

CSI - Ohio

The Common Sense Initiative

Business Impact Analysis

Agency Name: Ohio Environmental Protection Agency

Regulation/Package Title: Biosolids/Sewage Sludge

Rule Number(s): 3745-40-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12

Date: July 5, 2017

Rule Type:

☐ New

☒ Amended

☒ 5-Year Review

☐ Rescinded

The Common Sense Initiative was established by Executive Order 2011-01K and placed within the Office of the Lieutenant Governor. Under the CSI Initiative, agencies should balance the critical objectives of all regulations with the costs of compliance by the regulated parties. Agencies should promote transparency, consistency, predictability, and flexibility in regulatory activities. Agencies should prioritize compliance over punishment, and to that end, should utilize plain language in the development of regulations.

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Regulatory Intent

1. Please briefly describe the draft regulation in plain language.

Please include the key provisions of the regulation as well as any proposed amendments.

This rulemaking addresses Ohio EPA's sewage sludge and biosolids operating conditions and monitoring requirements for the disposal of sewage sludge and the beneficial use of biosolids, which are regulated through National Pollutant Discharge Elimination System (NPDES) permits. These programs regulate publicly and privately owned treatment works who dispose of sewage sludge, and beneficial users of biosolids.

For the purpose of this rulemaking, "biosolids" is defined as sewage sludge or mixtures containing sewage sludge that have been treated for beneficial use, and "sewage sludge" means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works.

Under the Clean Water Act (CWA), states to which the program is delegated are required to oversee all treatment works that treat domestic sewage sludge through land application, surface disposal or incineration. These requirements are incorporated into permits issued under Section 402 of CWA, under the appropriate provisions of other legislation, under EPA-approved state sludge management programs, or, in the case of a treatment works that is not subject to the above requirements, in a sludge-only permit.

U.S. EPA approved Ohio EPA's sludge management program in accordance with Title 40 of the Code of Federal Regulations (C.F.R.), Parts 123 and 501 of the State Sludge Management Program Regulations. Specifically, the approval is for the state's sewage sludge management program which addresses the land application of sewage sludge, surface disposal of sewage sludge, and the landfiling of sewage sludge.

Draft revisions for all of the rules listed below also include updates of references and style to conform to the Legislative Service Commission's rule drafting manual.

- Rule 3745-40-01 contains the definitions for terms used in Chapter 3745-40 of the Administrative Code. Draft revisions to this rule include the addition, deletion and clarification of several definitions.
- Rule 3745-40-02 contains the purpose, applicability, general requirements, exclusions and prohibitions for OAC Chapter 3745-40. Draft revisions to this rule include the addition of an option for Ohio EPA to establish procedures in an NPDES permit for non-traditional feedstock (NTF) approvals and the addition of new language for odor minimization during the treatment, storage, transfer, or disposal of sewage sludge or biosolids, and the beneficial use of biosolids.

- Rule 3745-40-03 contains the NPDES permit requirements and biosolids management plan requirements for this chapter. Draft revisions include the addition of the option for Ohio EPA to request standard operating procedures (SOPs) in permits, and the addition of more detailed requirements for biosolids management plans, including the requirement for spill contingency and odor management plans to be submitted.
- Rule 3745-40-04 covers the classification of biosolids. Draft revisions include new language for the equivalent process to further reduce pathogens, and additional requirements for the use of the specific oxygen uptake rate test.
- Rule 3745-40-06 covers beneficial use site authorizations for class B biosolids. Draft revisions include additional language to clarify that the site authorization process is an extension of the POTW's NPDES permit, and an expiration date for authorized beneficial use sites.
- Rule 3745-40-08 covers the requirements for the beneficial use of biosolids: general requirements, prohibitions, isolation distance requirements, site specific requirements, and additional site restrictions for the beneficial use of class B biosolids. Draft revisions address the use of the Phosphorus Index, and frozen and saturated ground restrictions.
- Rule 3745-40-12 covers compliance and enforcement, and spill notification requirements. Draft revisions include a caveat that the Director may require any person treating, storing, transferring or disposing of sewage sludge or biosolids that has resulted in a nuisance odor, to take measures to eliminate the nuisance odor, and the separation of discharge and spill requirements for clarity.
- Rules 3745-40-05, -07, -09, -10, -11 only have very minor revisions. Rule -05 covers information and notification requirements, rule -07 covers field storage requirements, rule -09 covers sampling methods, monitoring frequency, record retention and annual reporting, rule -10 covers facility storage requirements, and lastly rule -11 covers signage requirements.

