



State of Ohio Environmental Protection Agency

Northeast District Office

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

March 16, 2009

RE: LAKE COUNTY  
VILLAGE OF MADISON WWTP  
COMPLIANCE EVALUATION INSPECTION  
NPDES PERMIT #OH0023515  
OEPA PERMIT # 3PB00030

Mayor, Council & Administrator  
Village of Madison  
126 West Main Street  
P.O. Box 7  
Madison, Ohio 44057

Ladies/Gentlemen:

On March 12, 2009, this writer conducted a compliance evaluation inspection of the wastewater treatment plant serving the Village of Madison. Mr. Dave Cogar and Mr. Dustin Lewis represented the village during the inspection. The purpose of the inspection was to evaluate the treatment facility's compliance with the terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit.

At the time of inspection, the plant was discharging an unsatisfactory, partially treated effluent. The following observations were noted:

- The aerators of oxidation ditches #1, 3 and 4 had been shut-off, providing no secondary treatment. According to the plant operators, this was done as an attempt to retain the activated sludge within the treatment plant and to try to prevent the loss of activated sludge that could result from the high flows that the plant was experiencing. Oxidation ditch #2 has not been in operation since November 2008 due to the need for repairs on the rotor's shaft.
- Activated sludge that had spilled over the sides of the ditches was evident on the ground adjacent to the oxidation ditches. This is considered a sanitary sewer overflow (SSO) occurrence that requires monitoring as described in the village's NPDES permit.
- The settling tanks contained turbid water.
- The chlorine contact chamber contained wastewater full of solids that looked like an activated sludge, instead of a clarified wastewater.
- The UV disinfection chamber contained excessive amounts of solids.

The bypassing of treatment units resulting in the discharge of partially treated sewage is a violation of Ohio Revised Code 6111 that is subject to enforcement action. Also the village's NPDES permit requires the immediate notification to Ohio EPA of an SSO, followed by a follow-up written report within 5 days of becoming aware of an SSO.



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A review of our files shows that the village submitted on October 31, 2008, an application for the modification of its NPDES permit, in compliance with a request for a general mercury variance.

A review of the Discharge Monitoring Reports (DMRs) covering the period of January 2008 through January 2009 revealed the following effluent limitation violations:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00530	Total Suspended Solids	7D Conc	24	26.5	1/8/2009
001	00530	Total Suspended Solids	7D Conc	24	46.	12/22/2008
001	00530	Total Suspended Solids	7D Qty	45.4	111.006	12/22/2008
001	00530	Total Suspended Solids	30D Conc	16	16.625	12/1/2008
001	00530	Total Suspended Solids	30D Qty	30.3	41.4840	12/1/2008
001	00300	Dissolved Oxygen	1D Conc	6.0	5.97	7/9/2008
001	00530	Total Suspended Solids	7D Conc	24	28.5	7/8/2008
001	00530	Total Suspended Solids	7D Qty	45.4	54.9203	7/8/2008
001	00530	Total Suspended Solids	30D Conc	16	19.375	7/1/2008
001	00530	Total Suspended Solids	7D Conc	24	35.5	7/1/2008
001	00530	Total Suspended Solids	30D Qty	30.3	34.8574	7/1/2008
001	00530	Total Suspended Solids	7D Qty	45.4	63.0789	7/1/2008
001	00300	Dissolved Oxygen	1D Conc	6.0	4.67	6/30/2008
001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.6	4.1	6/22/2008
001	00610	Nitrogen, Ammonia (NH3)	7D Qty	4.9	5.37697	6/22/2008
001	00530	Total Suspended Solids	7D Qty	45.4	79.9146	6/1/2008
001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.7	2.17125	6/1/2008
001	00610	Nitrogen, Ammonia (NH3)	30D Qty	3.2	3.48352	6/1/2008
001	00665	Phosphorus, Total (P)	30D Conc	.73	.78	5/1/2008
001	00400	pH	1D Conc	6.5	6.41	4/16/2008
001	00530	Total Suspended Solids	7D Qty	45.4	51.7201	4/1/2008
001	00530	Total Suspended Solids	7D Qty	45.4	51.8280	3/22/2008
001	00530	Total Suspended Solids	7D Qty	45.4	53.9532	3/15/2008
001	00610	Nitrogen, Ammonia (NH3)	7D Qty	16.5	17.6717	3/15/2008
001	80082	CBOD 5 day	7D Qty	36.9	41.6558	3/15/2008
001	00530	Total Suspended Solids	30D Qty	30.3	32.5888	3/1/2008
001	00610	Nitrogen, Ammonia (NH3)	30D Qty	11.0	12.0921	3/1/2008
001	80082	CBOD 5 day	30D Qty	24.6	26.1874	3/1/2008
001	00530	Total Suspended Solids	7D Conc	24	24.5	2/8/2008
001	00530	Total Suspended Solids	7D Qty	45.4	57.9653	2/8/2008

