



State of Ohio Environmental Protection Agency

Northeast District Office

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

October 1, 2007

RE: LORAIN COUNTY
OBERLIN WWTP
SEWAGE SLUDGE INSPECTION

Mr. Gary Boyle, Interim Manager
85 South Main Street
Oberlin, OH 44074

Dear Manager Boyle:

On August 23, 2007, a sewage sludge inspection was conducted in order to determine compliance with Ohio Administrative Code (OAC) Rule 3745-40, Ohio's sewage sludge rules, at the Oberlin wastewater treatment plant (WWTP). Mr. Steve Hoffert, 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 a walk through of the WWTP sewage sludge units. The sewage sludge inspection revealed the following:

Monitoring

- According to Ohio EPA records, the WWTP failed to perform the monitoring parameters within the table provided below:

Date	Station	Reporting Code	Parameter	Frequency
8/1/2007	581	00400	pH	1/Quarter
8/1/2007	581	00627	Nitrogen Kjeldahl, Tot	1/Quarter

The WWTP must provide documentation as to why the required sewage sludge monitoring was not performed.

- Pathogen reduction (PR) alternative 2a, aerobic digestion, is being performed on approximately one-half of the sewage sludge treatment process. Mr. Hoffert stated that secondary sewage sludge is treated within an unheated aerobic digester for greater than sixty (60) days at an average temperature of greater than twenty-five degrees Celsius (25°C). The aerobically treated sewage sludge is then stored on the WWTP's sewage sludge drying beds prior to land application. The mean cell residence time of the sewage sludge within the aerobic digester and the average temperature of the aerobic digester must continue to be recorded.
- PR alternative 2c, anaerobic digestion, is being performed on approximately one-half of the sewage sludge treatment process. Mr. Hoffert stated that primary sewage sludge is treated within a heated anaerobic digester for greater than thirty (30) days at an average temperature of ninety-nine degrees Fahrenheit (99°F). The anaerobically treated sewage sludge is then stored within the WWTP's storage lagoon prior to land application. The mean cell residence time of the sewage sludge within the anaerobic digester and the average temperature of the anaerobic digester must continue to be recorded.

- The monitoring point for sewage sludge parameters must occur at the sewage sludge treatment point just prior to land application. Therefore, monitoring at the WWTP must occur at the sewage sludge drying beds and the sewage sludge lagoon. Mr. Hoffert stated that sewage sludge samples are collected from the sewage sludge drying beds and the sewage sludge lagoon.

Record Retention

- OAC rule 3745-40-06(I) requires the WWTP to "...develop the following information, shall retain the information for five years, and shall make the information available to the division upon request:
 - (1) The concentration of each pollutant listed in paragraph (F) of rule 3745-40-05 of the Administrative Code;
 - (2) A description of how the pathogen reduction requirements of rule 3745-40-05 of the Administrative Code are met;
 - (3) When applicable, a description of how the vector attraction reduction requirements in paragraphs (Q)(1) to (Q)(8) of rule 3745-40-05 of the Administrative Code are met;
 - (4) The results of all analyses required by paragraphs (A), (B), (C), (D), (F), and (G) of this rule; and
 - (5) The following certification statement signed by the permittee: "I certify, under penalty of law, that the information that will be used to determine compliance with class (insert A or B) pathogen reduction alternative (insert one of the class A alternatives in paragraphs (N)(1) to (N)(6) of rule 3745-40-05 of the Administrative Code or one of the class B alternatives in paragraphs (O)(1) to (O)(3) of rule 3745-40-05 of the Administrative Code) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."; and
 - (6) When applicable, the following certification statement signed by the permittee: "I certify, under penalty of law, that the information that will be used to determine compliance with vector attraction reduction requirement (insert one of the vector attraction reduction requirements in paragraphs (Q)(1) to (Q)(8) of rule 3745-40-05 of the Administrative Code) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

The WWTP was unable to provide five years worth of records to document that the above requirements are being satisfied. Specifically, records for 2005 and 2006 were not available. The WWTP must immediately begin maintaining records in accordance with OAC Rule 3745-40-06(I).

Exceptional Quality (EQ)

- During the sewage sludge inspection, Mr. Hoffert stated that the WWTP is currently evaluating treating sewage sludge to satisfy the requirements established for an EQ sewage sludge via a pasteurization process. EQ sewage sludge is required to satisfy all of the following qualifications:
 - (a) Satisfies the class A pathogen standards in paragraphs (N)(1) to (N)(6) of OAC Rule 3745-40-05;
 - (b) Satisfies one of the vector attraction reduction requirements in paragraphs (Q)(1) to (Q)(8) of OAC Rule 3745-40-05;
 - (c) Does not exceed the ceiling concentration limitations for metals listed in paragraph (F)(1) of OAC Rule 3745-40-05; and
 - (d) Does not exceed the concentration limitations for metals listed in paragraph (F)(3) of OAC Rule 3745-40-05.

In order for the WWTP to verify and document that an exceptional quality sewage sludge can be generated and that the above conditions have been satisfied, the following activities must be performed should the WWTP elect to generate an EQ sewage sludge:

- (a) Three composite composted sewage sludge samples must be monitored for the following parameters: arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, zinc (all metals are total metals, dry weight basis, in mg/kg), pH, total Kjeldahl nitrogen, ammonia nitrogen, total solids, volatile solids, and pathogen reduction, and vector attraction reduction analysis to demonstrate that the sewage sludge will satisfy the exceptional quality, Class A, requirements.
- (b) A National Pollutant Discharge Elimination System Application for Modification of Ohio NPDES Permit (NPDES Modification Permit Application) and Ohio EPA Antidegradation Addendum, located at the following Web site: <http://www.epa.state.oh.us/dsw/permits/npdesform.html>, must be submitted to Ohio EPA in accordance with the application instructions. The NPDES Modification Permit Application and Ohio EPA Antidegradation Addendum are required in order for the WWTP to receive a Station 584 for the monitoring of composted exceptional quality, Class A, sewage sludge. It is highly recommended that the modified NPDES permit include the active NPDES station numbers as a contingency for sewage sludge disposal should the WWTP fail to satisfy the exceptional quality, class A, conditions during monitoring in the future.

Mr. Gary Boyle
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WWTP Upgrades

During the sewage sludge inspection, Mr. Hoffert stated that the WWTP was evaluating upgrading the sewage sludge treatment process through the installation of a belt press. If the WWTP determines that the current dewatering process is inefficient for disposing of treated sewage sludge, a belt press would be a viable option to increase the WWTP's dewatering ability. Should the WWTP elect to utilize a belt press, a permit-to-install (PTI) would be required to be authorized by Ohio EPA prior to construction. The step by step process for obtaining a PTI can be located at the following Web site:

<http://www.epa.state.oh.us/dsw/pti/HowToObtainPTI.html>

The Oberlin WWTP sewage sludge disposal program was not in compliance with OAC 3745-40. Within fourteen (14) days of receiving this inspection letter, please submit a written response as to how the Oberlin WWTP will 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

cc: Steve Hoffert, Superintendent