



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

October 28, 2008

RE: DISCHARGE MONITORING
REPORT VIOLATIONS
LAKE COUNTY
THE HOLDEN ARBORETUM
THAYER CENTER
WASTEWATER TREATMENT PLANT
OHIO EPA PERMIT NO. 3PR00467
NPDES PERMIT NO. OH0140376

Mr. Clem Hamilton, Director
Holden Arboretum
9500 Sperry Road
Kirtland, OH 44094

Dear Mr. Hamilton:

This office has recently reviewed your discharge monitoring reports covering the months of July 2008 through August 2008 for the referenced facility. Our review indicates violations of the terms and conditions of your NPDES permit. The specific instances of effluent limitation noncompliance are as follows:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	50060	Chlorine, Total Residual	1D Conc	0.019	.29	7/23/2008

Please be advised that such instances of noncompliance may be cause for enforcement actions pursuant to the Ohio Revised Code, Chapter 6111. Enforcement action may include a monetary penalty pursuant to Ohio Revised Code 6111.99.

Please inform this office, in writing, within ten days of receipt of this notification as to the reasons for the above referenced violations, as well as a description of the actions taken or proposed to prevent any further violations. Your response should include the dates, either actual or proposed, for completion of the actions.

If there are any questions or comments regarding this notification, please contact the undersigned at (330) 963-1183.

Sincerely,

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

MU/mt



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Twinsburg, Ohio 44087-1969

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Bob Taft, Governor
Jennette Bradley, Lieutenant Governor
Christopher Jones, Director



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LAKE KIRTLAND THE HOLDEN ARBORETUM 3PR00467 2008/07/29 UNDERWOOD,
MARIE

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TELE: (330) 963-1200 FAX: (330) 487-0769
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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

July 29, 2008

RE: LAKE COUNTY
KIRTLAND
HOLDEN ARBORETUM
THAYER CENTER, ET. AL.
9500 SPERRY ROAD
NPDES PERMIT NO. 3PR00467

Clem Hamilton, Director
Holden Arboretum
9500 Sperry Road
Kirtland, OH 44094

Dear Mr. Hamilton:

On July 24, 2008, this writer conducted a compliance evaluation inspection of the wastewater treatment plant that serves the above referenced center that consists of the Thayer Building, Corning Building, Cooper Annex, Horticultural Grounds Building and the Facilities Maintenance 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. Mr. Rick Wilson represented Holden Arboretum during the inspection.

At the time of inspection, the plant was producing an effluent of satisfactory visual quality in that there was no evidence of foam, debris, oil or grease. All treatment units were in operation.

The following observations were noted:

- A new trash trap has been installed. According to Mr. Wilson, the former trash trap that was an in-laid trash trap, collapsed. A new trash trap was installed in 2007, adjacent to the aeration tank. A permit-to-install (PTI) is required for the installation of a new or modified treatment unit. This office has no record of receipt of a PTI application and detailed design plans for the trash trap.
- The aeration tank mixed liquor was chocolate brown in color, indicating a balanced system.
- The settling tank had an excessive amount of sludge on its surface and in the effluent trough. The sludge return rate or sludge wasting rate may need adjusting.

- Excessive vegetation was on the surface of the filter beds. The vegetation must be removed. Assurances must be made that each filter bed contains 18 inches of Ohio EPA approved filter sand. Approved filter sand consists of clean and washed sand with an effective size between 0.4 and 1.0 mm and a uniformity coefficient not greater than 3.0. The filter sand must be raked with an even distributed across the surface area of the filter bed. The filter beds must be routinely switched to maximize the performance of the filter beds.
- The chlorinator in the chlorine contact chamber contained chlorine tablets for disinfection, as required. The chamber contained no dechlorinator.

The above referenced deficiencies must be corrected.

A review of the discharge monitoring reports, covering the period October 2007 through June 2008, revealed the following effluent limitation violations:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	50060	Chlorine, Total Residu	1D Conc	0.019	4.6	5/13/2008

The average daily design flow of the wastewater treatment plant (20,000 gpd) is being reported on the discharge monitoring reports as the daily estimated flow. This practice is not acceptable. Acceptable methods for estimating daily flow are, in order of preference: 1) elapsed time meters on sand filter dosing pumps; 2) elapsed time meters on influent pumps; and 3) water use records.

The NPDES permit has a schedule of compliance to meet the final chlorine residual limit by April 2008. As of this date, dechlorination facilities have not been installed. Dechlorination facilities are required in order to consistently meet the chlorine residual limit of 0.019 mg/l.

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.

Pursuant to Ohio Administrative Code 3745-7-09, effective December 21, 2006, this agency requires the owner and operator of record of a wastewater treatment plant to maintain operation and maintenance records for the wastewater treatment plant. The records shall be housed onsite and shall be accessible for twenty-four hour inspection. The following information must be recorded:

1. 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 this chapter;
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;

CLEM HAMILTON, DIRECTOR
JULY 29, 2008
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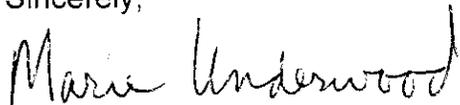
5. Performance of preventative maintenance and repairs or requests for repair of the equipment that affect or have the potential to affect the quality or quantity of sewage conveyed, effluent produced; and
6. Identification of the persons making entries.

Please review the administrative code carefully for information on all requirements. The Holden Arboretum must immediately make provisions for onsite operation and maintenance records.

Please inform this office, in writing, within ten (10) days of receipt of this notification as to the reasons for the above referenced violations and deficiencies, as well as a description of the actions taken or proposed to prevent any further violations. Your response should include the dates, either actual or proposed, for completion of the actions. Your response must also include a date for the submittal of a permit to install application and detailed plans for the unpermitted trash trap.

Should you have any questions, please contact the undersigned at (330)963-1183.

Sincerely,



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

MU:bo

cc: Liberato Picciano, Facilities Manager