



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

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

December 8, 2009

RE: LAKE COUNTY
WILLOUGHBY HILLS
WILLO HILL PROFESSIONAL BUILDING
NPDES PERMIT NO. 3PR00449
APPLICATION NO. OH0139467

Mr. William Rackus, DDS
Willo Hill Professional Building
35005 Chardon Road
Willoughby Hills, OH 44094

Dear Dr. Rackus:

On December 7, 2009, this writer conducted a compliance evaluation inspection of the wastewater treatment plant that serves Willo Hill Professional Building. The purpose of the inspection was to evaluate the WWTP's operation and maintenance condition, and to evaluate the facility's compliance with National Pollutant Discharge Elimination System (NPDES) permit effluent limits.

At the time of inspection, the plant was producing an effluent free of solids, debris, oil and grease. The following observations were made:

- The aeration tank mixed liquor and return sludge line were dark brown.
- The settling tank content was turbid. An excessive amount of sludge was behind the baffle. The sludge wasting rate may be in need of adjustment.
- The west filter bed was ponded with wastewater. The east filter bed contained excessive vegetation that requires removal. The sand in the west filter bed was not evenly distributed. Any vegetation and solids laden sand must be removed and replaced with clean sand. Assurances must be made that 18 inches of Ohio EPA approved filter sand exists on both beds. Ohio EPA approved filter sand has a uniformity coefficient that does not exceed 3.0 and an effective size of 0.4 mm - 1.0 mm. The sand must be raked and evenly distributed across the surface of the filter beds.
- The chlorine contact chamber contained a chlorinator, but no de-chlorinator prior to discharge. The NPDES permit residual chlorine effluent limit is 0.019 mg/l during the summer months (May 1st to October 31st). A de-chlorinator must be installed to meet this limit.

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

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Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00530	Total Suspended Solids	30D Qty	0.04	.3679	6/1/2009
001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.003	.00981	6/1/2009
001	80082	CBOD 5 day	30D Qty	0.03	.12263	6/1/2009
001	00530	Total Suspended Solids	1D Qty	0.06	.3679	6/16/2009
001	00610	Nitrogen, Ammonia (NH3)	1D Qty	0.005	.00981	6/16/2009
001	80082	CBOD 5 day	1D Qty	0.05	.12263	6/16/2009
001	50060	Chlorine, Total Residual	1D Conc	0.019	.15	6/16/2009
001	00530	Total Suspended Solids	30D Qty	0.04	.15541	8/1/2009
001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.003	.00389	8/1/2009
001	80082	CBOD 5 day	30D Qty	0.03	.15541	8/1/2009
001	00530	Total Suspended Solids	1D Qty	0.06	.15541	8/3/2009
001	80082	CBOD 5 day	1D Qty	0.05	.15541	8/3/2009

The following frequency violations were noted for the same period.

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	00010	Water Temperature	1/Week	1	0	12/01/2008
001	00083	Color, Severity	1/Week	1	0	12/01/2008
001	01330	Odor, Severity	1/Week	1	0	12/01/2008
001	01350	Turbidity, Severity	1/Week	1	0	12/01/2008
001	00056	Flow Rate	1/Month	1	0	12/01/2008
001	00300	Dissolved Oxygen	1/Quarter	1	0	12/01/2008
001	00010	Water Temperature	1/Week	1	0	12/08/2008
001	00083	Color, Severity	1/Week	1	0	12/08/2008
001	01330	Odor, Severity	1/Week	1	0	12/08/2008
001	01350	Turbidity, Severity	1/Week	1	0	12/08/2008
001	00010	Water Temperature	1/Week	1	0	12/15/2008
001	00083	Color, Severity	1/Week	1	0	12/15/2008
001	01330	Odor, Severity	1/Week	1	0	12/15/2008
001	01350	Turbidity, Severity	1/Week	1	0	12/15/2008
001	00010	Water Temperature	1/Week	1	0	12/22/2008
001	00083	Color, Severity	1/Week	1	0	12/22/2008
001	01330	Odor, Severity	1/Week	1	0	12/22/2008
001	01350	Turbidity, Severity	1/Week	1	0	12/22/2008
001	00530	Total Suspended Solids	1/Quarter	1	0	03/01/2009
001	00610	Nitrogen, Ammonia-NH3	1/Quarter	1	0	03/01/2009
001	80082	CBOD 5 day	1/Quarter	1	0	03/01/2009
001	00056	Flow Rate	1/Month	1	0	03/01/2009
001	00300	Dissolved Oxygen	1/Quarter	1	0	03/01/2009
001	00083	Color, Severity	1/Week	1	0	03/15/2009
001	01330	Odor, Severity	1/Week	1	0	03/15/2009

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Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	01350	Turbidity, Severity	1/Week	1	0	03/15/2009
001	00083	Color, Severity	1/Week	1	0	03/22/2009
001	01330	Odor, Severity	1/Week	1	0	03/22/2009
001	01350	Turbidity, Severity	1/Week	1	0	03/22/2009
001	00010	Water Temperature	1/Week	1	0	06/01/2009
001	00083	Color, Severity	1/Week	1	0	06/01/2009
001	01330	Odor, Severity	1/Week	1	0	06/01/2009
001	01350	Turbidity, Severity	1/Week	1	0	06/01/2009
001	00010	Water Temperature	1/Week	1	0	06/08/2009
001	00083	Color, Severity	1/Week	1	0	06/08/2009
001	01330	Odor, Severity	1/Week	1	0	06/08/2009
001	01350	Turbidity, Severity	1/Week	1	0	06/08/2009
001	00010	Water Temperature	1/Week	1	0	06/22/2009
001	00083	Color, Severity	1/Week	1	0	06/22/2009
001	01330	Odor, Severity	1/Week	1	0	06/22/2009
001	01350	Turbidity, Severity	1/Week	1	0	06/22/2009

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

Your National Pollutant Discharge Elimination System (NPDES) permit requires the wastewater treatment plant to be operated by a Class I licensed wastewater treatment operator. The operator of record is responsible for overseeing the technical operation of the plant. Enclosed with this letter is an Operator of Record Notification Form. Please immediately complete the form and return it to the address stated on the form. The form requires both the signatures of the owner and the operator of record.

Also, this writer was unable to determine the location of the operation and maintenance record, required pursuant to Ohio Administrative Code (OAC) 3745-7-09 and described in this writer's letter dated October 12, 2007. Please notify this office, in writing, of the location of the operation and maintenance record. At a minimum, the log book must contain:

1. The identification of the sewage treatment works;
2. Date and times of arrival and departure for the operator of record and any other operator required by the administrative code.
3. Specific operation and maintenance activities that affect or have the potential to affect the quality or quantity of sewage conveyed or effluent produced;
4. Results of tests performed and samples taken, unless documented on a laboratory sheet;

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5. Performance of preventative maintenance and repairs or requests for repair of the equipment that affect or have the potential to affect the quality or quantity of sewage conveyed, effluent produced; and
6. Identification of the persons making entries.

The administrative code must be carefully reviewed for information on all requirements.

Within 10 days of the date of this letter, you are required to notify this office, in writing, outlining the corrective action, either actual or proposed, that will be taken to eliminate the deficiencies highlighted in this letter.

Should you have any comments or questions regarding this letter, please contact this writer at (330) 963-1183.

Sincerely,

A handwritten signature in black ink that reads "Marie Underwood". The signature is written in a cursive style with a large, looped initial "M".

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

MU/mt

Enclosure: Operator-of-Record Notification Form