



State of Ohio Environmental Protection Agency

Northeast District Office

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

February 22, 2010

RE: ASHTABULA COUNTY
ORWELL VILLAGE WWTP
OHIO EPA PERMIT 3PB00041

NOTICE OF VIOLATION

Mr. Greg Hogue, Superintendent
Village of Orwell
Board of Public Affairs
179 W. Main Street
Orwell, OH 44079

Dear Mr. Hogue:

On February 18, 2010, a site inspection was conducted at the above referenced facility. The inspection was conducted by John Schmidt and John Kwolek of this office. The purpose of the inspection was to evaluate the facility's compliance status with respect to the terms and conditions of the facility's National Pollutant Discharge Elimination System (NPDES) permit. The last compliance inspection was conducted on January 12, 2007. may 11, 2008

The system consists of screening and grit removal, lift station, equalization basin, oxidation ditch, clarification, sand filtration, UV disinfection, and post disinfection aeration. Sludge management consists of aerobic digestion and a settling lagoon, with sludge land applied via subsurface injection to fields owned by the Village to the southeast of the facility. The facility discharges to a tributary of the Grand River west of the facility at Parker Road.

Observations

Following are observations made during the inspection.

1. The overall condition of the treatment plant during this inspection was satisfactory. Inspection of the headworks of the facility indicated that there was insufficient grit removal capacity. You indicated that you were recently issued a PTI to convert one of the older oxidation ditches into additional grit removal capacity, and that work would commence in 2010. Screenings were manually removed with a pitchfork from the screen, with about 3 CF of screenings observed placed on a concrete pad adjacent to the screen, without any means of controlling sewage runoff from the pile. Ohio EPA recommends that a container or tray be placed under the screening accumulation area to ensure containment of sewage until placed into a container or direct placement in a container.

2. During the inspection, you noted that grit is incorporated into the sludge and land applied. **Grit as well as screenings, is a solid waste and cannot be mixed with the sludge. Collected grit must be containerized and sent to a licensed solid waste disposal facility for disposal.**
3. The content of the aeration tank had good color and mixing. Sludge returns were a chocolate brown color, with minimal foaming.
4. The surface of the clarifier was clear. The effluent trough was clean and there was no scum around the effluent baffle or the trough.
5. The sand filter was free of sludge. The west filter was operational at the time of the inspection with the east filter disassembled for repair. The effluent discharged to the sand filter during the inspection was clear and free of color and turbidity. The wastewater percolated freely through the sand indicating that the beds were not clogged.
6. During the inspection, it was noted that the receiving stream flows through a farm field immediately downstream of the discharge that contains horses with access to the stream.

NPDES Permit Compliance Review

A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period February 1, 2007 through February 1, 2010 indicates violations of the terms and conditions of your NPDES permit. Specific instances of noncompliance are as follows:

Limit Violations

The following limit violations were noted:

<u>Station</u>	<u>Parameter</u>	<u>Limit Type</u>	<u>Limit</u>	<u>Reported Value</u>	<u>Violation Date</u>
001	Nitrogen, Ammonia (NH3)	30D Conc	1.0	1.02556	5/1/2008
001	Nitrogen, Ammonia (NH3)	7D Conc	1.5	2.25	6/1/2008
001	Nitrogen, Ammonia (NH3)	7D Qty	2.96	3.96479	6/1/2008
001	Nitrogen, Ammonia (NH3)	7D Conc	1.5	1.74	5/1/2009
001	Nitrogen, Ammonia (NH3)	30D Conc	1.0	1.77444	6/1/2009
001	Nitrogen, Ammonia (NH3)	7D Conc	1.5	5.745	6/22/2009
001	Nitrogen, Ammonia (NH3)	7D Qty	2.96	4.19079	6/22/2009
001	Nitrogen, Ammonia (NH3)	30D Conc	1.0	1.21444	9/1/2009
001	Nitrogen, Ammonia (NH3)	7D Conc	1.5	2.6	9/22/2009

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During our visit, you indicated that the nitrogen-ammonia violations are related to algal growth which is being addressed by the covers over the clarifier and older oxidation ditch, but that discharge of sand filter backwash to the secondary system is "reseeding" the algae. You indicated that you were open to any recommendations for a low-cost workable solution to the reseeding problem. Ohio EPA DSW's Compliance Assistance Unit (CAU) may be able to assist you in this matter. Please feel free to contact Keith Kroeger at (614) 644-2001 or via e-mail at Keith.Kroeger@epa.state.oh.us if you would like assistance from Ohio EPA DSW CAU.

