



State of Ohio Environmental Protection Agency

Northeast District Office

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

September 21, 2009

RE: LORAIN COUNTY  
EATON HOMES WWTP  
NPDES NO. 3PH00023

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

Dear Commissioners:

On September 10, 2009, a Compliance Evaluation Inspection (CEI) was conducted on the Eaton Homes Wastewater Treatment Plant (WWTP). Present during the inspection were Messrs. Steve Canfield and Nick Webber, 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 evaluate the present operation and maintenance conditions at the WWTP, and to evaluate its compliance with the terms and conditions of its NPDES permit.

At the time of the September 10<sup>th</sup> inspection, the following observations were made:

- 1) The extended aeration tank contents were medium brown in color, with light brown foam in the tank corners. The suspended solids (MLSS) content in the tank appeared to be in a normal operating concentration. The return sludge line was operating and returning brown liquid.
- 2) Contents of the settling tank were typical, and the mechanical scrapers were operating. The western settling tank did contain some bulking solids, and the eastern settling tank water surface had a slight floating scum. There was no solids deposition in the effluent troughs.
- 3) Tertiary filtration is normally accomplished by two drum filters. However, the filters were not operating due to failed motors, which were flooded out by heavy rains at the end of July. Replacement parts for the motors have been ordered, but their delivery is behind schedule.

Consideration is being given to the installation of actuator valves on the drum filters, in order to prevent backup into the filters during periods of excessive precipitation.

- 4) Final effluent is disinfected with chlorine gas, and dechlorination is accomplished with sodium bisulfite. Approximately 6 to 7 lbs/day of chlorine gas is used for disinfection.
- 5) Effluent from the WWTP was clear, colorless, and free of foam.
- 6) The Aerated Sludge Holding tank was well aerated, and contents were medium brown. No odors were present. Approximately 3000 gallons of sludge per quarter is hauled to the French Creek WWTP by Johnson Septic, or Father & Son Septic haulers.
- 7) A standby generator is located on site.
- 8) The Eaton Homes WWTP is subject to excessive Inflow/Infiltration (I/I) due to leaking sewers in the development. Relining work of some sewers is anticipated by the County.

The last Compliance Evaluation Inspection (CEI) conducted at the Eaton Homes WWTP was on September 3, 2008. Since the last CEI, the Eaton Homes WWTP has reported the following NPDES Permit effluent violations in their monthly electronic Discharge Monitoring Reports (eDMR):

**EATON HOMES WWTP  
 NPDES PERMIT NO. 3PH00023  
 EFFLUENT LIMIT VIOLATIONS  
 (9/1/08 – 9/1/09)**

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
October 2008	Total Suspended Solids	7D Conc	18	19.8	10/15/2008
November 2008	Total Suspended Solids	30D Qty	9.1	9.9685	11/1/2008
November 2008	Total Suspended Solids	7D Qty	13.6	47.4949	11/22/2008
November 2008	CBOD 5 day	7D Qty	11.40	19.3372	11/22/2008
December 2008	Total Suspended Solids	30D Qty	9.1	21.8664	12/1/2008
December 2008	Total Suspended Solids	7D Qty	13.6	66.5882	12/8/2008
December 2008	CBOD 5 day	7D Qty	11.40	13.3007	12/8/2008
December 2008	Total Suspended Solids	7D Qty	13.6	19.1206	12/22/2008
February 2009	Total Suspended Solids	30D Conc	12	16.025	2/1/2009
February 2009	Total Suspended Solids	30D Qty	9.1	35.8733	2/1/2009
February 2009	CBOD 5 day	30D Qty	7.57	11.8872	2/1/2009
February 2009	Total Suspended Solids	7D Conc	18	25.4	2/8/2009
February 2009	Total Suspended Solids	7D Qty	13.6	97.4972	2/8/2009

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2009	CBOD 5 day	7D Qty	11.40	24.6569	2/8/2009
February 2009	Total Suspended Solids	7D Qty	13.6	14.8696	2/15/2009
February 2009	Total Suspended Solids	7D Qty	13.6	28.2907	2/22/2009
February 2009	CBOD 5 day	7D Qty	11.40	14.4436	2/22/2009
March 2009	Total Suspended Solids	30D Qty	9.1	12.7667	3/1/2009
March 2009	Nitrogen, Ammonia (NH3-N)	30D Qty	5.15	8.44043	3/1/2009
March 2009	CBOD 5 day	30D Qty	7.57	9.41521	3/1/2009
March 2009	Total Suspended Solids	7D Qty	13.6	43.2594	3/8/2009
March 2009	Nitrogen, Ammonia (NH3-N)	7D Qty	7.72	16.8808	3/8/2009
March 2009	CBOD 5 day	7D Qty	11.40	33.3647	3/8/2009
April 2009	Total Suspended Solids	30D Qty	9.1	16.6414	4/1/2009
April 2009	Total Suspended Solids	7D Qty	13.6	25.7991	4/1/2009
April 2009	Total Suspended Solids	7D Qty	13.6	32.5394	4/8/2009
April 2009	CBOD 5 day	7D Qty	11.40	14.3318	4/8/2009
July 2009	Total Suspended Solids	30D Conc	12	22.5888	7/1/2009
July 2009	Total Suspended Solids	7D Conc	18	68.	7/1/2009
July 2009	Total Suspended Solids	7D Qty	13.6	18.2921	7/1/2009
August 2009	Total Suspended Solids	30D Conc	12	15.45	8/1/2009
August 2009	Total Suspended Solids	7D Conc	18	33.	8/15/2009

The County should continue with all efforts that will enable the Eaton Homes WWTP to consistently meet its NPDES Permit limits. Please submit a report to this office detailing the reasons for the significant amount of 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/Eaton Homes P&C