



**Environmental
Protection Agency**

John Kasich, Governor
Lee Fisher, Lt. Governor
Chris F. Hestek, Director

April 26, 2010

RE: TRUMBULL COUNTY
WARREN WWTP
SEWAGE SLUDGE INSPECTION

Mayor and Council
Warren City Hall
391 Mahoning Ave NW
Warren OH 44483

Dear Mayor and Council:

On March 17, 2010, 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 Warren wastewater treatment plant (WWTP), NPDES permit No. 3PE00008*KD. Via letter dated March 23, 2010, Ohio EPA notified the WWTP of deficiencies that were to be addressed. On April 21, 2010, Ohio EPA received the WWTP's response letter, dated April 16, 2010. Unfortunately, the response letter failed to completely address the following items:

- A stockpile of "Garden Magic," an exceptional quality sewage sludge mixed with composted leaves, was present on the concrete pad at the biosolids treatment facility. Ohio EPA provided clarification (i.e. U.S. EPA's guidance document entitled *Environmental Regulations and Technology: Control of Pathogens and Vector Attraction in Sewage Sludge*) that the "Garden Magic" must be monitored for pathogen reduction, vector attraction reduction, and heavy metals. While the WWTP's response letter provides analytical data regarding the "Garden Magic," no information regarding which pathogen reduction alternative (PR) and vector attraction reduction option (VAR) will be performed after the exceptional quality (EQ) sewage sludge was mixed with composted leaves. The "Garden Magic" must satisfy PR and VAR in order to be classified as an EQ sewage sludge. The WWTP must provide specific information regarding how the current "Garden Magic" stockpile and all future "Garden Magic" blends will satisfy PR and VAR; and
- To address temperature probe calibration, the WWTP's response letter included an April 5, 2010 letter from RDP Technologies, Inc. stating that "the thermocouples and indicators are factory calibrated and RDP is not aware of any additional calibration or certification required. The thermocouples are checked against standard temperature-millivolt curves to assure calibration accuracy." According to an April 26, 2010 e-mail from U.S. EPA, "RDP may not require calibration of the thermocouples at periodic intervals, but that does not mean that temperature verification should not be demonstrated by Warren."

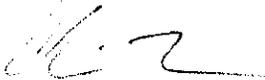
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The WWTP's response letter explains that "the temperature probes are used more as a guide for the operators to assure that when the fecal coli form test is performed the Pathogen reduction will be achieved." Ohio Administrative Code rule 3745-40-04(N) requires that both the fecal coliform in the sewage sludge to be less than one thousand most probable number (MPN) per gram of total solids (dry weight basis) and the performance standards established within the selected pathogen reduction alternative be satisfied. In accordance with U.S. EPA's April 26, 2010 email "accurate temperature monitoring is essential to assure process effectiveness...coliform monitoring does not necessary demonstrate the process has been effective for treatment of all pathogens. It demonstrates that the process has been effective on indicator bacteria. Knowing that process conditions are within appropriate operating ranges is essential to know that disinfection has been achieved."

Therefore, due to the caustic environment of the pasteurization vessel and to ensure that the PR performance standards are being satisfied, the WWTP must provide specific information (i.e. demonstrated temperature verification) that details whether or not the caustic environment has impacted the performance of the thermocouple.

The above information must be submitted to Ohio EPA by May 31, 2010. Should you have any questions regarding this matter, please contact me at your earliest convenience at (330) 963-1118.

Sincerely,



Chris Moody
Environmental Specialist
Division of Surface Water

CM/mt

pc: Thomas Angelo, Director

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