

3745-42-01

Definitions.

"40 C.F.R." means Title 40 of the Code of Federal Regulations, effective July 1, ~~2016~~2024.

(A)

(1) "Act" means the federal Water Pollution Control Act (commonly referred to as the "Clean Water Act"), 33 U.S.C. sections 1251 to 1387 as amended through ~~July 1, 2016~~November 27, 2023.

(2) "Agronomic benefit," as defined in Section 6111.01 of the Revised Code, means any process that promotes or enhances plant growth and includes, but is not limited to, a process that increases soil fertility and moisture retention.

~~(2)~~(3) "Applicable laws" means any applicable provisions of Chapter 6111. of the Revised Code and rules promulgated thereunder, the federal water pollution control act (33 U.S.C. sections 1251 to 1381, as amended through ~~July 1, 2015~~November 27, 2023) and 40 C.F.R. Chapter I, subchapters D, N, and O.

~~(3)~~(4) "Applicant" means the person applying for the permit to install or plan approval.

~~(4)~~(5) "Aquifer system" means one or more geologic units or formations that are wholly or partly saturated with water and are able to store, transmit and yield significant amounts of water to wells or springs.

~~(5)~~(6) "ASTM" means the American society for testing and materials. ASTM test methods referenced in this chapter are generally available in public libraries or from "ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959," at 1-877-909-2786, or available in electronic format at www.astm.org.

~~(6)~~(7) "ASTM C117-13C117-23" means ~~an~~ the American society of testing and materials (ASTM) standard test method for materials finer than seventy-five-micrometers (No. 200) sieve in mineral aggregates by washing, as that standard was approved by ASTM in ~~2013~~2023.

~~(7)~~(8) "ASTM C136 / C136M-14C136M-19" means ~~an~~ the American society of testing and materials (ASTM) standard test method for sieve analysis of fine and coarse aggregates, as that standard was approved by ASTM in ~~2014~~2019.

~~(8)~~(9) "ASTM D4318-10e1D4318-17" means ~~an~~ the American society of testing and materials (ASTM) standard test methods for liquid limit, plastic limit, and plasticity index of soils, as that standard was approved by ASTM in ~~2010~~2017.

(9)(10) "ASTM ~~D698-12e2~~D698-12(2021)" means the American society for testing and materials (ASTM) standard test methods for laboratory compaction characteristics of soil using standard effort, as that standard was approved in ~~2012~~2021.

(10)(11) "ASTM ~~D2487-14~~D2487-17(2025)" means the American society for testing and materials (ASTM) standard practice for classification of soils for engineering purposes, the "Unified Soil Classification System", as that standard was approved in ~~2014~~2025.

(11)(12) "At-grade system" means an onsite disposal system, where treated sewage is conveyed to a dispersal field that is constructed on or above in situ soil and covered by soil.

(B) [Reserved.]

(C)

- (1) "~~CBOD5~~CBOD₅" or "five-day carbonaceous biochemical oxygen demand" has the same meaning as defined in 40 C.F.R. 136 (effective ~~July 1, 2008~~June 25, 2024) where a nitrification inhibitor is added to eliminate nitrogenous demand.
- (2) "Class A treated sewage or liquid industrial waste" means treated sewage or liquid industrial waste treated with effluent limits and monitoring frequencies in accordance with table K-2 of rule 3745-42-13 of the Administrative Code.
- (3) "Class B treated sewage or liquid industrial waste" means treated sewage or liquid industrial waste treated with effluent limits and monitoring frequencies in accordance with table K-3 of rule 3745-42-13 of the Administrative Code.
- (4) "Class C treated sewage or liquid industrial waste" means treated sewage or liquid industrial waste treated with effluent limits and monitoring frequencies in accordance with table K-4 of rule 3745-42-13 of the Administrative Code.
- (5) "Coal waste" means residuals and earthen materials, in dry or slurry form that are removed or otherwise separated from the product coal after physical or chemical processing, cleaning or concentrating of coal. Coal waste does not include post-combustion materials that are fly ash, bottom ash, flue gas desulfurization waste or fluidized bed desulfurization wastes, and also does not include materials that are regulated as "solid waste," "infectious waste" or "hazardous waste" as those terms are defined in Chapter 3734, section 3734.01 of the Revised Code.

