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State of Ohio Environmental Protection Agency

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Northeast District Office

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

2008 SEP 30 A 7:30

September 29, 2008

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

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 Eaton Homes 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 3rd inspection, the following observations were made:

- 1) The extended aeration tank contents were medium gray / brown in color, with a light brown foam in the corners of the tank. The suspended solids (MLSS) content appeared to be at a normal operating concentration.
- 2) The settling tank contents were typical; the mechanical scrapers flights were operational. Effluent from the settling tank was clear, and there was no solids deposition in the troughs.
- 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 two drum filters, which were operational.
- 5) Final effluent is disinfected with chlorine gas, and dechlorination is accomplished with sodium bisulfite. Approximately 10 lbs/day of chlorine gas is used.
- 6) The effluent from the WWTP was clear and colorless, contained a slight pin floc, and was free of foam.

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- 7) The Aerated Sludge Holding tank was well aerated, and contents were medium 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 Eaton Homes WWTP, to the French Creek WWTP, for treatment and disposal.
- 9) A standby generator is located on site.
- 10) Approximately 40% of the sanitary sewers in the east end of the development have been replaced with new PVC.

The last Compliance Evaluation Inspection (CEI) conducted at the Eaton Homes WWTP was on June 21, 2007. 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. 3PH0023
 EFFLUENT LIMIT VIOLATIONS
 (6/1/07 – 9/1/09)**

Parameter	Limit Type	Limit	Reported Value	Violation Date
Dissolved Oxygen	1D Conc	6.0	1.87	6/1/2007
Dissolved Oxygen	1D Conc	6.0	2.03	6/4/2007
Dissolved Oxygen	1D Conc	6.0	1.82	6/5/2007
Dissolved Oxygen	1D Conc	6.0	1.4	6/6/2007
Dissolved Oxygen	1D Conc	6.0	2.13	6/7/2007
Dissolved Oxygen	1D Conc	6.0	1.52	6/8/2007
Dissolved Oxygen	1D Conc	6.0	.64	6/11/2007
Dissolved Oxygen	1D Conc	6.0	.7	6/12/2007
Dissolved Oxygen	1D Conc	6.0	.72	6/13/2007
Dissolved Oxygen	1D Conc	6.0	3.55	6/14/2007
Dissolved Oxygen	1D Conc	6.0	3.7	6/15/2007
Dissolved Oxygen	1D Conc	6.0	3.89	6/18/2007
Dissolved Oxygen	1D Conc	6.0	3.55	6/19/2007
Dissolved Oxygen	1D Conc	6.0	3.05	6/20/2007
Dissolved Oxygen	1D Conc	6.0	2.73	6/21/2007
Dissolved Oxygen	1D Conc	6.0	2.85	6/22/2007
Dissolved Oxygen	1D Conc	6.0	4.27	6/25/2007
Dissolved Oxygen	1D Conc	6.0	4.39	6/26/2007
Dissolved Oxygen	1D Conc	6.0	5.01	6/27/2007

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Parameter	Unit/Type	Limit	Reported Value	Violation Date
Dissolved Oxygen	1D Conc	6.0	3.95	6/28/2007
Dissolved Oxygen	1D Conc	6.0	4.44	6/29/2007
Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	1.57333	7/1/2007
Dissolved Oxygen	1D Conc	6.0	4.9	7/2/2007
Dissolved Oxygen	1D Conc	6.0	5.01	7/3/2007
Dissolved Oxygen	1D Conc	6.0	5.46	7/5/2007
Dissolved Oxygen	1D Conc	6.0	5.28	7/6/2007
Dissolved Oxygen	1D Conc	6.0	5.39	7/9/2007
Dissolved Oxygen	1D Conc	6.0	5.68	7/10/2007
Dissolved Oxygen	1D Conc	6.0	5.57	7/11/2007
Dissolved Oxygen	1D Conc	6.0	4.98	7/16/2007
Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	1.88	8/1/2007
Fecal Coliform	7D Conc	2000	12500.	8/8/2007
Nitrogen, Ammonia (NH3-N)	7D Conc	2.3	3.34	8/22/2007
Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	1.61	10/1/2007
Nitrogen, Ammonia (NH3-N)	30D Qty	1.14	1.67092	10/1/2007
Total Suspended Solids	7D Conc	18	20.7	10/22/2007
Total Suspended Solids	7D Qty	13.6	27.0755	10/22/2007
Nitrogen, Ammonia (NH3)	7D Qty	1.74	3.01607	10/22/2007
Total Suspended Solids	30D Qty	9.1	10.3100	11/1/2007
Total Suspended Solids	7D Qty	13.6	18.6815	11/8/2007
Total Suspended Solids	7D Conc	18	23.3	11/22/2007
Total Suspended Solids	7D Qty	13.6	26.0250	11/22/2007
Total Suspended Solids	30D Qty	9.1	24.9168	12/1/2007
CBOD 5 day	30D Qty	7.57	10.5651	12/1/2007
Total Suspended Solids	7D Qty	13.6	68.2160	12/8/2007
CBOD 5 day	7D Qty	11.40	26.7848	12/8/2007
Total Suspended Solids	30D Qty	9.1	12.8427	1/1/2008
Total Suspended Solids	7D Qty	13.6	40.6269	1/8/2008
CBOD 5 day	7D Qty	11.40	20.6482	1/8/2008
Total Suspended Solids	30D Conc	12	15.3125	2/1/2008
Total Suspended Solids	7D Conc	18	39.	2/1/2008
Total Suspended Solids	30D Qty	9.1	41.3464	2/1/2008
Total Suspended Solids	7D Qty	13.6	152.683	2/1/2008
CBOD 5 day	30D Qty	7.57	15.0511	2/1/2008
CBOD 5 day	7D Qty	11.40	51.0264	2/1/2008
Total Suspended Solids	30D Conc	12	14.0875	3/1/2008
Total Suspended Solids	30D Qty	9.1	51.5497	3/1/2008
Total Suspended Solids	7D Qty	13.6	32.2798	3/1/2008
Nitrogen, Ammonia (NH3-N)	30D Qty	5.15	14.9296	3/1/2008
CBOD 5 day	30D Qty	7.57	27.2776	3/1/2008
CBOD 5 day	7D Qty	11.40	19.1146	3/1/2008
Total Suspended Solids	7D Qty	13.6	32.4042	3/8/2008
CBOD 5 day	7D Qty	11.40	21.3751	3/8/2008

