



## Ohio Administrative Code

### Rule 3745-40-02 Purpose, applicability, general requirements, exclusions and prohibitions.

Effective: December 1, 2018

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[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules and federal statutory provisions referenced in this rule, see rule 3745-40-01 of the Administrative Code.]

#### (A) Purpose.

(1) The purpose of this chapter is all of the following:

- (a) To establish standards applicable to the treatment, storage, transfer or disposal of sewage sludge or biosolids.
- (b) To establish standards applicable to the beneficial use of biosolids.
- (c) To reasonably protect public health and the environment.
- (d) To encourage the beneficial use of biosolids.
- (e) To minimize the creation of nuisance odors.

(2) Said standards under this chapter are consistent with section 405 of the federal "Water Pollution Control Act" and regulations adopted thereunder.

#### (B) Applicability.

(1) Except as provided in paragraphs (B)(2) to (B)(2)(c)(v) of this rule and as noted within other rules in this chapter, this chapter is applicable to both of the following:

- (a) The treatment, storage, transfer, or disposal of sewage sludge or biosolids.



(b) The beneficial use of biosolids.

(2) The director, or an authorized representative, may waive any requirement of this chapter or impose a less stringent requirement than that imposed by this chapter, provided that all of the following are abided by:

(a) The authorization to waive a requirement will not result in a less stringent requirement than required in 40 C.F.R. 503.

(b) Waiving the requirement will not adversely affect public health or the environment.

(c) The permittee has requested and received authorization from the director or an authorized representative, prior to treatment, storage, transfer or disposal of the sewage sludge or biosolids or the beneficial use of biosolids. The letter requesting authorization shall include all of the following:

(i) The specific requirement of these rules for which the waiver is being requested.

(ii) The volume of sewage sludge or biosolids affected by the waiver being requested.

(iii) If applicable, the location, including the county, township and the latitude and longitude, where the waiver is being requested.

(iv) An explanation of why the waiver being requested will not adversely affect the public health or the environment.

(v) An explanation of why the waiver being requested is necessary.

(C) General requirements.

(1) In accordance with Chapter 3745-33 of the Administrative Code, an NPDES permit is required prior to the discharge of any pollutant to surface waters of the state.



(2) General requirements for sewage sludge.

(a) The treatment, storage, transfer, or disposal of sewage sludge shall be in compliance with this chapter and the conditions of an NPDES permit or a biosolids management plan.

(b) In accordance with rules adopted under section 3734.03 of the Revised Code and licensed under section 3734.05 of the Revised Code, sewage sludge that is disposed of in a landfill shall be in compliance with the requirements of this chapter, and rules adopted under Chapter 3734. of the Revised Code.

(c) Sewage sludge may be transferred to another treatment works provided that said treatment works has an NPDES permit or a management plan for the treatment, storage, transfer, or disposal of sewage sludge or biosolids, or for the beneficial use of biosolids.

(d) The treatment, storage, transfer or disposal of sewage sludge shall be done in a manner as to minimize odors.

(3) General requirements for biosolids.

(a) Prior to the beneficial use of biosolids, influent wastewater and septage, or sewage sludge at a treatment works shall be treated by a process such as physical screening or another method to significantly remove foreign/inert matter. Meeting this requirement may be accomplished by any of the following:

(i) Screening influent wastewater and influent septage through a bar screen with a maximum aperture of five-eighths inch (1.59 centimeters) designed to screen the average daily design flow.

(ii) Screening all biosolids through a bar screen with a maximum aperture of five-eighths inch (1.59 centimeters) prior to beneficial use.

(iii) Obtaining approval from the director for an alternative method that achieves a removal rate equal to or greater than that achieved by the screening standards in paragraph (C)(3)(a)(i) or (C)(3)(a)(ii) of this rule.