- (6) "Coal waste facility" means a disposal facility where fine coal waste is dewatered and disposed of in a slurry impoundment or where fine or coarse coal waste is disposed of in a dry placement area. Coal waste facility does not include any facility that is used for the temporary holding or treatment of liquid wastes.
- (7) "Coal mining operations" means any coal mining activity that is defined in division (H) of section 1513.01 of the Revised Code ~~as coming under the jurisdiction of the chief of the division of mineral resource management under Chapter 1513. of the Revised Code.~~
- (8) "Complete," in reference to an application for a permit, means that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the director from requesting or accepting any additional information.
- (9) "Controlled discharge" means an NPDES permitted discharge that can occur when certain stream conditions exist or when land application can not occur.

(D)

- (1) "Dense glacial till" means tills that impede the movement of treated water away from the site and cause the formation of perched saturated conditions in the soil profile, especially with the addition of wastewater.
- (2) "Design Standards: Wastewater Treatment Plants & Collection Systems <= 100,000 gpd (2013), Ohio EPA." This document is available online at <http://epa.ohio.gov/dsw/guidance/guidance.aspx><https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/wastewater-permit-to-install-pti-program>.
- (3) "Director" means the director of the Ohio environmental protection agency.
- (4) "Discharging land application system" means a land application system that ~~includes~~ applies or proposes one of the following:
 - (a) Regardless of whether a land application contract allows isolation distance requirements to be waived, does not meet the isolation distance requirements in this rule.
 - (b) ~~Proposes to land apply on~~ On sites where drain tiles are, or will be, less than two vertical feet below final grade.
 - (c) ~~Proposes to land apply on~~ On frozen or snow covered ground.

(d) ~~Proposes to land apply during During~~ precipitation events.

(e) ~~Proposes a~~ A point source discharge to waters of the state.

(5) "Disposal system" means disposal system, as is defined in section 6111.01 of the Revised Code.

(6) "Drinking water source protection area for a public water system using ground water" means the surface and subsurface area surrounding a public water supply well or wells that will provide water to the well or wells within five years as delineated or endorsed by Ohio EPA under the wellhead protection program and the source water assessment and protection program.

(7) "Duly authorized representative" means a person who has authorization in accordance following:

(a) The authorization is made in writing by a person described in paragraph (B) of rule 3745-42-03 of the Administrative Code.

(b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position).

(c) The written authorization is submitted to the director.

(8) "Dwelling" has the same meaning as in rule 3701-29-01 of the Administrative Code.

(E) "Emergency management zone" or "EMZ" means the surface and subsurface area in the immediate vicinity of a public water system intake as delineated or endorsed by Ohio EPA under the source water assessment and protection program, ~~within which~~ Within this area, the public water supply owner or operator has little or no time to respond to potential contamination from a spill, release, or weather related event. The standard emergency management zone boundary consists of a semi-circle that extends five hundred feet upstream of the intake and one hundred feet downstream of the intake, except as modified due to local conditions.

(F) [Reserved.]

(G) [Reserved.]

(H)

(1) "Holding tank" means any device that is not part of a larger disposal system and that is used to accumulate or store sewage or industrial waste that: (a) is not hazardous waste as defined by rule 3745-51-03 of the Administrative Code and (b) ~~must~~ is to be hauled for recycling, treatment or disposal. Holding tank does not include such a device in a fixed location that is connected by pipe or hose to a disposal system.

[Comment: For the purposes of rule 3745-42-11 of the Administrative Code, a tank used for flow equalization, septage receiving at a treatment works or sludge holding at a treatment works is not considered a holding tank. These tanks are part of a larger disposal system.]

(2) "Hydraulic balance" means an accounting of the hydraulic inputs and outputs of a land application system.

