



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

March 27, 2013

RE: ASHTABULA COUNTY
CONNEAUT WWTP
NPDES PERMIT NO. OH0024767
OHIO EPA PERMIT NO. 3PD00002*ND
SEWAGE SLUDGE INSPECTION

Craig Pierce
City of Conneaut
294 Main Street
Conneaut, Ohio 44030

Dear Mr. Pierce:

On March 6, 2013, a sewage sludge inspection was conducted in order to determine compliance with Ohio Administrative Code Chapter (OAC) 3745-40, Ohio's sewage sludge rules, at the Conneaut wastewater treatment plant (WWTP). The facility was represented by you and Bob DeMarco, who provided information regarding the WWTP's sewage sludge operations. The sewage sludge inspection consisted of a review of the WWTP's contact information and sewage sludge records, completion of a compliance checklist, and an inspection of the sewage sludge treatment units.

WWTP information

The WWTP has a design treatment capacity of 2.93 million gallons of wastewater per day (mgd) and currently treats approximately 2.657 mgd. Sewage sludge is treated within two heated anaerobic digesters (i.e. each sized for a capacity of 144,000 gallons), one unheated anaerobic digester (i.e. sized for a capacity of 178,000 gallons), and two holding tanks (i.e. capacities of 144,000 gallons and 693,000 gallons). The WWTP's contractor, Synagro Central, utilizes a portable belt press for dewatering the biosolids prior to beneficial use. Onsite sewage sludge storage capacity exceeds six months.

Sewage Sludge Management

The WWTP is currently generating a Class B biosolid by performing pathogen reduction (PR) alternative P-1, geometric mean of seven fecal coliform samples, and vector attraction reduction (VAR) option VAR-1, 38% volatile solids reduction.

Pathogen Reduction

The 2012 annual sewage sludge report details that the geometric mean of seven fecal coliform samples is being performed. During the inspection, the analytical results of seven individual fecal coliform samples were available for 2012; unfortunately, the geometric mean calculation was not available. For your convenience, the geometric mean calculation can be obtained from the "compliance tools" tab of the following website:

<http://epa.ohio.gov/dsw/sludge/biosolid.aspx>

A copy of the geometric mean calculation must be submitted to Ohio EPA for review.

Vector Attraction Reduction

The average volatile solids reduction for 2012 was 46.0%. The average volatile solids concentration of the raw sewage sludge was 51.52% and the average volatile solids concentration final sewage sludge was 32.83%.

Pollutant Ceiling Concentration Limits:

A review of the electronic discharge self-monitoring reports (eDMR) received by Ohio EPA for the period September 1, 2008 through March 1, 2013 indicates that the following violation has occurred:

Station	Reporting Code	Parameter	Limit Type	Limit (mg/kg)	Reported Value (mg/kg)	Violation Date
581	78465	Molybdenum In Sludge	1/Year	75	112	12/7/2012

OAC 3745-40-04(D)(1) requires that "no person shall beneficially use biosolids if any monitoring result indicates that a pollutant concentration exceeds the pollutant ceiling concentration listed in table D-1 of this rule." **The above violation exceeds the pollutant ceiling concentration limit for molybdenum and constitute violations of Ohio Revised Code Chapter 6111.07, OAC 3745-40-04(D)(1) and Part I.B and Part II.P of the NPDES permit.** As a result, the beneficial use sites where these biosolids were beneficially used are now designated as cumulative pollutant loading rate (CPLR) and all applicable CPLR requirements must be satisfied.

During the inspection, you indicated that the sewage sludge was resampled for molybdenum on February 13, 2013 with the laboratory returning a result of 8.78 mg/kg. According to the eDMR, the WWTP provided a comment for the 112 mg/kg molybdenum concentration stating that *"the result was over our permitted limit of 75. This was probably due to a low percent solids in the composite sample that was sent to the outside lab. Operator error in sampling of the sludge was the cause for the low percent solids. A higher percent solids would yield a lower and more normal result."*

Ohio EPA highly recommends the WWTP perform sampling at the beginning a monitoring period in order to ensure that the sewage sludge analytical results are acceptable prior to beneficial use occurring.

Chain of Custody

The WWTP must ensure that the chain of custody forms are completed and that the laboratory documents the time of sample pick-up.

CPLR Records Retention

OAC 3745-40-09(C)(5) requires the specific CPLR records that must be maintained at the WWTP. The following information regarding the biosolids containing the 112 mg/kg of molybdenum must be submitted to Ohio EPA:

- The location, by street address and Ohio EPA No. of each beneficial use site on which CPLR biosolids were beneficially used;
- The number of acres in each beneficial use site on which CPLR biosolids were beneficially used;
- The date the CPLR biosolids were beneficially used on each beneficial use site;
- The amount of biosolids, in dry tons, beneficially used on each beneficial use site; and
- The cumulative amount of each pollutant listed in OAC rule 3745-40-05(F)(2) beneficially used on each beneficial use site.

Standard Operating Procedure

OAC 3745-40-09(C)(3)(c) requires a WWTP to develop a standard operating procedure (SOP) that, at a minimum, includes the following information:

1. Sample collection or monitoring locations;
2. The frequency at which sample collection or monitoring is to occur;
3. Sample collection or monitoring procedures;
4. Sample storage and preservation procedures; and
5. Sample or monitoring analysis procedures, including any calculations required for sample or monitoring analysis.

The WWTP has not developed the appropriate SOP. The WWTP must develop a SOP to comply with OAC 3745-40-09(C)(3)(c).

CRAIG PIERCE
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Within thirty days of receiving this correspondence, the CPLR information requested above, must be submitted to Ohio EPA for review. Should you have any questions regarding the sewage sludge inspection, please contact me at your earliest convenience at (330) 963-1118 or via e-mail at chris.moody@epa.ohio.gov.

Sincerely,



Chris Moody
Environmental Specialist II
Division of Surface Water

CM:bo

pc: Brian Alger, Synagro Central