(a) The alternative method may be achieved by testing biosolids to ensure they contain less than one point zero per cent foreign/inert matter by weight on a "number 5 sieve" (four millimeter screen), with no more than one fourth of this matter being plastic. Samples shall be prepared in accordance with U.S. EPA's "160.3 Methods for Chemical Analysis of Water and Wastes." Foreign/inert matter content shall be determined by passing a dried, weighed sample of not less than one hundred grams of biosolids through a U.S. standard "number 5 sieve" (four millimeter). The material remaining on the screen shall be inspected and the foreign/inert matter shall be separated and weighed. The weight of the foreign/inert matter divided by the total weight of the biosolids sample and multiplied by one hundred shall be the per cent dry weight of the foreign matter content. The minimum frequency of monitoring for foreign/inert matter shall be in accordance with table B-1 of rule 3745-40-09 of the Administrative Code.

[Comment: Foreign/inert matter is considered solid waste and should not be part of a beneficial use application. Foreign/inert matter should be disposed of within a landfill. When a treatment works is cleaning out a digester or other sewage sludge treatment unit that contains sewage sludge from a time period when influent wastewater or septage was not screened, the treatment works should inspect the biosolids to determine if screening to remove foreign/inert matter is needed.]

(b) The treatment, storage, transfer, disposal, or beneficial use of biosolids shall be in compliance with this chapter and the conditions of an NPDES permit or a biosolids management plan.

(c) Biosolids that are disposed of in a landfill, in accordance with rules adopted under section 3734.03 of the Revised Code and licensed under section 3734.05 of the Revised Code shall be in compliance with the requirements of this chapter, and shall be in compliance with the rules adopted under Chapter 3734. of the Revised Code.

(d) Biosolids may be transferred to another treatment works provided that said treatment works has an NPDES permit or a biosolids management plan for the treatment, storage, transfer, or disposal of sewage sludge or biosolids, or the beneficial use of biosolids.

(e) The treatment, storage, transfer, disposal, or beneficial use of biosolids shall be done in a manner as to minimize odors.



(4) General requirements for acceptance of non-traditional or alternative feedstocks for anaerobic digestion. Non-traditional feedstocks (NTFs) shall be approved by the director prior to use in anaerobic digestion.

(a) A request for approval to accept an NTF shall be submitted on forms approved by Ohio EPA and include, at a minimum, the following, unless waived or modified in writing by Ohio EPA:

(i) The name of the treatment works where the NTF will be accepted.

(ii) The source or generator of the NTF and the current disposal method of the NTF.

(iii) A detailed description of the NTF including analytical data that identifies any known or potential parameters of concern (POC) that may cause or threaten to cause an adverse effect on the anaerobic digestion process or to public health and safety or the environment. The analytical data shall be sufficient to characterize representative conditions of the generation of the NTF. Ohio EPA may request additional analytical data after an initial review of the request for approval.

(iv) A description and flow diagram of the facility and process that generates the NTF.

(v) For each treatment works where the NTF will be accepted, the maximum amount of the NTF included in the request for approval, the frequency of acceptance, and the average amount expected at that frequency.

(vi) A copy of any material safety data sheets (MSDS) and hazardous waste determinations for the NTF.

(vii) Results of pilot scale digester studies that include, at a minimum, the following:

(a) A description of the operational conditions used during the study that shall simulate typical digester conditions, including mixing the NTF with other feedstocks expected to be present to determine how feedstocks may interact.



- (b) A measure of the biodegradability of the NTF and its potential to produce methane via anaerobic digestion.
  - (c) The degree to which the NTF may inhibit methane production.
  - (d) The concentration of each POC before and after digestion.
  - (e) A determination of the potential for odor generation from the acceptance and management of the NTF.
  - (viii) A detailed description of any impact, including the methods that will be used to control the impacts, that may result from the following:
    - (a) Acceptance of the NTF in regard to operation of the anaerobic digester.
    - (b) Beneficial use of biosolids generated during anaerobic digestion.
    - (c) The management of odors.
  - (ix) A detailed description of any special management or storage requirements due to the physical, biological or chemical characteristics of the NTF.
  - (x) Any other information deemed necessary by Ohio EPA.
- (b) A request for approval to accept an NTF that fails to provide Ohio EPA with required information may be considered defective. Ohio EPA may either request additional information or return the application to the applicant without further processing. An indication of the deficiency shall accompany the application returned.
- (c) The director or an authorized representative shall not approve an NTF request submitted in accordance with this rule unless all of the following are determined:
- (i) The use of the NTF is technically feasible for anaerobic digestion.