(3) "H 20 loading" is defined by figure 3.7.6A of the 17th edition of "AASHTO Standard Specifications for Highway Bridges," copyright ~~2005~~²⁰⁰². ~~This Hardcopies of this publication is~~ are available from "AASHTO Publications Order Department, P.O. Box 933538, Atlanta, GA 31193-3538," ~~fax 1-734-487-1890; international telephone 1-800-231-3475~~¹⁻⁷³⁴⁻²⁰³⁻⁰⁴⁵⁶; digital and ~~hardcopy orders available through~~ web page <https://bookstore.transportation.org>~~https://store.transportation.org~~.

(I)

(1) "Impoundments" means any clay or synthetically lined earthen structure, or fabricated structures (e.g. concrete or metal tanks), for the treatment or storage of sewage, sewage sludge, biosolids, industrial waste, sludge materials, or other wastes. These impoundments are also commonly referred to as storage ponds or lagoons.

(2) "Industrial waste" means industrial waste as it is defined in section ~~6111-456111.01~~ of the Revised Code.

(3) "Inner management zone" means the surface and subsurface area within a drinking water source protection area for a public water system using ground water surrounding a public water supply well or wells that will provide water to the well or wells within one year as delineated or endorsed by Ohio EPA under the wellhead protection program and the source water assessment and protection program.

~~(3)~~(4) "Install" or "installation" means to begin actual construction, erect, locate or affix any disposal system.

(J) [Reserved.]

(K) "Karst" means a terrain with an assemblage of landforms such as sinkholes and caves that are due to weathering of predominantly carbonate bedrock.

(L)

(1) "Lagoon" means any earthen or partially earthen impoundment that is used for the treatment of sewage or liquid industrial waste.

(2) "Land application" means evenly spreading or spraying treated sewage or liquid industrial waste onto the surface of the land for final treatment or ~~disposal~~agronomic benefit.

(3) "Land application area" means the site or location where treated sewage or liquid industrial waste is applied to the ground surface for treatment or disposal.

(4) "Land application contract" means a deed showing ownership, or a contract or agreement that describes the land where treated sewage or liquid industrial waste will be applied and that allows treated sewage or liquid industrial waste to be land applied.

(5) "Land application management plan" means a management plan governing the operation, maintenance, effluent limits, and monitoring requirements of a land application system.

(6) "Land application system" means a disposal system that uses land application; ~~thereby minimizing or eliminating the discharge~~ of treated sewage or liquid industrial waste ~~to waters of the state~~.

(7) "Low permeability" means a permeability of less than two tenths of one inch per hour.

(M) "Modify" or "modification" means any physical change into, or change in the method of operation of an existing component of a disposal system to allow it to process water pollutants:

(1) In materially increased quantities.

(2) Of a materially different character.

(3) In materially higher concentrations.

The addition of new connections to a public sewage system ~~shall is not be~~ considered a modification of the sewage system.

(N)

- (1) "New source" means any disposal system for which an owner or operator undertakes a continuing program of installation or modification or enters into a binding contractual obligation to undertake and complete, within a reasonable time, a continuing program of installation or modification, after January 1, 1974, and that at the time of installation or modification would have otherwise been subject to the provisions of this chapter.
- (2) "Normal ground water table" means the shallowest depth of soil that is saturated with water for an extended or permanent time period.
- (3) "NPDES" means national pollutant discharge elimination system.

(O)

- (1) "Occupied building" means any building that is regularly occupied by people, is owned by a person other than the owner of the disposal system, and is located on a plat of land separate from the plat of land on which the disposal system is installed or operated.
- (2) "Ohio EPA" means the Ohio environmental protection agency or its director, ~~as the context or other law or regulations may require.~~
- (3) "Operator" means the person in responsible charge of operating and maintaining the disposal system in compliance with the NPDES permit or land application management plan. The operator may or may not be the owner of the disposal system.

(4) "Other wastes" is defined in section 6111.01 of the Revised Code.

