OhioEPA
State of Ohio Environmental Protection Agency
Northeast District Office

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

October 23, 2009

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

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

Dear Mr. Hamilton:

On October 21, 2009, 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. Al Picciano 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.
- 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 behind the baffles. The sludge wasting rate may need adjusting.
- A small amount of vegetation was in the filter beds and 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 distribution across the surface area of the filter bed. The filter beds must be routinely switched to maximize the performance of the filter beds.
- A new UV disinfector has been installed.
- A new fence has been purchased and will be erected around the plant soon.

The new treatment units installed at the plant were approved for construction pursuant to the Permit to Install (PTI No. 709900), issued May 12, 2009

A review of the discharge monitoring reports, covering the period July 2008 through September 2009 revealed the following effluent limitation violations:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	50060	Chlorine, Total Residual	1D Conc	0.019	.29	7/23/2008
001	50060	Chlorine, Total Residual	1D Conc	0.019	.83	9/9/2008
001	50060	Chlorine, Total Residual	1D Conc	0.019	.09	5/8/2009

The average daily design flow of the wastewater treatment plant (20,000 gpd) is incorrectly being reported on the discharge monitoring reports as the daily estimated flow. An elapsed time meter was installed on sand filter dosing pumps in September 2009. A more accurate estimated flow of the discharge should now be reported on the discharge monitoring reports.

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;
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.

Enclosed with this letter is the Ohio EPA guidance document on operating package plants. The document is provided for your reference.

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.

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

Sincerely,

Marie Underwood

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

MU/mt

cc: Al Picciano, Facilities Manager