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

April 12, 2012

RE: WAYNE COUNTY
SMITHVILLE WESTERN, LTD.
NPDES PERMIT NO. OH0101265
OHIO EPA PERMIT NO. 3PS00010*ED
SEWAGE SLUDGE INSPECTION

Mr. Rick Jackson
Maintenance Director / Operator
4110 East Smithville Western Road
Wooster, Ohio 44691

Dear Mr. Jackson:

On March 14, 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 Smithville Western, Ltd. wastewater treatment plant (WWTP). You were present during the sewage sludge inspection and provided 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 90,000 gallons of wastewater per day and currently treats approximately 41,000 gallons of wastewater per day. Sewage sludge is treated within six aerobic digesters (one with a capacity of 1,000 gallons, one with a capacity of 15,000 gallons, and four with a capacity of 20,000 gallons each).

Sewage Sludge Management
The WWTP is currently generating a Class B sewage sludge by performing pathogen reduction (PR) alternative P-6, lime treatment, and vector attraction reduction (VAR) option VAR-6, alkali addition. Onsite sewage sludge storage capacity is approximately one year. The WWTP also has the ability to transfer sewage sludge to the City of Lodi for disposal. Adequate records are being maintained to verify that the PR and VAR requirements and agronomic rates are being satisfied.

Cumulative Pollutant Loading Rate (CPLR)
Ohio EPA records detail that the following value was reported by the WWTP:

Parameter	Units	Date Reported	Reported Value
Arsenic, Total In Sludge	mg/kg	12/1/2008	48

Since the above reported value exceeds the 41 mg/kg average concentration limit for arsenic and is below the 75 mg/kg ceiling limit for arsenic, the beneficial use site where beneficial use of the Class B biosolids containing the above reported value for arsenic 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):

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

330 | 963 1200
330 | 487 0769 (fax)
www.epa.ohio.gov

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;

The WWTP has not maintained 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 that received the Class B biosolids containing the above reported value for arsenic.

New Sewage Sludge Rules

The WWTP has not beneficially used biosolids since July 1, 2011. Please be aware that on this date, new rules regulating sewage sludge became effective and that the sewage sludge management program must be modified to comply with the new requirements.

- OAC 3745-40-02(C)(3)(a) requires that by July 1, 2015, prior to the beneficial use of biosolids, influent wastewater and septage, or sewage sludge at a treatment works must be treated by a process such as physical screening or another method to significantly remove manufactured inerts. Meeting this requirement may be accomplished by either of the following:

  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.

- 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.

- 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.

- OAC 3745-40-05 requires that the WWTP provide the beneficial use site operator (i.e. farmer) with a crop year report for each beneficial use site. The crop year report, at a minimum, shall include the following information:

  "On [fill in the date(s) biosolids were beneficially used on the beneficial use site], biosolids from [fill in name of treatment works], Ohio Environmental Protection Agency (Ohio EPA) permit [fill in NPDES permit number], were beneficially used on [fill in OhioEPA number for the beneficial use site for Class B biosolids, or street address or latitude and longitude of the beneficial use site for bulk exceptional quality biosolids] located in [fill in township and county where beneficial use occurred]. Biosolids are a by-product of wastewater treatment. An analysis of the biosolids showed the following concentrations:

  1. Kjeldahl nitrogen: [provide concentration in per cent or milligram per kilogram, dry-weight basis]
  2. Ammonia nitrogen: [provide concentration in per cent or milligram per kilogram, dry weight basis]
  3. Total phosphorous: [provide concentration in per cent or milligram per kilogram, dry weight basis]
  4. Total potassium: [provide concentration in per cent or milligram per kilogram, dry weight basis]

  The beneficial use rates were:

  1. Available nitrogen: [provide concentration in per cent or milligram per kilogram, dry weight basis]
  2. Phosphate: [provide application rate in pounds per acre or kilogram per hectare, dry-weight basis]
  3. Potash: [provide application rate in pounds per acre or kilogram per hectare, dry-weight basis]

The above information is supplied as a requirement of the Ohio EPA, division of surface water, which can be reached at 1-877-644-2001."

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

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