



Ohio Administrative Code Rule 3745-42-11 Holding tanks.

Effective: February 23, 2018

(A) Purpose. The purpose of this rule is to establish the permit to install application requirements, management plan application requirements, design standards, siting restrictions and operation and maintenance requirements for any holding tank.

(B) Exclusions from this rule. A permit to install or management plan is not required for any of the following:

(1) Any portable toilet that does not have a connection to a water supply.

(2) A portable unit for the storage of sewage or industrial waste that meets all of the following:

(a) Is dropped off and picked up for off-site recycling, treatment or disposal, including but not limited to "totes" or "roll-offs".

(b) Has a total sewage storage volume of five hundred gallons or less.

[Comment: Some portable units include individual storage tanks for the discharge from sinks and the discharge from toilets. The total additive volume of both tanks shall not exceed five hundred gallons.]

(3) A holding tank that is regulated by rules 3745-55-90 to 3745-55-99 of the Administrative Code or rules 3745-66-90 to 3745-66-101 of the Administrative Code.

[Comment: These rules generally cover hazardous waste tank systems.]

(4) A holding tank that is an underground storage tank and is regulated by rule 1301:7-9-06 of the Administrative Code.

[Comment: These rules generally cover underground petroleum storage tanks.]



(C) Prohibitions and restrictions.

(1) A sewage holding tank for existing onsite sewage disposal system or other unauthorized discharging system prohibition. Except as provided in paragraphs (C)(3) to (C)(4)(d)(iii) of this rule, a sewage holding tank shall not be installed to replace an existing onsite sewage disposal system or other unauthorized discharging system except in the following instances:

(a) When the existing onsite sewage disposal system or other unauthorized discharging system has resulted in a nuisance, a human health risk or a risk to the environment and centralized sewers are not available and there is no other viable treatment alternative for the site.

(b) When the existing onsite sewage disposal system or other unauthorized discharging system has resulted in an un-permitted discharge to waters of the state and centralized sewers are not available and there is no other viable treatment alternative for the site.

(2) New sewage holding tank prohibition. Except as provided in paragraphs (C)(2)(a) to (C)(2)(c) of this rule and paragraphs (C)(3) to (C)(4)(d)(iii) of this rule, a new sewage holding tank shall not be installed to serve a building that is currently not served by a disposal system except in the following instances:

(a) Sanitary sewers are currently unavailable and inaccessible, but they are under construction or a contract for construction has been signed at the time the permit to install application is received by the director or an authorized representative.

(b) Sewers will be available within twelve months of the date the permit to install application was received.

(c) The building will be connected to sanitary sewers within twelve months of the date the permit to install application was received.

(3) The director may allow a sewage holding tank, provided it is located within a recreational vehicle park, a recreation camp, a combined park-camp, or a temporary park-camp for which Ohio EPA



shall adopt rules under section 6111.46 of the Revised Code and is designed in accordance with this rule.

[Comment: The definitions for "recreational vehicle park", a "recreation camp", a "combined park-camp", and a "temporary park-camp" can be found in Chapter 3701-26 of the Administrative Code.]

(4) The director may allow a sewage holding tank, when the sewage holding tank is designed in accordance with this rule and any of the following scenarios apply:

(a) Will be utilized as a vault privy and not connected to a water supply.

(b) Will be a proprietary stand alone, self-contained system, not connected to a water supply other than a water tank that is constructed as part of the unit and the volume of the water tank is less than the volume of the sewage holding tank, and will not serve a residence or business.

[Comment: A restroom facility at a park is an example of when this type of holding tank system could be approved.]

(c) Will be used for not more than one occurrence of less than twenty-one consecutive days in any calendar year.

(d) Will be used to serve a temporary construction trailer, provided the temporary construction trailer meets all of the following conditions:

(i) Will be used solely for business purposes.

(ii) Will not be used as a residence.

(iii) Will be removed from service and decommissioned in accordance with paragraphs (I) to (I)(3)(d) of this rule.

(5) The director may allow a sewage holding tank not otherwise authorized by this rule, when the sewage holding tank is designed in accordance with this rule and extreme site circumstances warrant



no other viable option. For the purposes of this rule, extreme site circumstances may include, but are not be limited to, the following:

- (a) Project site restrictions provide no feasible discharge location, and no adequate soils exist for soil absorption.
- (b) Sewage chemical or biological characteristics are not conducive or amenable to standard biological treatment alternatives.
- (c) Sewage flow is so variable it is not conducive or amenable to standard biological treatment alternatives.

