



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

March 16, 2012

RE: ORWELL VILLAGE WATER TREATMENT PLANT
ORWELL TOWNSHIP, ASHTABULA COUNTY
OHIO EPA PERMIT 3IY00160
COMPLIANCE EVALUATION INSPECTION

Mr. Jack Nettis, Jr., Village Manager
Village of Orwell
179 W. Main Street
Orwell, OH 44079

Dear Mr. Nettis:

On March 15, 2012, a site inspection was conducted at the above referenced facility along the south side of U.S. Route 322 in the 1900 Block of US 322, Orwell Township, Ashtabula County. The inspection was conducted by John Schmidt of this office, and you and Mr. Greg Hoghe, Water Superintendent, 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 March 3, 2012.

Water treatment consists of chlorine injection, with water filtered in three 1,000-gallon tanks, followed by a 20,000-gallon clear well. Wastewater is generated during backwash of the tanks, with water feed provided by the clear well. Wastewater (backwash) is diverted to a 2-ft by 2-ft pit, rapid sand filter, and dechlorination. Sludge management consists of iron sludge placed on two drying beds, with semi-dry sludge stockpiled in a holding area for further dewatering until removed for off-site disposal at a landfill. The facility discharges to Snyder Ditch adjacent to the southeast side of the facility.

Observations and Notations

The following observations and notations were made during the inspection:

1. The design flow of the wastewater treatment system is 4,300 gallons per day. The actual flow through this plant is 6,720 gpd as discussed during the site visit. At the next renewal cycle, Orwell should request an increase in the design flow of the system and a corresponding increase in effluent loadings based on the actual flow through the plant.
2. The plant operates on batch process as needed (backwash process), and was not discharging at the time of the inspection.

3. Rapid sand filters were reasonably clean and operable. No discharge to the sand filters was observed during the inspection.
4. The final discharge the dechlorination manhole was not observed due to lack of flow.
5. Samples are collected and analyzed by the Village of Orwell Laboratory, with data reported by the laboratory on the electronic discharge monitoring reports (eDMRs).

NPDES Permit Compliance Review

A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period February 1, 2011 through February 1, 2012 indicates apparent noncompliance of the terms and conditions of your NPDES permit.

Effluent Limit Violations

The following effluent limit violations were noted:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	01054	Manganese, Suspended	30D Qty	0.016	.03602	10/1/2011
001	00530	Total Suspended Solids	30D Qty	0.49	2.06025	10/1/2011
001	01054	Manganese, Suspended	1D Qty	0.033	.03602	10/26/2011
001	00530	Total Suspended Solids	1D Qty	0.73	2.06025	10/26/2011
001	00530	Total Suspended Solids	30D Qty	0.49	1.44981	12/1/2011
001	01054	Manganese, Suspended	30D Qty	0.016	.0235	12/1/2011
001	00530	Total Suspended Solids	1D Qty	0.73	1.44981	12/2/2011
001	50060	Chlorine, Total Residual	1D Conc	0.019	.2	12/2/2011

Ohio EPA notes that these violations placed Orwell in substantial noncompliance (SNC) with its NPDES permit for manganese and suspended solids. Orwell notified Ohio EPA on November 29, 2011 concerning the October 2011 events, and again on January 20, 2012 concerning the December 2011 events. During the site visit, Mr. Hogue indicated that this is likely attributed seals in the walls of the sand beds. Orwell has sealed the cracks, but has expressed concerns of maintaining the seals. One method may be to line the beds with a flexible membrane liner. Orwell must ensure that these violations are not repeated.

Reporting Violations

No reporting code or reporting frequency violations were reported for the time period reviewed.

Compliance Schedule Violations

No compliance schedule violations were noted for the reporting period reviewed. There is no compliance schedule in your existing NPDES permit.

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

Respectively,

A handwritten signature in black ink, appearing to read "John M. Schmidt". The signature is written in a cursive style with a large initial "J" and "S".

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

JMS/cs

cc: Mr. Greg Hogue, Superintendent

File: Industrial/Orwell WTP/PC