



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

May 14, 2013

RE: ANGELS FOR ANIMALS
BEAVER TOWNSHIP
MAHONING COUNTY
LAMP NO. 3MP00026
FSY 2013 CEI

Mr. George Beaver
Angels for Animals
4630 South Range Road
Canfield, OH 44406

Mr. Beaver:

On April 4, 2013, this writer conducted an inspection of the wastewater treatment system for Angels for Animals. The intent of the inspection was to evaluate operations and maintenance of the wastewater treatment system. The system has been placed under a Land Application Management Plan (LAMP) by Ohio EPA since the last inspection on July 11, 2012. The LAMP replaced the NPDES Permit No. 3PR00442.

Observations

Following are observations made during this most recent inspection of the wastewater treatment system:

1. The treatment plant was approved to treat an average daily flow of 1,500 gpd. The system includes a vertical trash trap, a vertical equalization tank with a flow control box, a 1,500 gallon aeration tank, a clarifier, a dosing system with tertiary filters, a chlorination system, a scum holding tank and a sludge holding tank. Wastewater is disposed onto a spray irrigation field north of the treatment system.
2. Both equalization pumps were operational at the time of the inspection. The flow to the aeration tank is controlled by a weir box. It is understood that during a May 7, 2013 evaluation of the plant, the flow rate from the weir box was found to be approximately 5 gpm. The flow rate from the weir box at the equalization tank was subsequently adjusted to more closely match the design average daily flow of the plant.
3. The aeration tank was a light brown color. A sample of the mixed liquor suspended solids was collected at the time of the inspection to observe the settling characteristics. There appeared to be approximately 200 ml of sludge in a 650 ml sample after approximately thirty minutes. The sludge had good settling characteristics in the beaker used for the settling test. The return sludge was light to medium brown.

4. The clarifier had significant scum on the surface. The weir trough had scum and floating sludge at the weir plates, and sludge deposits were observed in the trough. Sludge in the trough indicates that sludge had previously discharged to the dosing system for the sand filters. The floating scum and sludge were removed during the inspection. Scum on the surface of the clarifier should be removed daily, and the weir should be clean daily also.
5. Though sludge settled well in the beaker as previously described, there seemed to be some interference of sludge settling in the clarifier. The sludge seemed to drop at the influent baffle and then float to the surface towards the effluent baffle. The cause of the poor settling characteristics in the clarifier should be determined and corrected. Until such time as the settling problems are corrected in the clarifier, the plant will continue to loose solids to the sand filters.
6. The sand filters appeared to have been properly sealed to prevent leaks through the joints. This concern was identified in the previous inspection.

The east sand filter did not appear to be draining properly. Sludge that previously discharged from the clarifier could have blinded the filter. The west filter should be brought online and the east filter should be rested and cleaned as weather permits.

Also, the cause of poor sludge settling in the clarifier should be further investigated. Any hydraulic issues or wastewater characteristics that inhibit settling in the clarifier should be corrected to prevent the discharge of sludge to the sand filters. As you are aware, preventing the discharge of sludge to the sand filters would significantly reduce the effort and costs associated with maintaining the plant.

7. The storage lagoon was approximately one foot from overflowing the banks. It was understood that the lagoon was emptied and the banks were raised last fall. It is possible that the lagoon has partially filled with vegetative debris and sediment since being constructed. Angels for Animals should investigate the need to clean the lagoon in order to restore the original capacity.
8. The spray irrigation system was tested during the inspection. It appeared that issues identified in previous inspection reports had been corrected.

Compliance Review

The compliance record for Angels for Animals was review as part of this inspection. The period of review was July 2012 through March 2013.

Following is a list of violations identified for the period of time the Land Application Management Plan (LAMP) has been in effect. The LAMP became effective on February 1, 2013.

LAMP No. 3MP00026

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2013	601	E. coli	1D Conc	298	330.	2/21/2013

Following is also a list of violations identified for the NPDES Permit No. 3PR00442 for the period covering July 2012 through January 2013.

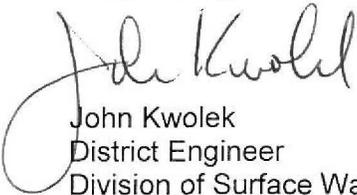
NPDES Permit No. 3PR00442

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
July 2012	601	Nitrogen, Ammonia (NH3	30D Conc	1.0	4.636	7/1/2012
July 2012	601	Nitrogen, Ammonia (NH3	1D Conc	1.5	4.636	7/18/2012
July 2012	601	E. coli	1D Conc	2.0	83.	7/18/2012
September 2012	601	Total Suspended Solids	30D Conc	12.0	21.	9/1/2012
September 2012	601	Nitrogen, Ammonia (NH3	30D Conc	1.0	2.928	9/1/2012
September 2012	601	Total Suspended Solids	1D Conc	18.0	21.	9/12/2012
September 2012	601	Nitrogen, Ammonia (NH3	1D Conc	1.5	2.928	9/12/2012

Be advised that that violations noted above are subject to enforcement action per Ohio Revised Code 6111. All actions must be taken to ensure that the plant consistently complies with the requirements of the LAMP. A recent evaluation of the plant was performed by operations staff of Ohio EPA. Any recommendations provided by the Ohio EPA operations staff should be implemented to improve treatment plant performance.

You may contact this writer at (330) 963-1251 or at john.kwolek@epa.ohio.gov in the event you have any questions related to this inspection report.

Respectfully,



John Kwolek
District Engineer
Division of Surface Water

JK/cs

Cc. Firl Byers, Operator of Record
John Lubonovic, Mahoning County Department of Health