A sewage holding tank can only be allowed in these circumstances after all viable discharging or soil absorption systems have been deemed technically ineffective, sanitary sewers are not available as determined by rule 3745-42-07 of the Administrative Code, the property was legally platted prior to the effective date of this rule, and there is no change in use of the property from that which was anticipated when the property was platted.

(D) Permit to install exemptions. A permit to install is not required for the modification of a holding tank, when the modification will do either of the following:

- (1) Replace a holding tank's equipment or parts with like equipment or like parts.
- (2) Make minor repairs or minor modifications, as determined by the director or an authorized representative, that do not change the overall capacity, operation or maintenance of the holding tank.

[Comment: Regardless of a permit to install exemption, the director may require a holding tank management plan, in accordance with paragraphs (G)(3) to (G)(3)(b)(iii) of this rule.]

(E) General requirements: permits to install, holding tanks that contain industrial waste and management plans.

- (1) Permit to install requirements.



(a) Except as provided in paragraphs (B) and (D) of this rule, a person shall not cause, permit or allow the installation or modification of a holding tank without first obtaining a permit to install from the director.

(b) For any holding tank to be used as a replacement for an existing sewage disposal system, the applicant shall demonstrate to the director's satisfaction that connecting to a sanitary sewer or constructing an onsite sewage disposal system is not feasible. At a minimum, the applicant shall submit the following information to the director or an authorized representative for consideration and determination:

(i) A cost comparison of disposal system alternatives that includes the installation and annual operating costs for all of the following:

(a) A holding tank.

(b) Connecting to sanitary sewers.

(c) At least two other onsite disposal system alternatives.

(ii) Demonstration that the cost of connecting to sewers or installing and operating the onsite alternatives is not affordable.

(iii) A letter from the local sewer authority, locating the nearest sanitary sewer.

(iv) A site plan for the lot where the holding tank is being proposed, showing the size and location of any building and the size and location of any proposed holding tank.

(v) Demonstration that a sewage disposal system is required for the building because the state or local plumbing code requires that restrooms or running water be provided for the building.

(vi) Whether the building that the holding tank will serve is proposed or existing.



(vii) A narrative description of the operations, including all of the following:

(a) The number of employees or occupants that will generate sewage.

(b) The average daily flow estimate and the peak daily flow estimate of sewage to be generated at the facility over the course of a week.

(c) The types of wastewater generated.

(d) Whether the operations will be seasonal or year-round.

(viii) A site specific soil evaluation that includes a site specific soil map that locates, as necessary, any soil probes, any soil delineations, any soil pits or any soil borings. In addition to the information in the general soil survey, the location of any soil delineations and the location and number of soil probes, pits or borings necessary to describe the soil conditions shall be determined by a professional soil scientist for the site. The soil delineations, soil probes, soil pits or soil borings shall include the following:

(a) Be performed or evaluated by a professional soil scientist.

(b) Be taken prior to any construction activities.

(c) Be done to a minimum depth of thirty inches below natural grade. To protect public health or the environment, the director or authorized representative may require deeper soil probes, soil pits or soil borings. In areas where glacial till and fractured bedrock substratum soils are in close proximity, the soil investigation shall be done to a depth of at least fifty inches or until bedrock is encountered.

[Comment: The Ohio department of agriculture's division of soil and water conservation web site provides additional information regarding a site's specific soils:

<http://www.agri.ohio.gov/divs/SWC/SWC.aspx>. To locate a professional soil scientist in your area, you can visit the association of Ohio pedologists web link at <http://www.ohiopedologist.com>.]

(2) General requirements for holding tanks that contain industrial waste.



(a) Except as provided in paragraph (E)(2)(b) of this rule, for any holding tank that will contain industrial waste, the proposed holding tank shall be used exclusively to collect, hold or store industrial waste.

(b) The director may allow a holding tank to collect, hold or store both industrial waste and sewage provided the following:

(i) The maximum daily flow of sewage flow into the holding tank does not exceed twenty-five gallons per day.

(ii) The holding tank is designed as if it contains solely industrial waste, in accordance with this rule.

(3) General requirements for a sewage holding tank management plan.