Parameter	Limit type	Limit	Reported Value	Violation Date
Total Suspended Solids	7D Conc	18	24.	3/15/2008
Total Suspended Solids	7D Qty	13.6	114.979	3/15/2008
Nitrogen, Ammonia (NH3-N)	7D Qty	7.72	28.5997	3/15/2008
CBOD 5 day	7D Qty	11.40	54.2469	3/15/2008
Total Suspended Solids	7D Qty	13.6	26.5347	3/22/2008
CBOD 5 day	7D Qty	11.40	14.3739	3/22/2008
Total Suspended Solids	7D Qty	13.6	14.7161	4/1/2008
Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	2.055	6/1/2008
Nitrogen, Ammonia (NH3-N)	30D Qty	1.14	11.4774	6/1/2008
Total Suspended Solids	7D Qty	13.6	23.5031	6/8/2008
Nitrogen, Ammonia (NH3-N)	7D Conc	2.3	4.11	6/8/2008
Nitrogen, Ammonia (NH3-N)	7D Qty	1.74	22.9549	6/8/2008
CBOD 5 day	7D Qty	11.40	15.2764	6/8/2008
Dissolved Oxygen	1D Conc	6.0	4.47	6/25/2008
CBOD 5 day	7D Qty	11.40	21.4956	7/1/2008
Total Suspended Solids	7D Qty	13.6	26.7840	7/8/2008
Dissolved Oxygen	1D Conc	6.0	5.6	7/14/2008

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

**EATON HOMES WWTP
 NPDES PERMIT NO. 3PH00023
 FREQUENCY VIOLATIONS
 (6/1/07 – 9/1/09)**

Violation Date	Parameter	Sample Frequency	Expected	Reported
6/2/2007	Flow Rate	1/Day	1	0
6/3/2007	Flow Rate	1/Day	1	0
6/4/2007	Flow Rate	1/Day	1	0
6/5/2007	Flow Rate	1/Day	1	0
6/6/2007	Flow Rate	1/Day	1	0
6/7/2007	Flow Rate	1/Day	1	0
6/8/2007	Flow Rate	1/Day	1	0
6/9/2007	Flow Rate	1/Day	1	0
6/10/2007	Flow Rate	1/Day	1	0
6/11/2007	Flow Rate	1/Day	1	0
6/12/2007	Flow Rate	1/Day	1	0
6/13/2007	Flow Rate	1/Day	1	0
6/14/2007	Flow Rate	1/Day	1	0
6/15/2007	Flow Rate	1/Day	1	0
6/16/2007	Flow Rate	1/Day	1	0