2. Please list the Ohio statute authorizing the Agency to adopt this regulation.

The adoption of all of the rules in this package is authorized by Ohio Revised Code (ORC) 6111.03 and 6111.042.

3. Does the regulation implement a federal requirement? Is the proposed regulation being adopted or amended to enable the state to obtain or maintain approval to administer and enforce a federal law or to participate in a federal program?

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If yes, please briefly explain the source and substance of the federal requirement.

Yes, the regulations implement federal requirements. The sewage sludge program is implemented under the federal Clean Water Act and U.S. EPA has delegated the program to Ohio EPA for implementation.

In 1977, Congress amended section 405 of the Clean Water Act to add a new section 405(d), which required U.S. EPA to develop regulations containing guidelines for the use and disposal of sewage sludge. In 1987, Congress amended section 405 to set forth a comprehensive program for reducing the potential environmental risks and maximizing the beneficial use of sludge. The basis of the program Congress mandated to protect public health and the environment is the development of technical requirements or standards for sewage sludge and disposal, and the implementation of these standards, in part, through a permit program.

Ohio EPA received delegated authority from U.S. EPA on March 16, 2005 to implement the sewage sludge/biosolids program. Ohio EPA's rules in Ohio Administrative Code (OAC) Chapter 3745-40 are based on 40 C.F.R. Part 503.

4. If the regulation includes provisions not specifically required by the federal government, please explain the rationale for exceeding the federal requirement.

The Ohio legislature passed House Bill 197 in 2000, allowing Ohio EPA to regulate sewage sludge in Ohio, including regulating odor nuisances from sludge, a provision not contained in the Clean Water Act or subsequent federal regulations. Additional examples in sewage sludge regulations that may be considered more stringent than the federal counterpart include, but are not limited to:

- More stringent isolation distances for the beneficial use of class B and bulk exceptional quality biosolids to protect the public from contact and odors, and to mitigate the potential for biosolids to runoff into Ohio's streams, rivers and lakes and to protect groundwater from potential contamination;
- Restrictions on the beneficial use of biosolids on frozen or snow covered ground to minimize runoff of biosolids into Ohio's streams, rivers and lakes;
- Consideration of phosphorus as a limiting nutrient when determining agronomic rates for the beneficial use of biosolids to protect Ohio's streams, rivers and lakes;
- Signage requirements for class B biosolids land application sites to notify the public that the beneficial use of biosolids may occur or has occurred at a site to minimize inadvertent contact;

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- Screening requirement to remove plastics and other non-biodegradable trash prior to the beneficial use of biosolids;
- Requirement for site authorizations for class B biosolids, which act as an important oversight tool and allow the public to be aware of authorized beneficial use sites;
- Biosolids stockpiling restrictions to mitigate pathogen re-growth, nuisance odors, vector attraction, and the potential for runoff into waters of the state; and
- Minimum biosolids facility storage requirements to account for periods when biosolids cannot be beneficially used on crop fields.

The federal counterpart to Ohio's sewage sludge rules, 40 C.F.R. Part 503, was created to apply to all states but includes a provision allowing states to impose more stringent requirements based on environmental differences in each state to protect public health and the environment. In general, most of the more stringent requirements stem from public right to know issues and further protection of surface waters of the state.