(a) For any sewage holding tank installed after September 1, 2009, a person shall not cause, permit or allow the operation of a holding tank without first obtaining a holding tank management plan in accordance with paragraph (G) of this rule.

(b) Fees. The fee for a holding tank management plan application is as follows.

[Comment: Information regarding Ohio EPA fees can be found in section 3745.11 of the Revised Code.]

(i) When a holding tank management plan is part of the permit to install application, the only application fee required is the permit to install application fee. No separate application fee or director's action is required for a holding tank management plan.

(ii) When any holding tank management plan is submitted in the absence of a permit to install, such as a renewal or as a result of noncompliance in accordance with paragraph (J) of this rule, the holding tank management plan application fee shall apply.



(iii) When a holding tank management plan application is submitted as a termination of the holding tank management plan, no fee is required.

(F) Design requirements for a holding tank that will contain sewage or industrial waste.

(1) For any in-ground or partially in-ground holding tank, an applicant shall, at a minimum, incorporate the following into the applications and into the design and operation of the holding tank and related equipment:

(a) The inner surface or the lining of the holding tank shall be compatible with the sewage or industrial waste that the tank is proposed to hold.

(b) The holding tank shall not leak from its sides, bottom, seams or top.

(c) The holding tank shall meet or exceed H 20 loading if the tank is completely below ground.

(d) The holding tank foundation shall be capable of supporting the holding tank when the tank is full of sewage or industrial waste and shall be capable of preventing uplift of the tank when the tank is empty.

(e) The holding tank shall be designed and constructed without storm water connections and to prevent inflow and infiltration from entering the holding tank.

(f) For any holding tank connected to a water supply, the tank shall be equipped with the following features:

(i) A liquid level device that is connected to an autodialer and a light alarm system located in a staffed location where, to the greatest extent practicable, the alarm will be heard by employees present on site, or an audio/visual alarm located in a visible location above ground at the tank's site. The alarm system shall be activated when the level of sewage or industrial waste reaches seventy-five per cent of the holding tank capacity and the alarm signal shall be transmitted to a staffed location or clearly visible to a staffed location.



(ii) Odor control measures, if necessary, to prevent nuisance conditions.

(g) The tank shall be labeled, or a legible sign shall be placed immediately adjacent to the holding tank, with the words "Non-Hazardous Sewage" or "Non-Hazardous Industrial Waste," whichever term applies to the tank in question.

(h) Signs that direct persons to notify the Ohio environmental protection agency's spill hotline (1-800-282-9378) in an event of a release shall be placed in clearly visible locations around the tank.

(i) The application shall include an operation and maintenance plan that, at a minimum, contains all of the following:

(i) A schedule for emptying the waste from the tank and hauling the waste for recycling, treatment or disposal.

(ii) Measures for spill control.

(iii) Standard operating procedures for filling, operating, and emptying the tank.

(iv) As applicable, a plan for the operation and maintenance of the equipment required in paragraph (F)(1)(f) of this rule.

(j) For any in-ground or partially in-ground holding tank that is designed to contain, store or hold sewage, the holding tank shall meet the following limitations:

(i) Unless otherwise determined by the director, the maximum allowable design flow into the tank shall not exceed six hundred gallons per day.

(ii) The design of the tank shall provide for a minimum storage capacity of ten times the daily design flow.

(iii) The tank volume shall be greater than or equal to one thousand gallons and less than or equal to seven thousand five hundred gallons.



(2) For any above-ground holding tank, an applicant shall, at a minimum, incorporate the following into the applications and into the design and operation of the holding tank and related equipment:

(a) The inner surface or the lining of the holding tank shall be compatible with the sewage or industrial waste that the tank is holding.

(b) The holding tank shall be equipped with the following features:

(i) For a remotely or automatically filled holding tank, a liquid level device connected to an autodialer and a light alarm system located in a staffed location, or a liquid level device connected to an audio/visual alarm located in a visible location above ground at the tank's location. The alarm system shall be activated when the level of sewage or industrial waste reaches seventy-five per cent of the holding tank capacity and the alarm signal shall be transmitted to a staffed location or clearly visible to a staffed location.

(ii) For a manually filled holding tank, a visual or sight glass type of level measurement.

(iii) Odor control measures, if necessary, to prevent nuisance conditions.

(c) The tank shall be labeled, or a legible sign shall be placed immediately adjacent to the holding tank, with the words "Non-Hazardous Sewage" or "Non-Hazardous Industrial Waste," whichever term applies to the tank in question.

