

**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

November 5, 2010

RE: LORAIN COUNTY
HENRIETTA TOWNSHIP
FIRELANDS LOCAL SCHOOL DISTRICT
(NPDES PERMIT NO. 3PT00095*AD)

Mr. Michael T. Englert
Firelands Local School District
11970 Vermilion Road
Oberlin, OH 44074

Dear Mr. Englert:

On October 19, 2010, an inspection of the above referenced facility's wastewater treatment system was conducted by this writer, and Mr. John Sabo of the Lorain County Health Department. The Firelands High School complex is located at 10643 Vermilion Road.

The purpose of the inspection was to evaluate the WWTP's operation and maintenance condition, and to assess compliance with National Pollutant Discharge Elimination System (NPDES) permit effluent limits. The last CEI conducted on the Firelands High School WWTP was on January 29, 2009.

During the October 19th inspection, the following observations were made:

1. The trash trap was in use and contents were typical.
2. The flow equalization tank was in use and was being well aerated. Contents of the tank were turbid gray.
3. The aeration tank was also being well aerated, and its contents were medium brown in color. The sludge return line was operating and returning brown sludge.
4. The settling tank had some floating sludge on the surface of its contents. The skimmer was operating, but was adjusted too far below the surface of the water to remove the sludge. The skimmer should be adjusted to approximately ¼ inch below the water surface. The settling tank effluent trough contained a slight algal growth, which should be removed.
5. The sand filter dosing station pumps were in the 'AUTO' mode, and were operational when tested in the 'HAND' mode. The high level alarm also worked when manually tested. Wastewater flow is measured using pump operating totalizers.

6. The surface sand filter south cell was being used, and did contain some solids buildup and ponding water. The north cell was not in use, and contained some vegetative growth. Both filter cells should have the solids and vegetation removed, and the sand raked level.
7. Treated effluent from the wastewater plant is disinfected by Ultra Violet light. The UV unit appeared to be operating, as there was a visible greenish light around the UV bulbs in the channel of the contact tank. However, the Relative % Irradiance @ 254 nm meter was not functioning, and should be checked for proper operation.
8. Effluent being discharged from the WWTP is post aerated, and was clear and free of visible solids.
9. The aerated sludge holding tank was full of brown sludge and being well aerated.

A review of the electronic Discharge Monitoring Reports (eDMR's) submitted for the Firelands High School WWTP for the period of January 1, 2009 through October 1, 2010, found the following final effluent limit numeric violations:

Firelands Elementary and High Schools
 NPDES Permit (3PT00095)
 Final Effluent Numeric Violations
 (Jan. 1, 2009 – Oct. 1, 2010)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
January 2009	Total Suspended Solids	30D Conc	12	19.	1/1/2009
January 2009	Total Suspended Solids	7D Conc	18	19.	1/1/2009
March 2010	Nitrogen, Ammonia (NH3-N)	30D Conc	3.0	11.4	3/1/2010
March 2010	Nitrogen, Ammonia (NH3-N)	7D Conc	4.5	11.4	3/22/2010
March 2010	Dissolved Oxygen	1D Conc	6.0	5.9	3/10/2010
October 2009	Nitrogen, Ammonia (NH3-N)	30D Conc	1.0	2.75	10/1/2009
October 2009	Nitrogen, Ammonia (NH3-N)	7D Conc	1.5	2.75	10/1/2009
May 2010	Nitrogen, Ammonia (NH3-N)	30D Conc	1.0	6.3	5/1/2010
May 2010	Nitrogen, Ammonia (NH3-N)	7D Conc	1.5	6.3	5/22/2010
May 2010	Dissolved Oxygen	1D Conc	6.0	4.3	5/19/2010
September 2009	Dissolved Oxygen	1D Conc	6.0	5.9	9/16/2009
February 2010	Nitrogen, Ammonia (NH3-N)	30D Conc	3.0	11.9	2/1/2010
February 2010	Nitrogen, Ammonia (NH3-N)	7D Conc	4.5	11.9	2/1/2010
September 2010	Dissolved Oxygen	1D Conc	6.0	4.1	9/15/2010
September 2010	Dissolved Oxygen	1D Conc	6.0	3.4	9/29/2010
February 2009	Total Suspended Solids	30D Qty	1.05	10355.7	2/1/2009

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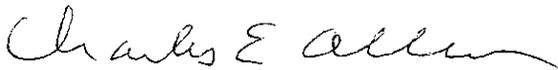
Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2009	Total Suspended Solids	7D Qty	1.57	10355.7	2/1/2009
February 2009	Nitrogen, Ammonia (NH3-N)	30D Qty	0.26	3376.52	2/1/2009
February 2009	Nitrogen, Ammonia (NH3-N)	7D Qty	0.39	3376.52	2/15/2009
February 2009	CBOD 5 day	30D Qty	0.87	17863.6	2/1/2009
February 2009	CBOD 5 day	7D Qty	1.31	17863.6	2/1/2009
June 2010	Nitrogen, Ammonia (NH3-N)	30D Conc	1.0	11.6	6/1/2010
June 2010	Nitrogen, Ammonia (NH3-N)	7D Conc	1.5	11.6	6/1/2010
June 2010	Dissolved Oxygen	1D Conc	6.0	5.6	6/9/2010

****NOTE:** No frequency or reporting code violations were indicated for the period.

Firelands Local School District should continue to implement operation and maintenance practices which will enable the WWTP to consistently meet its NPDES Permit limits.

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

Respectfully,



Charles E. Allen
Environmental Engineer
Division of Surface Water

CEA/mt

cc: John Sabo, Lorain County Health Department