- (ii) Methane production shall be maintained or improved in the anaerobic digester with the addition of NTF.
- (iii) The treatment works is in substantial compliance with this chapter and all other applicable laws and regulations.
- (iv) The applicant has demonstrated that the acceptance and processing of the NTF and subsequent beneficial use of biosolids will not cause or threaten to cause an adverse impact on public health and safety or the environment, or generate nuisance odors.
- (v) The acceptance and processing of the NTF is unlikely to cause violations of this chapter, Chapter 6111., 3704., or 3734. of the Revised Code, or any other applicable federal or state laws or regulations.
- (d) The director or an authorized representative may establish additional conditions in the approval of the NTF, including but not limited to, the following:
  - (i) Additional monitoring for any POCs before and after digestion.
  - (ii) Additional monitoring of the beneficial use of biosolids containing the digested NTF (e.g. soil, field tile runoff after rain event).
  - (iii) Periodic reporting of the volume of NTF accepted and the results of any required additional monitoring.
  - (iv) Minimizing odor generation and preventing nuisance odors.
  - (v) Conditions on acceptance of the NTF that address any of the following:
    - (a) Volume of the NTF to be accepted.
    - (b) Frequency of acceptance of the NTF.



- (c) Anaerobic digester operational conditions, when the NTF is included.
  - (d) Potential interactions of the NTF with other feedstocks.
  - (e) POC concentrations in the NTF.
  - (f) Changes in the NTF generating facility or process.
  - (g) Other conditions determined by the director or an authorized representative to be necessary to protect public health or safety or the environment.
- (e) The director may revoke approval of the acceptance of the NTF if any of the following have occurred:
- (i) Acceptance of the NTF has caused or is causing adverse effects on the anaerobic digestion process or on public health or safety or the environment.
  - (ii) Acceptance of the NTF is causing a nuisance.
  - (iii) Acceptance of the NTF has caused or is causing violations of this chapter or any applicable state or federal laws or regulations.
- (D) Exclusions. This chapter does not establish requirements for any of the following:
- (1) The ash generated during incineration of sewage sludge or biosolids.
  - (2) The ash generated during the incineration of sewage sludge or biosolids and other wastes.
  - (3) Sewage sludge or biosolids co-fired in an incinerator with other wastes or for the incinerator in which sewage sludge or biosolids and other wastes are co-fired.
  - (4) The use or disposal of grit or screenings.





(5) Sewage sludge or biosolids, where either of the following apply:

(a) There is a concentration of polychlorinated biphenyls equal to or greater than one milligram per kilogram of total solids on a dry weight basis.

[Comment: Sewage sludge shall be analyzed in accordance with United States environmental protection agency method 8082A "PCBs by Gas Chromatography," for purposes of this exclusion.]

(b) The sewage sludge or biosolids are determined to be hazardous waste as defined in section 3734.01 of the Revised Code.

(6) Sludge, where the sludge is either of the following:

(a) Generated at an industrial facility during treatment of the facility's industrial wastewater with or without sewage present.

(b) Generated during the treatment of drinking water.

(7) The treatment, storage, transfer, beneficial use or disposal of any of the following:

(a) Domestic, commercial or industrial septage, unless septage from multiple sources is combined at a single treatment works prior to treatment, storage, transfer, disposal or beneficial use. In this case, the treatment works shall be installed in accordance with Chapter 3745-42 of the Administrative Code and operated in compliance with this chapter and the conditions of an NPDES permit.

[Comment: For the purpose of this rule, treatment works does not include vehicles used for the transportation of septage.]

(b) Grease trap waste.

(c) Final effluent.



(E) Prohibitions.

(1) The surface disposal of sewage sludge or biosolids is prohibited.

(2) Sewage sludge or class B biosolids shall not be placed on any location that is not, as applicable, authorized for beneficial use, facility storage, field storage or a regional storage facility. Locations that would not be authorized for beneficial use, facility storage, field storage or a regional storage facility include, but are not limited to, public or private roadways, parking lots and sidewalks.

(3) The distribution of biosolids that are not exceptional quality, as described in rule 3745-40-04 of the Administrative Code, is prohibited.