



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

April 16, 2009

RE: COLUMBIANA COUNTY
ELKTON WWTP
SEWAGE SLUDGE INSPECTION

Columbiana County Commissioners
105 South Market Street
Lisbon, Ohio 44432

Dear Commissioners:

On April 9, 2009, a sewage sludge inspection was conducted in order to determine compliance with Ohio Administrative Code (OAC) Chapter 3745-40, Ohio's sewage sludge rules, at the Elkton wastewater treatment plant (WWTP). The undersigned was accompanied by Mr. Joe Trocchio, Ohio EPA. Mr. Frank Daniels, Superintendent, was 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 evaluation of the WWTP sewage sludge treatment units.

Sewage Sludge Management

- The WWTP currently treats approximately 900,000 gallons of wastewater per day. Secondary sewage sludge is treated within one dual ring aerobic digester (total capacity of 425,000 gallons). Sewage sludge is dewatered and utilized in the following two scenarios:
 - a. Sewage sludge from the one dual ring aerobic digester is dewatered with a gravity thickener to approximately five and a half percent (5.5%) to six percent (6%) solids. The treated sewage sludge is then land applied to authorized sewage sludge sites; or
 - b. Sewage sludge from the one dual ring aerobic digester is dewatered with a gravity thickener, followed by additional dewatering from a belt filter press. The treated sewage sludge is then transferred to Redbud Company, Inc., NPDES Permit No. 31N00247*DD, for additional treatment.
- Land application of sewage sludge occurs approximately four (4) times per week to authorized sewage sludge sites. Approximately 0.7 dry tons of sewage sludge is transferred to Redbud Company, Inc. four (4) to five (5) times per week. The WWTP also has the ability to dispose of sewage sludge within a landfill that has been certified to accept solid waste as a contingency for land application.
- The WWTP currently generates a Class B sewage sludge via satisfying pathogen reduction alternative No. 1, geometric mean of seven fecal coliform samples, and vector attraction reduction option No. 9, subsurface injection.

- The WWTP performs annual monitoring for soil pH and soil phosphorus level (Bray-Kurtz P1 extraction or Mehlich 3 extraction) at authorized sewage sludge sites where land application occurs.
- OAC Chapter 3745-40-04(D) requires the land application of sewage sludge to occur at a rate that is equal to or less than the agronomic rate. The WWTP stated that land application of sewage sludge occurs at a rate of less than four (4) dry tons per acre. Unfortunately, the WWTP was unable to provide records that document OAC Chapter 3745-40-04(D) has been satisfied. The WWTP must immediately begin performing agronomic rate calculations for all of the authorized sewage sludge sites where land application occurs. Enclosed is an excerpt, pages 83 to 87, of Ohio EPA's "DSW Policy 0100.028" that should be utilized to perform agronomic rate calculations. For your convenience, Ohio EPA's "DSW Policy 0100.028" can also be obtained from the following Internet address:

<http://www.epa.state.oh.us/dsw/sludge/biosolid.html>

The WWTP must submit to Ohio EPA copies of the agronomic rate calculations for the authorized sewage sludge sites where land application occurs.

- Ohio EPA records indicate that the monitoring detailed in Table 1, below, was not performed in accordance with the WWTP's NPDES permit. Information must be submitted to Ohio EPA that details why the required monitoring was not performed.

Table 1 – Monitoring Violations

NPDES Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
581	71921	Mercury, Total In Sludge	1/Week	1	0	03/08/2008
581	71921	Mercury, Total In Sludge	1/Week	1	0	03/15/2008
581	71921	Mercury, Total In Sludge	1/Week	1	0	03/22/2008

- Ohio EPA had previously accepted the certification statement provided on the annual sewage sludge report, Form 4229; however, due to a U.S. EPA clarification, the certification statement provided on the annual sewage sludge report can no longer be utilized to satisfy the certification statement requirements established within OAC Chapter 3745-40-06(I) and (J). The WWTP must begin maintaining all certification statements as separate stand alone documents and submitting them with the annual sewage sludge report. This information will be clarified on future annual sewage sludge reports.
- Please be aware that Ohio EPA is currently soliciting public comments on the second draft of sewage sludge rule revisions. The deadline for submitting comments is 5:00 p.m. on May 22, 2009. For your convenience, the second draft of sewage sludge rule revisions are available at the following Internet address;

http://www.epa.state.oh.us/dsw/rules/draft_sludge_apr09.html

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Storm Water Management

In reviewing the WWTP's storm water management program, the following storm water pollution prevention plan deficiencies must be addressed:

- Best management practices must be identified and implemented to address spillage, leaks, and potential hose ruptures that occur at the leachate / septage receiving station during liquid transfer from vehicles; and
- The gasoline tanks and pesticide and herbicide containers must be relocated and stored on the contained area where the 55-gallon oil drums are housed. This will minimize the potential discharge of hazardous materials to the WWTP.

Elkton's sewage sludge disposal program and storm water management at the WWTP requires improvement to address the above deficiencies. Should you have any questions regarding the sewage sludge inspection, please contact me at your earliest convenience at (330) 963-1118.

Sincerely,



Chris Moody
Environmental Specialist
Division of Surface Water

CM/mt

Enclosure

cc: Frank Daniels

ec: Joe Trocchio, Ohio EPA, DSW, NEDO
Andrew Gall, Ohio EPA, DSW, NWDO
Jacob Howdysshell, Ohio EPA, DSW, CO