5. What is the public purpose for this regulation (i.e., why does the Agency feel that there needs to be any regulation in this area at all)?

The primary objectives of the sewage sludge/biosolids program are to reasonably protect public health and the environment, and to encourage the beneficial use of biosolids. These regulations ensure that biosolids are treated and managed appropriately for the protection of public health and Ohio's surface and ground water quality. For instance, adherence to site restrictions and appropriate agronomic rates contained within the regulations minimizes the potential for nutrients to runoff into surface waters or to leach into groundwater sources, thereby providing protection of the public and the environment. The requirements to meet specific pathogen reduction treatment process alternatives, site restrictions, and sign placement at sites minimizes the potential for public contact with biosolids.

These regulations allow for the beneficial use of biosolids without the repercussions of sludge reaching surface and ground waters of the State, possibly resulting in contamination of recreational or drinking water sources. The biosolids rules also provide a means of safe disposal of sewage sludge from POTWs, while providing a benefit to the agricultural community, and discourage the overfilling of landfills.

In regard to Ohio's regulations, although they are based on the federal requirements, by adopting state rules, Ohio EPA has made the requirements clearer, easier to read and understand and contain enough detail to make the permit process more transparent and predictable to the regulated community. As noted in question #4 above, Ohio EPA has also included a few tailored provisions to be protective of water quality in Ohio.

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6. How will the Agency measure the success of this regulation in terms of outputs and/or outcomes?

One of the purposes of the sludge rules is to encourage the beneficial use of biosolids. An increase in the number of facilities that beneficially use biosolids in Ohio would be indicative of a successful program. This can be evaluated through the generation of annual sludge disposal reports that summarize the amount of sludge treated for beneficial use, landfilled, transferred to other POTWs or incinerated for each year. The Agency would consider the program to be successful if the amount of biosolids that are land applied gradually increases each year.

The Agency also monitors the program through regular inspections of POTWs and review of annual sludge reports to verify compliance with the sludge rules. The Agency also performs inspections in response to public complaints regarding the beneficial use of biosolids. Other measures of success include a reduction in the number of compliance violations found during these inspections and report reviews and a reduction in the number of complaints received regarding beneficial use.

In general, Ohio EPA Division of Surface Water measures the success of its programs through biological and chemical sampling and determines whether or not a water body is attaining its designated uses. The status or health of Ohio's streams, rivers and lakes is reported every two years in the Integrated Water Quality Monitoring and Assessment Report, which is available on Ohio EPA's website at:

<http://www.epa.ohio.gov/dsw/tmdl/OhioIntegratedReport.aspx>.

Development of the Regulation

7. Please list the stakeholders included by the Agency in the development or initial review of the draft regulation.

If applicable, please include the date and medium by which the stakeholders were initially contacted.

Ohio EPA sent an electronic notification of Early Stakeholder Outreach to the Division of Surface Water's rulemaking interested party list and posted the Early Stakeholder Outreach fast sheet on the Division's website on November 30, 2015. The comment period deadline was January 14, 2016.

Stakeholders were contacted pre-ESO via phone and email. A list of stakeholders contacted is below:

- OWEA Residuals Committee
- Quasar
- Synagro
- Burch Hydro, Inc.
- Agri-Sludge, Inc.
- Alloway Labs
- City of Defiance
- City of Wauseon
- City of Columbus
- City of Jackson
- City of Sidney
- City of Alliance
- City of Massillon

8. What input was provided by the stakeholders, and how did that input affect the draft regulation being proposed by the Agency?

Two comment letters were received during the Early Stakeholder Outreach comment period, from Synagro and City of Columbus Department of Public Utilities. Neither party supported the removal of using a pathogen equivalency committee for pathogen reduction alternative 16 (P-16), but the Agency ultimately decided to remove that requirement, replaced with language stating that sewage sludge that is used or disposed of shall be treated in a process that is equivalent to a process to further reduce pathogens, as determined by the Director.

