Ohio | Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

November 5, 2011

RE: MAHONING COUNTY
BERLIN TOWNSHIP
BEN'S RESTAURANT
NPDES PERMIT NO. 3PR00491

Ms. Penny Bendetta
Ben's Restaurant
17729 Akron-Canfield Road
Berlin Center, OH 44401

Ms. Bendetta:

On November 29, 2011, this writer conducted an inspection of the wastewater treatment system for Ben's Restaurant. The purpose of the inspection was to monitor operations and maintenance of the facility and to review the compliance history or the system. Representing Ben's Restaurant during the inspection was Joe DeNiro.

Observations

Following are observations made at the time of the inspection:

1. The system appeared well maintained. Color in the aeration tank was light to medium brown.
2. Surface water was entering the clarifier on the east side of the tank. Mr. DeNiro had located the inflow of surface water a few weeks earlier and indicated during the inspection that he would take steps to plug the leak as soon as the weather permitted.
3. Both dosing pumps for the slow sand filters were operational at the time of the inspection.
4. The sand filters were satisfactory at the time of the inspection. No sludge deposition was apparent and the sand surface was level. The north filter was recently cleaned and leveled. The south filter will need to be cleaned and leveled in the near future. In the event the gravel in the south filter is power washed, the wash water should be contained in the disinfection tank and removed for disposal in a permitted wastewater treatment system; or, it should be pumped to the aeration system on site for retreatment if it is determined that the water will not create compliance problems in the system. The wash water should not be discharged to the wetland.

Compliance Review

The monthly compliance reports submitted by Ben's Restaurant were reviewed for compliance with the National Pollutant Discharge Elimination System (NPDES) Permit. The period of

review was November 2010 through October 2011. Following are violations identified during the review period:

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
January 2011	Total Suspended Solids	30D Conc	12.0	28.	1/1/2011
January 2011	CBOD 5 day	30D Conc	10.0	10.2	1/1/2011
January 2011	Total Suspended Solids	7D Conc	18.0	28.	1/22/2011
April 2011	Total Suspended Solids	30D Conc	12.0	37.	4/1/2011
April 2011	Total Suspended Solids	7D Conc	18.0	37.	4/22/2011
May 2011	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.41	5/1/2011
July 2011	Nitrogen, Ammonia (NH3	30D Conc	1.0	3.7	7/1/2011
July 2011	Nitrogen, Ammonia (NH3	7D Conc	1.5	3.7	7/1/2011
September 2011	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.02	9/1/2011
October 2011	pH	1D Conc	6.5	6.28	10/26/2011

The violations noted above place Ben's Restaurant in Significant Noncompliance (SNC) with the NPDES Permit. Be advised that violations of the NPDES Permit constitute violations of Ohio Revised Code (R.C.) 6111.07 and are subject to enforcement action.

In order to address the above violations, Mr. DeNiro and this writer agreed to the following steps:

1. Flow through the system must be monitored to determine the detention time in the aeration tank. Low flow rates and high detention times can cause alkalinity to be a limiting factor for ammonia treatment. Hour meters should be placed on the dosing pumps, or a water meter should be placed on the potable water well in order to monitor flow.
2. Alkalinity in the aeration tank should be monitored to determine if sufficient alkalinity exists to properly remove ammonia from the wastewater. Approximately 7.1 milligrams of alkalinity is required in the aeration tank for each milligram of ammonia to be treated. Insufficient alkalinity will inhibit the complete treatment of ammonia to the required concentration.
3. As soon as possible, repair the inflow of surface water to the clarifier.
4. Check settleability of the mixed liquor in the aeration tank to ensure that sludge is settling properly. Also, the dissolved oxygen and the pH in the aeration tank should be checked. The dissolved oxygen should be checked at several locations both horizontally and vertically in the aeration tank. If mixing of the aeration tank is not sufficient because of insufficient air distribution, solids deposition and deficient oxygen can inhibit treatment. The oxygen level in the aeration tank should be maintained between 2 and 4 mg/l. We also discussed using a sludge judge in the aeration tank to determine if solids deposition is occurring.
5. Bens Restaurant must clean the south sand filter as soon as the weather conditions permit equipment to be driven over the grass turf.

Once the above actions are completed and the system has had time to adjust to any changes, compliance will again be evaluated. In the event the system remains in noncompliance with the permit, further actions will be required. Full compliance with the NPDES Permit is necessary as soon as possible, but no later than March 1, 2012.

You may contact this writer at (330) 963-1251 or at john.kwolek@epa.state.oh.us to discuss any questions you may have regarding this inspection report.

Respectfully,

John Kwolek
District Engineer
Division of Surface Water

JK/cs

Cc. Joe DeNiro, Operator of Record
Joe Mansky, Mahoning County Department of Health