The following effluent sampling frequency violations were found:

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	00400	pH	1/Day	1	0	02/29/2008
001	00400	pH	1/Day	1	0	02/28/2008

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	00400	pH	1/Day	1	0	02/27/2008
001	00400	pH	1/Day	1	0	02/26/2008
001	00400	pH	1/Day	1	0	02/25/2008
001	00400	pH	1/Day	1	0	02/24/2008
001	00400	pH	1/Day	1	0	02/23/2008
001	00400	pH	1/Day	1	0	02/22/2008
001	00400	pH	1/Day	1	0	02/21/2008
001	00400	pH	1/Day	1	0	02/20/2008
001	00400	pH	1/Day	1	0	02/19/2008
001	00400	pH	1/Day	1	0	02/18/2008
001	00400	pH	1/Day	1	0	02/17/2008
001	00400	pH	1/Day	1	0	02/16/2008
001	00530	Total Suspended Solids	2/Week	2	1	02/15/2008
001	00610	Nitrogen, Ammonia-NH3	2/Week	2	1	02/15/2008
001	00400	pH	1/Day	1	0	02/15/2008
001	00400	pH	1/Day	1	0	02/14/2008
001	00400	pH	1/Day	1	0	02/13/2008
001	00400	pH	1/Day	1	0	02/12/2008
001	00400	pH	1/Day	1	0	02/11/2008
001	00400	pH	1/Day	1	0	02/10/2008
001	00400	pH	1/Day	1	0	02/09/2008
001	00400	pH	1/Day	1	0	02/08/2008
001	00400	pH	1/Day	1	0	02/07/2008
001	00400	pH	1/Day	1	0	02/06/2008
001	00400	pH	1/Day	1	0	02/05/2008
001	00400	pH	1/Day	1	0	02/04/2008
001	00400	pH	1/Day	1	0	02/03/2008
001	00400	pH	1/Day	1	0	02/02/2008
001	00400	pH	1/Day	1	0	02/01/2008
001	00400	pH	1/Day	1	0	01/31/2008
001	00400	pH	1/Day	1	0	01/30/2008
001	00400	pH	1/Day	1	0	01/29/2008
001	00400	pH	1/Day	1	0	01/28/2008
001	00400	pH	1/Day	1	0	01/27/2008
001	00400	pH	1/Day	1	0	01/26/2008
001	00400	pH	1/Day	1	0	01/25/2008
001	00400	pH	1/Day	1	0	01/24/2008
001	00400	pH	1/Day	1	0	01/23/2008
001	00400	pH	1/Day	1	0	01/22/2008
001	00400	pH	1/Day	1	0	01/21/2008
001	00400	pH	1/Day	1	0	01/20/2008
001	00400	pH	1/Day	1	0	01/19/2008
001	00400	pH	1/Day	1	0	01/18/2008
001	00400	pH	1/Day	1	0	01/17/2008
001	00400	pH	1/Day	1	0	01/16/2008

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Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	00530	Total Suspended Solids	2/Week	2	1	01/15/2009
001	00610	Nitrogen, Ammonia-NH3	2/Week	2	1	01/15/2009
001	80082	CBOD 5 day	2/Week	2	1	01/15/2009
601	00530	Total Suspended Solids	2/Week	2	1	01/15/2009
601	80082	CBOD 5 day	2/Week	2	1	01/15/2009
001	00400	pH	1/Day	1	0	01/15/2008
001	00400	pH	1/Day	1	0	01/14/2008
001	00400	pH	1/Day	1	0	01/13/2008
001	00400	pH	1/Day	1	0	01/12/2008
001	00400	pH	1/Day	1	0	01/11/2008
001	00400	pH	1/Day	1	0	01/10/2008
001	00400	pH	1/Day	1	0	01/09/2008
001	00400	pH	1/Day	1	0	01/08/2008
001	00400	pH	1/Day	1	0	01/07/2008
001	00400	pH	1/Day	1	0	01/06/2008
001	00400	pH	1/Day	1	0	01/05/2008
001	00400	pH	1/Day	1	0	01/04/2008
001	00400	pH	1/Day	1	0	01/03/2008
001	00400	pH	1/Day	1	0	01/02/2008
001	00400	pH	1/Day	1	0	01/01/2008

Be advised that failure to comply with the effluent limitations or to satisfy the monitoring, reporting, or compliance scheduling requirements of your NPDES permit may be cause for enforcement pursuant to the Ohio Revised Code Chapter 6111.

*Please inform this office, in writing, within ten days of the date of this letter, the reasons for the referenced violations and deficiencies, as well as a description of the actions taken to prevent any further violations. Your response should include proposed dates for completion of the actions.*

Sincerely,



Marie Underwood, P.E.  
Environmental Engineer  
Division of Surface Water

MU/mt