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Violation Date	Parameter	Sample Frequency	Expected	Reported
6/17/2007	Flow Rate	1/Day	1	0
6/19/2007	Flow Rate	1/Day	1	0
6/20/2007	Flow Rate	1/Day	1	0
6/21/2007	Flow Rate	1/Day	1	0
6/22/2007	Flow Rate	1/Day	1	0
6/23/2007	Flow Rate	1/Day	1	0
6/24/2007	Flow Rate	1/Day	1	0
6/25/2007	Flow Rate	1/Day	1	0
6/26/2007	Flow Rate	1/Day	1	0
6/27/2007	Flow Rate	1/Day	1	0
6/28/2007	Flow Rate	1/Day	1	0
6/29/2007	Flow Rate	1/Day	1	0
6/30/2007	Flow Rate	1/Day	1	0
7/2/2007	Flow Rate	1/Day	1	0
7/3/2007	Flow Rate	1/Day	1	0
7/4/2007	Flow Rate	1/Day	1	0
7/5/2007	Flow Rate	1/Day	1	0
7/6/2007	Flow Rate	1/Day	1	0
7/7/2007	Flow Rate	1/Day	1	0
7/8/2007	Flow Rate	1/Day	1	0
7/9/2007	Flow Rate	1/Day	1	0
7/10/2007	Flow Rate	1/Day	1	0
7/11/2007	Flow Rate	1/Day	1	0
7/12/2007	Flow Rate	1/Day	1	0
7/13/2007	Flow Rate	1/Day	1	0
7/14/2007	Flow Rate	1/Day	1	0
7/15/2007	Flow Rate	1/Day	1	0
7/16/2007	Flow Rate	1/Day	1	0
7/17/2007	Flow Rate	1/Day	1	0
7/18/2007	Flow Rate	1/Day	1	0
7/19/2007	Flow Rate	1/Day	1	0
7/20/2007	Flow Rate	1/Day	1	0
7/21/2007	Flow Rate	1/Day	1	0
7/22/2007	Flow Rate	1/Day	1	0
7/23/2007	Flow Rate	1/Day	1	0
7/24/2007	Flow Rate	1/Day	1	0
7/25/2007	Flow Rate	1/Day	1	0
7/26/2007	Flow Rate	1/Day	1	0
7/27/2007	Flow Rate	1/Day	1	0
7/28/2007	Flow Rate	1/Day	1	0
7/29/2007	Flow Rate	1/Day	1	0
7/30/2007	Flow Rate	1/Day	1	0
7/31/2007	Flow Rate	1/Day	1	0
8/15/2007	Suspended Solids	2/Week	2	1

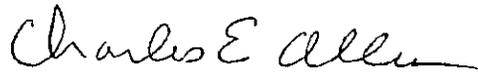
Violation Date	Parameter	Sample Frequency	Expected	Reported
8/15/2007	Fecal Coliform	1/Week	1	0
8/2/2007	Flow Rate	1/Day	1	0
8/3/2007	Flow Rate	1/Day	1	0
8/4/2007	Flow Rate	1/Day	1	0
8/5/2007	Flow Rate	1/Day	1	0
8/6/2007	Flow Rate	1/Day	1	0
8/7/2007	Flow Rate	1/Day	1	0
8/8/2007	Flow Rate	1/Day	1	0
8/9/2007	Flow Rate	1/Day	1	0
8/10/2007	Flow Rate	1/Day	1	0
8/11/2007	Flow Rate	1/Day	1	0
8/12/2007	Flow Rate	1/Day	1	0
8/13/2007	Flow Rate	1/Day	1	0
8/14/2007	Flow Rate	1/Day	1	0
8/15/2007	Flow Rate	1/Day	1	0
8/16/2007	Flow Rate	1/Day	1	0
8/17/2007	Flow Rate	1/Day	1	0
8/18/2007	Flow Rate	1/Day	1	0
8/19/2007	Flow Rate	1/Day	1	0
8/20/2007	Flow Rate	1/Day	1	0
8/21/2007	Flow Rate	1/Day	1	0
8/22/2007	Flow Rate	1/Day	1	0
8/23/2007	Flow Rate	1/Day	1	0
8/24/2007	Flow Rate	1/Day	1	0
8/25/2007	Flow Rate	1/Day	1	0
8/26/2007	Flow Rate	1/Day	1	0
8/27/2007	Flow Rate	1/Day	1	0
8/28/2007	Flow Rate	1/Day	1	0
8/29/2007	Flow Rate	1/Day	1	0
8/30/2007	Flow Rate	1/Day	1	0
8/31/2007	Flow Rate	1/Day	1	0
8/15/2007	CBOD 5 day	2/Week	2	1
8/15/2007	Suspended Solids	1/Week	1	0
8/15/2007	CBOD 5 day	1/Week	1	0
11/22/2007	Suspended Solids	2/Week	2	1
11/22/2007	CBOD 5 day	2/Week	2	1
12/22/2007	Suspended Solids	2/Week	2	1
12/22/2007	CBOD 5 day	2/Week	2	1
1/1/2008	Suspended Solids	2/Week	2	1
1/1/2008	CBOD-5-day	2/Week	2	1
5/1/2008	Fecal Coliform	1/Week	1	0
8/8/2008	Suspended Solids	2/Week	2	1
8/8/2008	CBOD 5 day	2/Week	2	1

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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
