



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

January 14, 2013

RE: GLENBEIGH HEALTH SERVICES WWTP  
NPDES PERMIT NO. 3PT00116  
MORGAN TOWNSHIP, ASHTABULA CO.  
COMPLIANCE EVALUATION INSPECTION

Mr. Tim Phillips, Maintenance Supervisor  
Glenbeigh Health Services  
P.O. Box 298  
Rock Creek, OH 44084-0298

Dear Mr. Phillips:

On January 10, 2013, a site inspection was conducted at the above referenced facility at 2863 State Route 45, Morgan Township, Ashtabula County. The inspection was conducted by John Schmidt of this office, with you and Mr. Chris Cimino represented Glenbeigh Health Services (Glenbeigh). The purpose of the inspection was to evaluate the facility's compliance status with respect to the terms and conditions of the facility's National Pollutant Discharge Elimination System (NPDES) permit. The last compliance inspection was conducted on January 11, 2012.

The system consists of an influent pump station, flow equalization, trash trap, extended aeration tanks, clarifiers, surface sand filtration, chlorine disinfection, dechlorination, and post-disinfection aeration. Sludge management of sludge removal from the sludge tanks to sludge drying beds. The facility discharges to Badger Run adjacent to the north side of the facility. No backup power is provided to the facility, but the facility is provided with alarms.

#### **Observations and Notations**

1. The plant is operated by both Mr. Phillips and Mr. Cimino of Glenbeigh, as well as Steven Howe, Charles Newman, and Donald Velisek of AKE Environmental and Construction Services, Inc. (AKE). Mr. Cimino and Mr. Velisek are the primary operators. The plant is visited weekly by AKE, who performs onsite analyses of pH, dissolved oxygen, temperature, and conductivity, as well as all off-site analysis, and submits the data to the electronic discharge monitoring system (eDMR) on behalf of Glenbeigh Health Services.
2. Sanitary sewers for a new dormitory and a flow equalization tank were constructed in 2012 and completed on October 20, 2012.
3. The overall condition of the treatment plant during the inspection was satisfactory with the plant well maintained. Trash is removed from the influent pump station trash traps every other month and disposed off-site in a sanitary landfill. The trash traps were last cleaned on November 2, 2012.
4. Log books and a copy of NPDES permit were available for inspection and found compliant with OAC 3745-7-09. The facility appears to be meeting minimum staffing requirements. For portable readings for NPDES permitting, equipment calibration dates should be noted in the logs. A copy of the operator contract and O&M manual must also be maintained at the facility and available for inspection. I have attached a copy of an O&M manual for extended aeration plant.

5. The influent pump station pumps were cycled and found in operating condition. The alarms were tested and found in operating condition.
6. The flow equalization blowers were cycled and found in operating condition. The alarms were cycled and found in operating condition.
7. The aeration blowers were cycled and found in operating condition. The alarms were cycled and found in operating condition. The content of the aeration tank had a good color and mixing. Sludge returns were found in operating condition and were a medium brown color. The aeration system was examined and found to contain some foaming on the surface in the north tank, occupying about 30% of the aeration tank surface. From discussion with the operators, Glenbeigh sees peaks in influent flows in the morning hours (6-8 AM) and again in the afternoons (4-6 PM). Mr. Phillips indicated that the foaming is something typically seen in the colder months of the year. Sources of foaming could include over aeration, organic under-loading, or excessive use of surfactants (cleaners), sanitizers, or detergents by institution staff. Mr. Phillips did note that there are onsite laundry facilities. Sources should be investigated and materials with low phosphates should be substituted.
8. The surface of the clarifier was reasonably clear and the skimmer appeared to be operating as designed. Weirs were found reasonably clean. The effluent weir from the south aeration tank appears to be out of adjustment and was not discharging. The weir needs to be re-adjusted so that it is level.
9. The dosing pumps were cycled and found in operating condition. Alarms associated with these pumps were cycled and found in operating condition.
10. Surface sand filters were found operable. Sand was replaced in October 2012. The clarifier effluent discharged to the sand filter during the inspection was clear. The discharge from the sand bed was noted as having a slight tan color, likely due to fines from the new sand placed in the filter.
11. The Chlorination and dechlorination tanks were not in operation and therefore not inspected, due to the time of year. Disinfection and dechlorination is required for this facility between May and October. Glenbeigh added post-disinfection aeration to the facility in 2010.
12. The final effluent discharge to the tributary north of the wastewater plant was observed to be slightly turbid (scale of 1) with some foaming. The source of the excess foaming must be investigated and eliminated.

**NPDES Permit Compliance Review**

A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period December 1, 2011 through December 1, 2012 indicates apparent noncompliance of the terms and conditions of your NPDES permit as noted below:

**Limit Violations:**

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00610	Nitrogen, Ammonia (NH3	30D Conc	3.0	4.95	1/1/2012
001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	4.95	1/8/2012
001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	2.69	5/1/2012
001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.69	5/1/2012
001	00530	Total Suspended Solids	30D Conc	12	13.	6/1/2012
001	00300	Dissolved Oxygen	1D Conc	6.0	2.7	7/19/2012
001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	37.75	8/1/2012
001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.08	.11431	8/1/2012
001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.0	28.5	9/1/2012
001	00610	Nitrogen, Ammonia (NH3	30D Qty	0.08	.21575	9/1/2012
001	00610	Nitrogen, Ammonia (NH3	7D Conc	1.5	28.5	9/22/2012
001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.11	.21575	9/22/2012

A written explanation as to why these violations occurred must be provided, along with measures to ensure that they are not repeated. Note that the ammonia-nitrogen violations have placed Glenbeigh Hospital in **significant noncompliance** with its NPDES permit. Ohio EPA will continue to monitor this facility for recurring violations. Ohio EPA notes that these violations occurred prior to implementation of the new flow equalization tank, additional post-chlorination disinfection, and flow metering. Glenbeigh should continue performing internal process control, such as monitoring dissolved oxygen levels, (minimum 2 mg/l in the aeration tank), alkalinity (minimum 120 mg/l in the clarifier), ammonia (under 1 mg/l in clarifier), pH, and sludge settlability within the aeration system. Overuse of dechlorination tablets could contribute to low dissolved oxygen readings. Glenbeigh must also ensure that dissolved oxygen readings are being conducted at the plant with a properly calibrated instrument, as holding times would be exceeded for transportation back to the laboratory.

Reporting Violations

No reporting code or reporting frequency violations were noted for the reporting period reviewed.

Compliance Schedule Violations

No compliance schedule violations were noted for the reporting period reviewed. There is no compliance schedule in your existing NPDES permit.

***Please inform this office, in writing, within 30 days of the date of this letter as to the actions we discussed that have been or will be taken to correct the above noncompliance or explanations if you believe the noncompliance issues noted are in error. Your response to this letter should include the dates that the actions have been or will be completed. Please be advised that past or present issues of noncompliance can continue as subjects of future enforcement actions by Ohio EPA.***

If you have any questions or comments regarding this inspection, please feel free to contact me at (330) 963-1175.

Respectively,



John M. Schmidt P.E., R.S.  
Environmental Engineer  
Division of Surface Water

JMS/cs

Enclosure: A Guide for Owners of Package Extended Aeration Treatment Plants (Ohio EPA, 2000)

cc: Dan Kopec, Ohio EPA, DSW, CO  
Steven Howe, Ake Environmental

File: SP/Ashtabula Co./Morgan Twp/Glenbeigh Health Services