



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

August 9, 2007

RE: PORTAGE COUNTY
VILLAGE OF WINDHAM
SEWAGE SLUDGE INSPECTION

Mr. Cecil James Moore, Mayor
Village of Windham
9621 East Center Street
Windham, OH 44288

Dear Mr. Moore:

On July 25, 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 Village of Windham's wastewater treatment plant (WWTP). Mr. James "Roger" Stier, 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:

- **Ohio EPA records indicate that the WWTP has violated its National Pollutant Discharge Elimination System (NPDES) permit by failing to report Arsenic, Total in Sludge (mg/kg), for June 2006. The WWTP must submit documentation to Ohio EPA as to why this parameter was not reported.**
- The WWTP currently has one aerobic digester. Mr. Stier stated that a second aerobic digester is being evaluated for upgrading the WWTP. Should the WWTP select to pursue installing a second aerobic digester, a permit-to-install (PTI) application would be required to be submitted to Ohio EPA for approval. PTI forms A, B4-7, and an Antidegradation Addendum would be required to be submitted for any sewage sludge treatment upgrade that would be pursued. The PTI forms are available at the following Internet address:

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

- OAC Rule 3745-40-05(K) requires that "...one of the class B pathogen requirements in paragraphs (O)(1) to (O)(3) of this rule and, when applicable, the site restrictions in paragraph (P) of this rule, shall be met when sewage sludge is applied to the land." Previous sewage sludge inspections documented that the WWTP was not performing a class B pathogen reduction (PR) alternative. The WWTP has begun performing PR alternative one (1), the geometric mean of the density of seven fecal coliform samples. WWTP records documented that the sampling for fecal coliform commenced in February 2006 with the most recent sampling event occurring March 12 through the 22, 2007.
- OAC Rule 3745-40-05(M) requires that "one of the vector attraction reduction [VAR] requirements in paragraphs (Q)(1) to (Q)(10) of this rule [OAC Rule 3745-40-05] shall be

met when sewage sludge is applied to the land." WWTP records documented that VAR option four (4), the specific oxygen uptake rate, is performed monthly and recommenced in February 2006.

- The WWTP was unable to produce records to document that the sewage sludge application sites have been monitored within the last two years. OAC Rule 3745-40-06(E) requires that "for authorized sewage sludge application sites, the frequency of monitoring for soil pH and soil phosphorus level (Bray-Kurtz P1 extraction or Mehlich 3 extraction) shall be such that the most recent results are not more than two years old at the time of bulk sewage sludge land application." Mr. Stier did not know if the fields were being analyzed by the WWTP's sewage sludge contractor, Agri-Sludge, Inc. On July 31, 2007, Ohio EPA received documentation from the WWTP verifying that the required sewage sludge site monitoring is occurring.
- During the sewage sludge inspection, I asked Mr. Stier if the WWTP is following the appropriate isolation distances at sewage sludge land application sites, and adhering to the harvesting restrictions when land application of sewage sludge occurs. Mr. Stier stated that he was unsure if the notifications, isolation distances, and harvesting restrictions were being performed at the WWTP's sewage sludge land application sites.

A. OAC Rule 3745-40-04(M) requires that "no person shall land apply bulk sewage sludge within the following isolation distances:

	Surface application	Injected
Waters of the state (excluding groundwater)	33 feet	
Occupied building	300 feet	100 feet
Medical care facility	1000 feet	300 feet
Private potable water source	300 feet	100 feet
Bedrock	3 feet	
Sinkhole or UIC class V drainage well	300 feet without a grass buffer, 100 feet with a grass buffer	

B. OAC 3745-40-05(P) requires "Site restrictions for sewage sludge treated by a class B pathogen reduction process.

- (1) Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for fourteen months after the application of sewage sludge.
- (2) Food crops with harvested parts below the surface of the land shall not be harvested for twenty months after the application of sewage sludge when the sewage sludge remained on the land surface for four months or longer prior to incorporation into the soil.

- (3) Food crops with harvested parts below the surface of the land shall not be harvested for thirty-eight months after the application of sewage sludge when the sewage sludge remained on the land surface for less than four months prior to incorporation into the soil.
 - (4) All other food crops, feed crops, and fiber crops shall not be harvested for thirty days after the application of sewage sludge.
 - (5) Animals shall not be grazed on the land for thirty days after the application of sewage sludge.
 - (6) Turf grown on land where sewage sludge is applied shall not be harvested for one year after the application of sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the director.
 - (7) Public access to land with a high potential for public exposure shall be restricted for one year after the application of sewage sludge.
 - (8) Public access to land with a low potential for public exposure shall be restricted for thirty days after the application of sewage sludge.”
- C. OAC Rule 3745-40-04(E) requires “a permittee who generates bulk sewage sludge shall provide a label or information sheet to the following persons: all persons who receive bulk sewage sludge from the permittee; all persons who land apply bulk sewage sludge received from the permittee; and the owner or lease holder of the land upon which the bulk sewage sludge is land applied. Such label or information sheet shall provide all notices and information necessary to comply with the requirements of this chapter including the following:
- (1) The name, address, telephone number, and Ohio NPDES permit number of the permittee;
 - (2) A statement that the material is or contains a by-product of wastewater treatment;
 - (3) A statement that the Ohio EPA, Division of Surface Water, may be contacted at 1-800-644-2001 (*Note: the correct telephone number is 1-877-644-2001*);
 - (4) The concentration of total Kjeldahl nitrogen, ammonia nitrogen, total phosphorus, and total potassium of the sewage sludge in milligrams per kilogram (dry weight basis);
 - (5) The concentration of total Kjeldahl nitrogen, available phosphorus, and soluble potassium of the sewage sludge as a “grade”; and

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- (6) When applicable for a liming material, the effective neutralizing power, fineness index, and standard of fineness of the sewage sludge."

The WWTP must immediately verify with Agri-Sludge, Inc. in order to determine if the notifications, isolation distances, and harvesting restrictions are being performed. If the WWTP determines that the notifications, isolation distances, and harvesting restrictions are not being performed, the WWTP must immediately begin utilizing the appropriate notifications, isolation distances, and harvesting restrictions at its authorized sewage sludge land application sites.

- OAC rule 3745-40-06(l) 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."

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The WWTP was unable to produce complete records to document that the required information has been recorded for the previous five years; however, the WWTP has begun maintaining records to comply with OAC Rule 3745-40-06(I).

While significant improvements have occurred at the WWTP regarding the sewage sludge treatment and disposal program, the Village of Windham's 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 Village of Windham will address the above deficiency. 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: James "Roger" Stier
Tom Abraham, Agri-Sludge, Inc.

ec: Andrew Gall, Ohio EPA, DSW, NWDO
Jacob Howdyshell, Ohio EPA, DSW, CO