Reporting Violations

The following reporting violations were noted.

Reporting Period	Station	Parameter	Sample Frequency	Expected	Reported	Violation Date
February 2007	001	CBOD 5 day	2/Week	2	1	02/08/2007
June 2007	001	Fecal Coliform	2/Week	2	1	06/08/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/01/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/01/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/01/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/03/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/03/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/03/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/04/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/04/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/04/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/05/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/05/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/05/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/06/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/06/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/06/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/07/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/07/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/07/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/08/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/08/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/08/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/09/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/09/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/09/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/10/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/10/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/10/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/11/2007

Reporting Period	Station	Parameter	Sample Frequency	Expected	Reported	Violation Date
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/11/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/11/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/12/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/12/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/12/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/13/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/13/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/13/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/14/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/14/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/14/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/15/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/15/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/15/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/16/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/16/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/16/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/17/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/17/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/17/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/18/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/18/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/18/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/19/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/19/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/19/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/20/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/20/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/20/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/21/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/21/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/21/2007
November 2007	001	Total Suspended Solids	2/Week	2	1	11/22/2007
November 2007	601	Total Suspended Solids	2/Week	2	1	11/22/2007
November 2007	001	Nitrogen, Ammonia (NH3)	2/Week	2	1	11/22/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/22/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/22/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/22/2007
November 2007	001	CBOD 5 day	2/Week	2	1	11/22/2007
November 2007	601	CBOD 5 day	2/Week	2	1	11/22/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/23/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/23/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/23/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/24/2007

Reporting Period	Station	Parameter	Sample Frequency	Expected	Reported	Violation Date
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/24/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/24/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/25/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/25/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/25/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/26/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/26/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/26/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/27/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/27/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/27/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/28/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/28/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/28/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/29/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/29/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/29/2007
November 2007	581	Sludge Weight	1/Day	1	0	11/30/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/30/2007
November 2007	581	Sludge Solids, Percent	1/Day	1	0	11/30/2007
January 2009	001	Total Suspended Solids	2/Week	2	1	01/15/2009
January 2009	001	Nitrogen, Ammonia (NH3)	2/Week	2	1	01/15/2009
January 2009	001	CBOD 5 day	2/Week	2	1	01/15/2009
April 2009	001	Total Suspended Solids	2/Week	2	1	04/08/2009
April 2009	601	Total Suspended Solids	2/Week	2	1	04/08/2009
April 2009	001	Nitrogen, Ammonia (NH3)	2/Week	2	1	04/08/2009
April 2009	001	CBOD 5 day	2/Week	2	1	04/08/2009
April 2009	601	CBOD 5 day	2/Week	2	1	04/08/2009
July 2009	601	Total Suspended Solids	2/Week	2	1	07/01/2009
July 2009	001	Total Suspended Solids	2/Week	2	1	07/01/2009
July 2009	001	Nitrogen, Ammonia (NH3)	2/Week	2	1	07/01/2009
July 2009	001	Fecal Coliform	2/Week	2	1	07/01/2009
July 2009	601	CBOD 5 day	2/Week	2	1	07/01/2009
July 2009	001	CBOD 5 day	2/Week	2	1	07/01/2009

Please be advised that such violations are subject to enforcement actions pursuant to Chapter 6111 of the Ohio Revised Code.

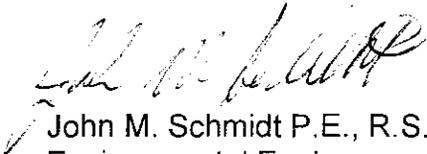
If you feel some of Ohio EPA's reporting records are in error, you may wish to reenter this information through the e-DMR system or mail your data to Ohio EPA DSW central office and request that the data be entered on your behalf. E-mailing questions to James.Roberts@epa.state.oh.us is the quickest way to get a response if you have a specific question with the e-DMR program.

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Please inform this office, in writing, within 30 days of the date of this letter as to the actions we discussed that have been or will be taken to correct the above violations or explanations if you believe items are in error. Your response to this letter should include the dates that the actions have been or will be completed. Please be advised that past or present issues of noncompliance can continue as subjects of future enforcement actions by Ohio EPA.

If you have any questions or comments regarding this notification, please feel free to contact me at (330) 963-1175.

Respectively,



John M. Schmidt P.E., R.S.
Environmental Engineer
Division of Surface Water

JMS/mt

ec: John Kwolek, Ohio EPA, DSW, NEDO

File: Municipal/Orwell WWTP/PC