Synagro did not support the possible prohibition on nighttime application of biosolids to land. The Agency ultimately agreed to remove this possible provision. Synagro provided favorable comments for other changes proposed by Ohio EPA.

9. What scientific data was used to develop the rule or the measurable outcomes of the rule? How does this data support the regulation being proposed?

Scientific data used to support this rulemaking include:

- 40 C.F.R. Part 503 Standards for the Use or Disposal of Sewage Sludge.
- Senate Bill 1 of the 131st General Assembly.
- Ohio Department of Agriculture's Manure Rules (OAC 901:10-2-14)

These items form the basis for the program requirements in Ohio EPA's biosolids rules.

10. What alternative regulations (or specific provisions within the regulation) did the Agency consider, and why did it determine that these alternatives were not appropriate? If none, why didn't the Agency consider regulatory alternatives?

Ohio EPA has reviewed revisions to federal and state laws and rules since the last five-year rule review and determined that revisions were necessary to bring clarity and connection between Ohio Department of Agriculture's manure rules (referenced in #9), Senate Bill 1 of the 131st General Assembly, and other statutory requirements.

11. Did the Agency specifically consider a performance-based regulation? Please explain. *Performance-based regulations define the required outcome, but don't dictate the process the regulated stakeholders must use to achieve compliance.*

Yes, the Agency already uses performance-based regulations for sewage sludge to mirror 40 C.F.R. Part 503.

For example, the Agency lists sixteen options that can be used to meet the class B pathogen reduction alternative, but permittees are allowed to meet the requirement by an equivalent process to further reduce pathogens with the Director's approval.

12. What measures did the Agency take to ensure that this regulation does not duplicate an existing Ohio regulation?

Ohio EPA is the delegated state agency for the biosolids program. Only a review of existing Ohio EPA rules was necessary and no duplication was found.

13. Please describe the Agency's plan for implementation of the regulation, including any measures to ensure that the regulation is applied consistently and predictably for the regulated community.

The Agency will continue to implement the rules through current practices, which include inspections and reporting requirements to ensure the rules are applied consistently throughout the state.

Adverse Impact to Business

14. Provide a summary of the estimated cost of compliance with the rule. Specifically, please do the following:

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- a. **Identify the scope of the impacted business community;**
- b. **Identify the nature of the adverse impact (e.g., license fees, fines, employer time for compliance); and**
- c. **Quantify the expected adverse impact from the regulation.**

The adverse impact can be quantified in terms of dollars, hours to comply, or other factors; and may be estimated for the entire regulated population or for a “representative business.” Please include the source for your information/estimated impact.

No new costs will be incurred through the draft revisions in this rulemaking.

In regard to the existing biosolids program as a whole:

- a. The impacted business community will include publicly and privately owned treatment works who dispose of sewage sludge and beneficial users of biosolids.
- b. The nature of the adverse impact may include: a NPDES permit fee of \$200.00 obtained through Ohio EPA; all necessary treatment of the sewage sludge, if needed; proper maintenance and operational expense; sludge sample collection and proper laboratory analysis; compliance monitoring paperwork, and any potential actions against a treatment works for noncompliance issues.
- c. The cost of compliance for a treatment works with these rules is site specific and will vary greatly based on the type of sewage treatment, the amount of sludge generated by a POTW, the types of samples and the amount of sampling required, and the amount of treatment that would be required to satisfy the limitations.

A small POTW may only have to sample yearly, while a large POTW may have to sample monthly, based on the amount of sludge generated annually. POTWs may also choose the method for disposal of generated sewage sludge that is the most cost effective for that treatment works. This could include land application, landfilling or transfer to another treatment works.

15. Why did the Agency determine that the regulatory intent justifies the adverse impact to the regulated business community?

In regard to the National Pollutant Discharge Elimination System (NPDES) and biosolids programs as a whole, the U.S. Congress made the determination that the intent (fishable, swimmable waters) justifies the adverse impact to the regulated business community when they passed the initial and subsequent amendments to the Federal Water Pollution Control Act (also known as the Clean Water Act).