(d) Signs that direct persons to notify the Ohio environmental protection agency's spill hotline (1-800-282-9378) in an event of a release shall be placed in clearly visible locations around the tank.

(e) The application shall include an operation and maintenance plan that, at a minimum, contains all of the following:

(i) A schedule for emptying the waste from the tank and hauling the waste to off-site recycling, treatment or disposal.



(ii) Measures for spill control.

(iii) Standard operating procedures for filling, operating, and emptying the tank.

(iv) As applicable, a plan for the operation and maintenance of the equipment required in paragraph (F)(2)(b) of this rule.

(f) In addition, above-ground holding tanks that are designed to contain, store or hold sewage shall meet the following limitations:

(i) Unless otherwise determined by the director, the maximum allowable design flow into the tank shall not exceed six hundred gallons per day.

(ii) The design of the tank shall provide for a minimum storage capacity of ten times the daily design flow.

(iii) The tank volume shall be greater than or equal to one thousand gallons and less than or equal to seven thousand five hundred gallons.

(3) Except as provided in paragraph (F)(3)(d) of this rule, secondary containment, as described in this rule, shall be provided for above-ground, in-ground or partially in-ground holding tanks that contain, store or hold industrial waste. Secondary containment is not required for above-ground, in-ground or partially in-ground tanks that only contain, store or hold sewage unless the director or an authorized representative determines that secondary containment for such tanks is needed to protect human health or the environment.

(a) The secondary containment system shall be designed, installed, and operated to prevent any migration of waste from the tank to the soil, ground water, or surface water. The secondary containment system shall be capable of detecting the release of any waste from the tank, and collecting such released waste until the collected waste is removed.

(b) Secondary containment system for holding tank containing industrial waste shall be, at a minimum, all of the following:



(i) Constructed of or lined with materials that are compatible with the wastes to be placed in the holding tank and have sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which they may be exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from nearby vehicular traffic).

(ii) Placed on a foundation or base capable of supporting the secondary containment system and resisting pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or for any in-ground or partially in-ground holding tank, preventing failure due to uplift.

(iii) Equipped with leak detection systems that are designed and operated to detect the failure of either the holding tank or the secondary containment structures or any release of industrial waste or accumulated waste in the secondary containment system within twenty-four hours of the leak, or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within twenty-four hours.

(iv) Sloped or otherwise designed to drain and facilitate removal of waste resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within twenty-four hours of becoming aware of the spill or leak, or as soon as possible to prevent harm to human health or the environment, if removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four hours.

(c) Secondary containment for holding tanks containing industrial waste shall include one or more of the following devices:

(i) A liner (external to the tank).

(ii) A vault.

(iii) A double-walled tank.



(iv) An equivalent device as approved by the director.

(d) Secondary containment for holding tanks as specified in this rule is not required if the following criteria are met:

(i) The industrial waste does not include any contaminant listed in table 1 of rule 3745-51-24 of the Administrative Code in concentrations greater than fifty per cent of the regulatory level listed for that contaminant.

(ii) The pH of the industrial waste will be greater than five standard units and less than twelve standard units.

(G) Holding tank management plan requirements for a sewage holding tank.

(1) The director may deny any sewage holding tank management plan application not in compliance with this chapter and require the submittal of a new management plan application, including all applicable fees, to be submitted to the director or an authorized representative, in accordance with the director's notification.

(2) For any sewage holding tank installed after September 1, 2009 and except as provided in paragraphs (B) and (G)(3) of this rule, no person shall install or operate a sewage holding tank without first obtaining a permit to install and holding tank management plan approval from the director. A holding tank management plan includes all of the following:

(a) Approval is effective for up to five years, starting from the date it was approved by the director. A renewal holding tank management plan shall be submitted to Ohio EPA at least six months prior to expiration of any existing holding tank management plan.

(i) If a person submits a renewal holding tank management plan six months prior to expiration of the existing plan and Ohio EPA has not approved the new holding tank management plan prior to the expiration of the existing holding tank management plan, the existing holding tank management plan shall be effective until the new holding tank management plan is acted upon by the director.



(ii) If a person does not submit a new holding tank management plan six months prior to expiration of the existing plan, the existing holding tank management plan will expire at the end of the five years.

