	18	45.	2/15/2007
February 2007	Total Suspended Solids	30D Conc	12	31.4125	2/1/2007
February 2007	Total Suspended Solids	7D Conc	18	21.	2/22/2007
February 2007	Phosphorus, Total (P)	30D Conc	1.0	2.48	2/1/2007
February 2007	Phosphorus, Total (P)	7D Conc	1.5	2.48	2/8/2007
February 2007	CBOD 5 day	7D Conc	15	15.8	2/1/2007
February 2007	CBOD 5 day	7D Conc	15	17.45	2/8/2007
February 2007	CBOD 5 day	7D Conc	15	19.	2/15/2007
February 2007	CBOD 5 day	30D Conc	10	15.4375	2/1/2007
March 2007	Total Suspended Solids	7D Conc	18	19.85	3/1/2007

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Reporting Period	Parameter	Limit		Reported Value	Violation Date
		Type	Limit		
March 2007	Total Suspended Solids	7D Qty	11.6	19.8258	3/1/2007
March 2007	Total Suspended Solids	30D Conc	12	15.1	3/1/2007
March 2007	Total Suspended Solids	30D Qty	7.7	8.90932	3/1/2007
March 2007	Phosphorus, Total (P)	30D Conc	1.0	1.54	3/1/2007
March 2007	Phosphorus, Total (P)	7D Conc	1.5	1.54	3/8/2007
March 2007	CBOD 5 day	7D Conc	15	15.75	3/22/2007
April 2007	Total Suspended Solids	7D Conc	18	24.25	4/1/2007
April 2007	Total Suspended Solids	7D Conc	18	23.45	4/8/2007
April 2007	Total Suspended Solids	30D Conc	12	15.275	4/1/2007
April 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	3.9	5.09	4/1/2007
April 2007	Phosphorus, Total (P)	30D Conc	1.0	1.48	4/1/2007
April 2007	CBOD 5 day	7D Conc	15	42.25	4/1/2007
April 2007	CBOD 5 day	7D Qty	9.6	11.3564	4/1/2007
April 2007	CBOD 5 day	30D Conc	10	15.75	4/1/2007
May 2007	Total Suspended Solids	30D Conc	12	12.76	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	11.7	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	7D Qty	1.9	3.45419	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	14.4	5/15/2007
May 2007	Nitrogen, Ammonia (NH3-N)	30D Conc	2.0	10.5433	5/1/2007
May 2007	Nitrogen, Ammonia (NH3-N)	30D Qty	1.3	1.9873	5/1/2007
May 2007	Phosphorus, Total (P)	30D Conc	1.0	2.89	5/1/2007
May 2007	Phosphorus, Total (P)	7D Conc	1.5	2.89	5/15/2007
May 2007	CBOD 5 day	7D Conc	15	15.5	5/15/2007

The following improvements are being, or have been, completed on the County WWTPs:

1) **Brentwood Lake:**

- WWTP upgrade is approximately 85% completed.
- 24,000-Gallon Aerated Sludge Holding Tank, **installed**.
- Two (2) drum filters (ea. 32 inches diameter x 54 inches long; 21 micron openings or less; 30.36 ft² surface area; design flow of 315 gpm), **installed**.
- 4,560-Gallon Contact Tank with Chlorination Facilities, **installed**.
- 1,475-Gallon Contact Tank with Dechlorination Facilities, **installed**.
- Geiser pumps in the final settling tanks, and return and waste sludge piping, **installed**.
- Two (2) rotary positive displacement aeration tank blowers, **installed**.
- "Muffin Monster" grinder at the WWTP headworks, **installed**.

2) **Columbia West River WWTP:**

- WWTP **eliminated.**
- 1,402 feet of 4" forcemain, and wastewater pump station, **installed.**
- Connection of the forcemain was made to the NEORSD sanitary sewer for conveyance to Southerly WWTP for treatment.

3) **Cresthaven WWTP:**

- WWTP upgrade is approximately 90% completed.
- 16,000-Gallon Aerated Sludge Holding Tank, **installed.**
- Two (2) drum filters (ea. 32 inches diameter x 54 inches long; 21 micron openings or less; 30.36 ft² surface area; design flow of 315 gpm), **installed.**
- 3,044-Gallon Contact Tank with Chlorination / Dechlorination Facilities, **installed.**
- Geiser pumps in the final settling tanks, and return and waste sludge piping, **installed.**

4) **Eaton Estates WWTP:**

- WWTP upgrade is approximately 80% completed.
- 40,000-Gallon Aerated Sludge Holding Tank, **installed.**
- Two (2) drum filters (ea. 48 inches diameter x 72 inches long; 21 micron openings or less; 60.72 ft² surface area; design flow of 490 gpm), **in process of being installed.**
- 10,993-Gallon Contact Tank with Chlorination / Dechlorination Facilities, **installed.**
- Raw sewage pump station with two self priming centrifugal solids handling pumps (ea. 450 gpm @ 25 ft. TDH), **installed.**
- Existing aeration tanks modified, via placement of a divider in the tanks, to permit operation in the extended aeration or contact stabilization mode, **completed.**

5) **Plum Creek WWTP:**

- WWTP upgrade is approximately 90% completed.
- Influent Pump Station with dual 275 gpm centrifugal pumps, **installed.**
- 18,000-Gallon Flow Equalization Tank, **installed.**
- 3,500-Gallon Trash Trap, **installed.**
- 96-Ft² Upflow Fixed Media Clarifier, **installed.**
- 8,000-Gallon Aerated Sludge Holding Tank, **installed.**

- 3,000-Gallon Dosing Station (1660 Gallon Eff. Cap.) with Dual Submersible Pumps (190 gpd @ 20' TDH), **installed.**
- 1,614-Ft² Surface Sand Filter, **installed.**
- 2,150-Gallon Contact Tank with Chlorination / Dechlorination Facilities, **installed.**

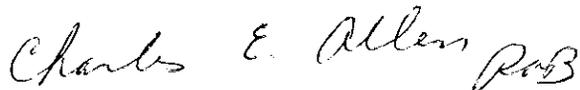
6) **Westview Park WWTP:**

- Elimination of WWTP and construction of pump station, **in process.**
- Installation of 25 feet of 12" gravity sewer, 5,500 feet of 10" forcemain, **completed.**
- Connection of forcemain to NEORSD sanitary sewer for conveyance to Southerly WWTP for treatment, **in near future.**

Discussions are still on-going between legal representatives for the Lorain County Commissioners and Ohio EPA, in an effort to settle unresolved past NPDES Permit violations.

If there are any questions or comments regarding this correspondence, please contact this office.

Respectfully,



Charles E. Allen
Environmental Engineer
Division of Surface Water

CEA/mt

cc: Andrew Conway, Ohio EPA, DSW Enforcement Section, CO
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