



Environmental
Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

March 4, 2011

RE: ORWELL VILLAGE WWTP
ORWELL VILLAGE, ASHTABULA CO.
OHIO EPA PERMIT 3PB00041
COMPLAINCE EVALUATION INSPECTION

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

Dear Mr. Hogue:

On March 3, 2011, a site inspection was conducted at the above referenced facility. The inspection was conducted by John Schmidt of this office, and you represented the Village of Orwell during the inspection. 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 February 18, 2010.

The system consists of primary screening, pre-aeration and grit removal, additional screening, 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 with the plant well kept. Screenings and grit are containerized for disposal at a solid waste landfill.
2. Influent sampler is noted as flow proportional and maintained at the proper temperature and condition.
3. Inspection of the headworks of the facility indicated that there is now sufficient grit removal capacity with the conversion of one of the older oxidation ditches into additional grit removal capacity, and work was completed in September-October 2010. Screenings are manually removed with a pitchfork from the screen, and containerized for off-site disposal.

4. The content of the aeration tank had good color and mixing, with minimal foaming. You noted that with technical assistance from the Operator Training Committee of Ohio, you were able to solve your secondary treatment foaming problem. You also indicated that you were able to have one of your industrial discharges discontinue the use of a biocide. Surface aerators were noted as in operating condition. Sludge returns were a chocolate brown color, with minimal foaming. This is an indicator of a properly operating biological system.
5. The surface of the clarifier was clear. The effluent trough was clean and there was no scum around the effluent baffle or the trough in areas not exposed to sunlight, but there was algal growth on areas exposed to sunlight. Effluent channels and weirs exposed to sunlight should be cleaned as soon as weather conditions permit.
6. The sand filter was free of sludge. Both filters were operational at the time of the inspection. 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.
7. The final effluent sampler is noted as a flow proportional sampler and maintained at the proper temperature and condition.
8. The Orwell WWTP laboratory performs monitoring of BOD, suspended solids, pH, temperature, and dissolved oxygen. Orwell contracts with Microbac Laboratories of Meadville, PA for metals, ammonia-nitrogen, oil and grease, bacteria (E. Coli), volatile organic compounds and semi-volatile organic compounds.
9. During the inspection, it was noted that the receiving stream flows through a farm field west of Parker Road immediately downstream of the discharge that contains horses with access to the stream.

NPDES Permit Compliance Review

The Village of Orwell operates the Orwell WWTP under NPDES Permit No. 3PB00041*GD. A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period February 1 2010 through February 1, 2011 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:

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Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00610	Nitrogen, Ammonia NH3	7D Conc	1.5	3.905	5/1/2010
001	00610	Nitrogen, Ammonia NH3	7D Qty	2.96	4.25676	5/1/2010
001	00610	Nitrogen, Ammonia NH3	7D Conc	1.5	2.5	10/15/2010

During our visit, you indicated that the nitrogen-ammonia violations may be related to algal growth which is being addressed by the covers over the clarifier and older oxidation ditch and that discharge of sand filter backwash to the secondary system is "reseeding" the algae, as well as carryover of solids by the excessive foaming that you eliminated. You indicated that you believe that the problem has been resolved through process changes with technical assistance from OTCO in September-October, 2010.

Reporting Violations

No reporting code violations were noted, however the following reporting frequency violations were noted:

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	00530	Total Suspended Solids	2/Week	2	1	04/01/2010
001	00610	Nitrogen, Ammonia NH3	2/Week	2	1	04/01/2010
001	80082	CBOD 5 day	2/Week	2	1	04/01/2010
601	00530	Total Suspended Solids	2/Week	2	1	04/01/2010
601	80082	CBOD 5 day	2/Week	2	1	04/01/2010

During our site visit, you indicated that this may be due to the last day of the month falling in the middle of the week. Please provide a written explanation as to why the parameter was not collected and analyzed at the frequency prescribed by your NPDES permit. Please note that Ohio EPA expects schedules to be adjusted over holiday periods to ensure that the parameters are collected at the frequencies as prescribed by your NPDES permit. Reporting codes for weekends and holidays may only be used on parameters required to be collected daily.

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. Emailing 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.

Compliance Schedule

Regarding the compliance schedule, Ohio EPA notes the following:

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Permit Effective Date	Permit Expiration Date	Schedule Due Date	Completion Date	Event Code	Schedule Type	Schedule Milestone
8/1/2010	7/31/2015	3/1/2012		95999	Other	E. Coli Status Report
8/1/2010	7/31/2015	8/1/2011		-----	Other	Submit PTI if Needed
8/1/2010	7/31/2015	9/1/2011		95999	Other	E. Coli Status Report
8/1/2010	7/31/2015	3/1/2012		05699	Other	Achieve Final Limits
8/1/2010	7/31/2015	8/1/2011		----	Other	NPDES Mod if Needed
8/1/2010	7/31/2015	8/1/2011		----	Other	Apply for Hg Variance if Needed
8/1/2010	7/31/2015	8/1/2011		----	Other	Individual Hg Variance if Needed

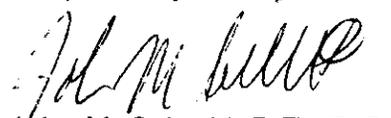
As of the date of this inspection, none of the compliance milestones are due. Orwell is reminded of its obligations to submit required information by the assigned milestones as prescribed by your NPDES permit.

Based upon the inspection findings and the overall compliance record of the facility, the Village of Orwell is considered to be in substantial compliance with the terms and conditions of its NPDES permit for the Orwell Village WWTP.

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

File: Municipal/Orwell WWTP/PC