



**Environmental
Protection Agency**

John E. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Walby, Director

May 9, 2012

RE: HOLMES COUNTY
BERLIN, VILLAGE OF
NPDES PERMIT NO. OH0112127
OHIO EPA PERMIT NO. 3PG00147*DD
SEWAGE SLUDGE INSPECTION

Christopher Young
Holmes County Engineer
7191 SR 39
Millersburg, Ohio 44654

Dear Mr. Young:

On April 11, 2012, 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 Village of Berlin wastewater treatment plant (WWTP). The undersigned was accompanied by Dean Stoll of Ohio EPA. Kevin Dean, Operator of Record, was not present during the sewage sludge inspection, but had prepared the requested information regarding the WWTP's sewage sludge operations and records. The sewage sludge inspection consisted of a review of the WWTP's contact information, completion of a compliance checklist, a review of the WWTP's sewage sludge records, and an inspection of the sewage sludge treatment units.

WWTP Information

The WWTP has a design treatment capacity of 300,000 gallons of wastewater per day and currently treats approximately 137,000 gallons of wastewater per day. Sewage sludge is treated within two 150,000-gallon aerobic digesters and two drying beds.

Sewage Sludge Management

The WWTP is currently generating a class B sewage sludge by performing pathogen reduction (PR) alternative P-1, geometric mean of seven fecal coliform samples and vector attraction reduction (VAR) option VAR-4, specific oxygen uptake rate (SOUR). Onsite sewage sludge storage capacity is approximately one year.

Adequate records are being maintained to verify that the PR requirements and agronomic rates are being satisfied.

Vector Attraction Reduction

OAC 3745-40-04(C)(4) requires that in order to achieve option VAR-4, the SOUR for the sewage sludge that is treated in an aerobic process at temperatures between ten and thirty degrees Celsius must be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of twenty degrees Celsius.

WWTP records document that the SOUR performed on October 10, 2011 was 9.79 (mg/g)hr, which exceeds the 1.5 (mg/g)hr limit. As a result, the WWTP failed to generate a Class B biosolid by failing to satisfy a VAR. **The WWTP must immediately cease beneficial use of biosolids until such time as a vector attraction reduction can be satisfied.**

Fecal Coliform Monitoring

Fecal coliform samples have a six-hour hold time after collection. The WWTP must contact the contracted laboratory to determine if the fecal coliform six-hour hold time is being satisfied. Please submit a copy of a correctly completed chain of custody form that includes the applicable times for collection, receipt, and testing to Ohio EPA for review.

Standard Operating Procedure (SOP)

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.

Although a copy of Ohio EPA's April 8, 2009 sludge program field sampling methods and quality assurance practices guidance document was available, the WWTP has not developed the appropriate SOP. The WWTP must develop a SOP to comply with OAC 3745-40-09(C)(3)(c).

Beneficial Use Site Authorization Records

OAC 3745-40-09(C)(3)(e) requires the WWTP to maintain a copy of the application for an authorization for a beneficial use site and the Ohio EPA beneficial use site authorization letter for each beneficial use site that is utilized for beneficial use. Ohio EPA could not locate these files at the time of the inspection. Please submit written correspondence that the WWTP has these documents maintained. In the event that the WWTP cannot locate copies of these documents, new applications for beneficial use sites must be submitted to Ohio EPA for review.

Cumulative Pollutant Loading Rate (CPLR)

Ohio EPA records detail that the following values were reported by the WWTP:

Parameter	Units	Date Reported	Reported Value
Arsenic, Total In Sludge	mg/kg	12/1/2010	45.9
Zinc, Total In Sludge	mg/kg	12/1/2011	3,710

Since the above reported value for arsenic exceeds the 41 mg/kg average concentration limit (ACL) for arsenic and is below the 75 mg/kg ceiling limit (CL) for arsenic and the above reported value for zinc exceed the 2800 mg/kg ACL for zinc and is below the 7,500 mg/kg CL for zinc, the beneficial use site where beneficial use of the Class B biosolids containing the above reported values for arsenic and zinc is now designated as a CPLR beneficial use site. As a result, the following records must now be maintained in accordance with OAC 3745-40-09(C)(5) and (6):

1. The location, by either street address or latitude and longitude, of each beneficial use site on which class B are beneficially used;
2. The number of acres of each beneficial use site where the class B biosolids are beneficially used;
3. The date the class B biosolids were beneficially used at the beneficial use Site; and
4. The cumulative amount, in pounds per acre, of each metal listed in table D-2 of rule 3745-40-04 of the Administrative Code that is beneficially used at each beneficial use site;

Ohio EPA could not locate the above records. The WWTP must begin maintaining all records in accordance with OAC 3745-40-09(C)(5) and (6). In order to update Ohio EPA records, the WWTP must submit written correspondence that provides the Ohio EPA ID of the beneficial use site and a site map that received the Class B biosolids containing the above reported values for arsenic and zinc.

Beneficial Use Records

OAC 3745-40-09(C)(4) requires beneficial user records that include the following information:

1. Records showing that the class B biosolids were not stored for more than ninety days at the beneficial use site;
2. Forecast or actual precipitation data in accordance with paragraphs (B)(1) and (B)(2) of rule 3745-40-08 of the Administrative Code;
3. The sign placement records for all authorized beneficial use sites in accordance with paragraph (D) of rule 3745-40-11 of the Administrative Code;
4. A description of how the agronomic rate is met at each beneficial use site including, but not limited to, how the beneficial use application equipment is calibrated; and
5. A copy of the information provided to the farm operator in accordance with paragraph (C) of rule 3745-40-05 of the Administrative Code.

The WWTP performed beneficial use from November 7, 2011 to November 9, 2011. WWTP records did not include item No. 3, above. The WWTP must begin maintaining the appropriate records for the above items.

Screening Requirements

Please be aware that OAC 3745-40-02(C)(3)(a) will require screening to be performed in one of the following methods starting July 1, 2015:

1. Screening influent wastewater and influent septage through a bar screen with a maximum aperture of five-eighths inch (1.59 centimeters) designed to screen the average daily design flow;
2. Screening all biosolids through a bar screen with a maximum aperture of five-eighths inch (1.59 centimeters) prior to beneficial use; or
3. Obtaining approval from the director for an alternative method that achieves a removal rate equal to or greater than that achieved by the screening standards in paragraph (C)(3)(a)(i) or (C)(3)(a)(ii) of this rule.

New Sewage Sludge Rules

Please be aware that new rules regulating sewage sludge became effective on July 1, 2011 and that the WWTP's sewage sludge management program must be modified in order to comply with the new requirements. For your convenience, Ohio EPA's new sewage sludge rules can be obtained from the following website:

http://www.epa.ohio.gov/portals/35/rules/40_all_eff_jul11.pdf

Written correspondence must be submitted to Ohio EPA by May 31, 2011 that details how the WWTP will address the above deficiencies and items. 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/cs

cc: Kevin Dean, Dean's Backflow Services, LLC