

**Environmental
Protection Agency**

John F. Welsch, Governor
Wayne D. White, Lt. Governor
John A. Nye, Director

August 24, 2011

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

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 Eaton Homes Wastewater Treatment Plant (WWTP). Present during the Eaton Homes 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 Eaton Homes WWTP was on December 9, 2010.

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

- 1) Contents of the extended aeration tanks were being well aerated, and were medium brown in color. Suspended solids (MLSS) concentrations in the aeration tanks appeared to be in a normal operating range, and the return sludge line was operating and returning brown liquid.
- 2) Contents of the settling tanks were typical, and the mechanical scrapers in the settling tank were operating. There was a slight scum floating on the water surface, and there was no solids deposition in the effluent troughs.
- 3) Tertiary filtration of the settled effluent is accomplished by two drum filters. Filter # 2 was in service, while Filter # 1 was out of service due to a broken gear box, which went down August 10, 2011.

- 4) Disinfection of the final effluent is accomplished with chlorine gas, and dechlorination is performed using 38% sodium bisulfite.
- 5) Aerated Sludge Holding tank contents were medium brown and well aerated.
- 6) WWTP effluent was visually clear, colorless, and free of foam.
- 7) The on-site standby generator is tested every Monday.
- 8) Flow at the Eaton Homes WWTP is measured by a Flowmotion ultrasonic flow meter.
- 9) Effluent samples at the Eaton Homes WWTP are collected by two operators, and are then 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 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 (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	19.4375	2/1/2011
February 2011	Total Suspended Solids	30D Qty	9.1	34.3541	2/1/2011
February 2011	CBOD 5 day	30D Qty	7.57	9.27531	2/1/2011
February 2011	Total Suspended Solids	7D Conc	18	21.15	2/8/2011
February 2011	Total Suspended Solids	7D Conc	18	39.35	2/15/2011
February 2011	Total Suspended Solids	7D Qty	13.6	113.794	2/15/2011
February 2011	CBOD 5 day	7D Qty	11.40	24.7002	2/15/2011
March 2011	Total Suspended Solids	30D Conc	12	14.31	3/1/2011
March 2011	Total Suspended Solids	30D Qty	9.1	16.9962	3/1/2011
March 2011	Total Suspended Solids	7D Qty	13.6	30.3591	3/1/2011
March 2011	Total Suspended Solids	7D Qty	13.6	31.9324	3/8/2011

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Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
April 2011	Total Suspended Solids	30D Conc	12	67.7875	4/1/2011
April 2011	Total Suspended Solids	7D Conc	18	39.15	4/1/2011
April 2011	Total Suspended Solids	30D Qty	9.1	199.509	4/1/2011
April 2011	Total Suspended Solids	7D Qty	13.6	49.0404	4/1/2011
April 2011	CBOD 5 day	30D Conc	10	16.15	4/1/2011
April 2011	CBOD 5 day	7D Conc	15	20.05	4/1/2011
April 2011	CBOD 5 day	30D Qty	7.57	34.1624	4/1/2011
April 2011	CBOD 5 day	7D Qty	11.40	25.1113	4/1/2011
April 2011	Total Suspended Solids	7D Conc	18	199.5	4/15/2011
April 2011	Total Suspended Solids	7D Qty	13.6	714.792	4/15/2011
April 2011	CBOD 5 day	7D Conc	15	34.4	4/15/2011
April 2011	CBOD 5 day	7D Qty	11.40	104.269	4/15/2011
April 2011	Total Suspended Solids	7D Conc	18	22.35	4/22/2011
April 2011	Total Suspended Solids	7D Qty	13.6	28.9795	4/22/2011
May 2011	Total Suspended Solids	30D Conc	12	16.0333	5/1/2011
May 2011	Total Suspended Solids	30D Qty	9.1	16.3341	5/1/2011
May 2011	Total Suspended Solids	7D Qty	13.6	22.2505	5/1/2011
May 2011	CBOD 5 day	30D Qty	7.57	10.1551	5/1/2011
May 2011	Total Suspended Solids	7D Conc	18	24.75	5/22/2011
May 2011	Total Suspended Solids	7D Qty	13.6	21.6295	5/22/2011
June 2011	Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	2.85	6/1/2011
June 2011	Nitrogen, Ammonia (NH3-N)	7D Conc	2.3	5.7	6/8/2011
June 2011	Fecal Coliform	7D Conc	2000	9400.	6/22/2011
July 2011	Total Suspended Solids	30D Qty	9.1	13.0594	7/1/2011
July 2011	Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	7.075	7/1/2011
July 2011	Nitrogen, Ammonia (NH3-N)	30D Qty	1.14	11.1929	7/1/2011
July 2011	CBOD 5 day	30D Conc	10	13.975	7/1/2011
July 2011	CBOD 5 day	30D Qty	7.57	22.5065	7/1/2011
July 2011	Dissolved Oxygen	1D Conc	6.0	5.96	7/1/2011
July 2011	Dissolved Oxygen	1D Conc	6.0	5.42	7/5/2011
July 2011	Dissolved Oxygen	1D Conc	6.0	5.61	7/6/2011
July 2011	Dissolved Oxygen	1D Conc	6.0	5.91	7/7/2011
July 2011	CBOD 5 day	7D Qty	11.40	12.4685	7/8/2011
July 2011	Dissolved Oxygen	1D Conc	6.0	5.28	7/13/2011
July 2011	Nitrogen, Ammonia (NH3-N)	7D Conc	2.3	14.1	7/15/2011
July 2011	Nitrogen, Ammonia (NH3-N)	7D Qty	1.74	22.2973	7/15/2011
July 2011	Total Suspended Solids	7D Conc	18	18.3	7/22/2011
July 2011	Total Suspended Solids	7D Qty	13.6	29.1075	7/22/2011
July 2011	CBOD 5 day	7D Conc	15	37.9	7/22/2011
July 2011	CBOD 5 day	7D Qty	11.40	61.1092	7/22/2011
July 2011	Dissolved Oxygen	1D Conc	6.0	5.97	7/26/2011