(b) Application shall be on forms approved by the director.

(c) Application shall be in narrative form and shall include the following:

(i) The physical location of the holding tank, including the street address, the city or village, the zip code, the county and the township.

(ii) The dimensions of the holding tank.

(iii) The volume of the holding tank.

(iv) The maximum number of employees or inhabitants the holding tank will serve on a daily basis.

(v) The name of the licensed hauler who will haul the holding tank waste.

(vi) A detailed description of the method or methods used for the handling, storage and disposal of the holding tank contents, including the following:

(a) Information on how sewage spills or runoff will be prevented or contained during pump outs.

(b) A copy of the contract with a local hauler, who will haul the holding tank contents, including the cost for the hauler to haul the waste.

(c) As applicable, confirmation that the hauler is licensed through a local health department to haul wastes.

(vii) The name and address of the receiving facility permitted by the applicable regulatory authority and documentation from the receiving facility that it is willing to receive the sewage from each hauling event.



(3) For any sewage holding tank installed prior to September 1, 2009:

(a) The sewage holding tank shall be protective of public health and the environment.

(b) The director may require any person that operates or owns a sewage holding tank to submit a holding tank management plan in accordance with the director's notification and paragraphs (G)(2) to (G)(2)(c)(vii) of this rule, where the director or an authorized representative has determined any of the following:

(i) That a risk to human health or the environment exists.

(ii) That the holding tank was installed without a permit to install.

(iii) That a holding tank is serving a purpose for which it was not originally designed and permitted.

[Comment: Fulfilling the requirement for a management plan does not preclude the director from pursuing enforcement action for situations where a holding tank has been installed without a permit to install.]

(H) Record keeping requirements for any holding tank. Any person who owns or operates a holding tank shall keep the following records at the facility for the time specified and make these records available to the director, or an authorized representative, within a reasonable time upon request:

(1) Holding tank construction and installation records, including a copy of the approved permit to install, until the holding tank is decommissioned in accordance with paragraph (I) of this rule.

(2) If applicable, a copy of the effective holding tank management plan.

(3) Operating records for holding tanks for a period of three years. The records shall include, at a minimum, the following:

(a) Each date that the sewage or industrial waste was hauled.



(b) The volume and description of each source of sewage or industrial waste. This may include sampling or monitoring of tank contents, as appropriate.

(c) The name and address of the receiving facility.

(d) The name of the hauler and, for any sewage holding tank, confirmation that the hauler is licensed through a local health department to haul wastes.

(e) As applicable, documentation from the receiving facility that the facility has received the sewage or industrial waste from each hauling event.

(I) Holding tank decommissioning requirements.

(1) For any above-ground holding tank, the owner or operator of the tank shall perform all of the following:

(a) Pump and haul the entire contents of the tank for recycling, treatment or disposal at a facility that has been permitted by the applicable regulatory authority.

(b) Clean the holding tank and appurtenant areas, as necessary.

(2) For any in-ground or partially in-ground holding tank, the owner or operator of the tank shall perform all of the following:

(a) Pump and haul the entire contents of the tank for recycling, treatment or disposal at a facility that has been permitted by the applicable regulatory authority.

(b) Clean the holding tank and related areas as necessary.

(c) Decommission the in-ground or partially in-ground holding tank with one of the following options:



- (i) Remove the holding tank from the ground.
 - (ii) Fill the holding tank with clean sand, soil, or other inert material.
 - (iii) Permanently change the function of the holding tank pursuant to the permit to install application requirements of this rule.
- (3) The owner or operator of the holding tank shall notify the director or an authorized representative of the following within thirty days of the holding tank decommissioning:
- (a) The name and address of the facility where the holding tank is located, the name of the owner and the name of the operator.
 - (b) The date the holding tank was decommissioned.
 - (c) The most recent date the sewage or industrial waste was pumped and hauled, as specified in paragraph (H)(3)(a) of this rule.
 - (d) A brief description of how the holding tank was decommissioned.
- (J) Compliance, enforcement and oversight.
- (1) A holding tank shall be designed, operated and maintained in accordance with this rule.
 - (2) The director may deny any holding tank permit to install or management plan application not in compliance with this rule and require the submittal of a new permit to install or management plan application, including all applicable fees, to be submitted to Ohio EPA within thirty days of the final action.
 - (3) The director may revoke any holding tank management plan not in compliance with this rule.