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In regard to the current rulemaking, the intent of the biosolids program is to protect surface and ground waters of the state from adverse impacts resultant from the treatment of sewage sludge and the beneficial use of biosolids. This program ensures that POTWs appropriately treat their sludge for the safety and health of humans and the environment, while encouraging the beneficial use of biosolids. Revisions to the draft rules in this rulemaking have no additional impact on the business community.

Regulatory Flexibility

16. Does the regulation provide any exemptions or alternative means of compliance for small businesses? Please explain.

Overall, the regulations do not provide exemptions for small businesses. Corresponding federal regulations and the Ohio Revised Code do not provide for exemptions or alternative means of compliance for any permittees. The regulations are applied evenly regardless of the size of the treatment works. There are provisions in the rules to lessen the regulatory burden on treatment works, including the possibility of a waiver of any requirement issued at the discretion of the Director that will not adversely impact public health and the environment or be any less stringent than 40 C.F.R. Part 503. POTWs have several different options for sludge disposal, and can choose which option is the most economical and cost effective for their facility. Small POTWs have reduced sampling requirements due to the small amount of sludge generated on an annual basis. Generally, they are required to monitor the sludge once per year, rather than once per month as required for most larger POTWs.

17. How will the agency apply Ohio Revised Code section 119.14 (waiver of fines and penalties for paperwork violations and first-time offenders) into implementation of the regulation?

The failure to get a permit under these chapters is not considered a paperwork violation and would not fall under the scope of ORC 119.14. However, the Agency uses enforcement discretion and first-time violations of reporting requirements is typically waived.

18. What resources are available to assist small businesses with compliance of the regulation?

The following resources are available:

- Ohio EPA's Office of Compliance Assistance and Pollution Prevention (OCAPP) is a non-regulatory program that provides information and resources to help small businesses

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comply with environmental regulations. OCAPP also helps customers identify and implement pollution prevention measures that can save money, increase business performance and benefit the environment. Services of the office include a toll-free hotline, on-site compliance and pollution prevention assessments, workshops/training, plain-English publications library and assistance in completing permit application forms. Additional information is available at:

<http://www.epa.ohio.gov/ocapp/ComplianceAssistanceandPollutionPrevention.aspx>.

- Ohio EPA also has a Customer Support Center web page (<https://ohioepa.custhelp.com/app/home/session/L3RpbWUvMTQ0NTg2NTYzNi9zaWQvX1hTRkZWem0%3D>) that contains links to several items to help businesses navigate the permit process, including the Permit Wizard, Frequently Asked Questions (FAQ), training and subscriptions to various program listservs.
- Ohio EPA maintains the Compliance Assistance Hotline 800-329-7518, weekdays from 8:00 a.m. to 5:00 p.m.
- Ohio EPA, Division of Environmental and Financial Assistance's Compliance Assistance Unit provides technical support to small (less than 0.5 million gallons per day) wastewater treatment plants. Additional information is available at: http://epa.ohio.gov/dsw/compl_assist/compasst.aspx.
- U.S. EPA Small Business Gateway also has information on environmental regulations for small businesses available at: <https://www.epa.gov/resources-small-businesses> and a Small Business Ombudsman Hotline 800-368-5888.
- Ohio EPA's Biosolids Program Coordinator, Betsy VanWormer, is available to answer questions by calling 614-644-2001 and email at betsy.vanwormer@epa.ohio.gov.
- Ohio EPA's Biosolids Program web page (<http://epa.ohio.gov/dsw/sludge/biosolid.aspx>) contains guidance documents, forms and answers to frequently asked questions regarding the biosolids program.
- U.S. EPA's Biosolids Program web page (<https://www.epa.gov/biosolids>) contains guidance documents and example compliance documents for the biosolids program.