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 Eaton Homes WWTP, which were constructed to correct prior NPDES permit effluent violations, were discussed. Also discussed was the fact that the Eaton Homes 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 Eaton Homes 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.

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.

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Utilizing data submitted for the Eaton Homes WWTP, the facility is in SNC for total suspended solids 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/Eaton Homes P&C

EATON HOMES WWTP

NPDES PERMIT NO. 3PH00023

(REV. 8/18/11)

Get Detail
for Selected
Permit

Facilities in Significant Non-Compliance **

Period: Jan-11 Jun-11

Permit #	Facility Name	Major	Station Code	Param Code	Parameter Name	Max % Exceed	# Months Slight Exceed (1)**	# Months Exceed (2)**
3PH00023	Eaton Homes WWTP		1	00530	Total Suspended Solids	5155.8	4	4
3PH00023	Eaton Homes WWTP		1	80082	CBOD 5 day	814.6	2	3

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Eaton Homes WWTP	Feb 2011	001	00530	Total Suspended Solids	30D Conc	12	19.4375	2/1/2011
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Eaton Homes WWTP	Feb 2011	001	00530	Total Suspended Solids	7D Qty	13.6	113.794	2/15/2011
Eaton Homes WWTP	Mar 2011	001	00530	Total Suspended Solids	7D Qty	13.6	30.3591	3/1/2011
Eaton Homes WWTP	Mar 2011	001	00530	Total Suspended Solids	30D Conc	12	14.31	3/1/2011
Eaton Homes WWTP	Mar 2011	001	00530	Total Suspended Solids	30D Qty	9.1	16.9962	3/1/2011
Eaton Homes WWTP	Mar 2011	001	00530	Total Suspended Solids	7D Qty	13.6	31.9324	3/8/2011
Eaton Homes WWTP	Apr 2011	001	00530	Total Suspended Solids	7D Qty	13.6	49.0404	4/1/2011
Eaton Homes WWTP	Apr 2011	001	00530	Total Suspended Solids	30D Qty	9.1	199.509	4/1/2011
Eaton Homes WWTP	Apr 2011	001	00530	Total Suspended Solids	7D Conc	18	39.15	4/1/2011

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Eaton Homes WWTP	May 2011	001	00530	Total Suspended Solids	7D Conc	18	24.75	5/22/2011
Eaton Homes WWTP	Jun 2011	001	00610	Nitrogen, Ammonia (NH3-N)	30D Conc	1.5	2.85	6/1/2011
Eaton Homes WWTP	Jun 2011	001	00610	Nitrogen, Ammonia (NH3-N)	7D Conc	2.3	5.7	6/8/2011
Eaton Homes WWTP	Jun 2011	001	31616	Fecal Coliform	7D Conc	2000	9400.	6/22/2011
Eaton Homes WWTP	Feb 2011	001	80082	CBOD 5 day	30D Qty	7.57	9.27531	2/1/2011
Eaton Homes WWTP	Feb 2011	001	80082	CBOD 5 day	7D Qty	11.40	24.7002	2/15/2011
Eaton Homes WWTP	Apr 2011	001	80082	CBOD 5 day	7D Qty	11.40	25.1113	4/1/2011
Eaton Homes WWTP	Apr 2011	001	80082	CBOD 5 day	30D Qty	7.57	34.1624	4/1/2011
Eaton Homes WWTP	Apr 2011	001	80082	CBOD 5 day	7D Conc	15	20.05	4/1/2011
Eaton Homes WWTP	Apr 2011	001	80082	CBOD 5 day	30D Conc	10	16.15	4/1/2011
Eaton Homes WWTP	Apr 2011	001	80082	CBOD 5 day	7D Conc	15	34.4	4/15/2011
Eaton Homes WWTP	Apr 2011	001	80082	CBOD 5 day	7D Qty	11.40	104.269	4/15/2011
Eaton Homes WWTP	May 2011	001	80082	CBOD 5 day	30D Qty	7.57	10.1551	5/1/2011