(P)

- (1) "Person" ~~means person, as is~~ defined in section 6111.01 of the Revised Code.
- (2) "Professional soil scientist" means an individual with a baccalaureate degree with a major in agronomy, soils, geology, or a closely allied field, or who is approved by Ohio department of health in accordance with paragraph (A) of rule 3701-29-07 of the Administrative Code. This professional will be able to apply

~~of principles of pedology to soil classification, investigation, education, and consultation and on evaluate the effect of measured, observed and inferred soil properties for siting of sewage treatment systems, disposal systems, and land application systems and their use, and who is a member of the Ohio association of pedologists or the American registry of certified professionals in agronomy in crops and soil (ARCPACS).~~

~~[Comment: A list of the professional soil scientists in Ohio can be obtained from the association of Ohio pedologists web site. The web link for this site is: <http://www.ohiopedologist.com>.]~~

- (3) "Public water system" or "PWS" has the same meaning as is defined in rule 3745-81-01 of the Administrative Code.
- (4) "Publicly owned sanitary sewers" means any centralized sewerage system other than those that are owned by a private or semi-public entity.
- (5) Publicly owned treatment works" or "POTW" is defined in rule 3745-3-01 of the Administrative Code.

(Q) [Reserved.]

(R)

- (1) "Recommended Standards for Wastewater Facilities (2014), Great Lakes-Upper Mississippi River Board (GLUMRB) of State and Provincial Public Health and Environmental Managers." This document can be viewed and downloaded online at ~~http://epa.ohio.gov/dsw/pti/PTIDocuments.aspx~~ and purchased online at ~~http://www.healthresearch.org~~ or by writing to Health Research, Inc. ~~P.O. Box 7126, Albany, New York 12224~~<https://www.health.state.mn.us/communities/environment/water/tenstates/standards.html>."
- (2) "Restricted access site" means a site on which treated sewage or liquid industrial waste may be placed with a limited probability that the public will come into contact with the treated sewage or liquid industrial waste. Such sites include, but are not limited to, agricultural crop fields (i.e., nonhuman food crops), and fenced-off meadows, pastures, woodlands, landscaping areas and other private property.
- (3) "Reuse of Reclaimed Wastewater Through Irrigation for Ohio Communities, Bulletin 860 (1997), The Ohio State University. This document can be purchased online at <http://setll.osu.edu/node/12/wastewater-treatment>."

(S)

- (1) "Sewage" means sewage, as is defined in section 6111.01 of the Revised Code.
- (2) "Sewerage system" means sewerage system, as is defined in section 6111.01 of the Revised Code.
- (3) "Significant zone of saturation" means a zone of saturation that may act as a preferential pathway of migration away from the limits of storage or application of treated sewage or liquid industrial waste.
- (4) "Soil absorption system" means the final treatment component of an on site sewage or liquid industrial waste treatment system that utilizes absorption and adsorption to treat and disperse the treated sewage or liquid industrial waste into subsurface soils. For the purposes of this definition, liquid industrial waste shall possess possesses characteristics similar to those of sewage.
- (5) "Soil and Site Evaluation for Onsite Wastewater Treatment, Bulletin 905 (20052015), The Ohio State University. This document can be purchased online at <http://setll.osu.edu/node/12/wastewater-treatment>."
- (6) "Source water assessment and protection program" means Ohio EPA's program based on the Safe Drinking Water Act, 42 U.S.C. 300 (f), as amended in 1996, and approved by U.S. EPA, ~~November, 1999~~December, 2016.
- (7) "Storage facility" means the part of a treatment works, such as a tank, an earthen or man-made impoundment, that is used solely for the storage of treated sewage or liquid industrial waste.
- (8) "Surface waters of the state" means surface waters of the state, as is defined in rule 3745-1-02 of the Administrative Code.

(T)

- (1) "Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring (20152020), Ohio EPA." This document can be found on the Ohio EPA web site at http://www.epa.ohio.gov/ddagw/gw_support.aspx?epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/guides-and-manuals/derr-ground-water-and-geology-support.
- (2) "Total inorganic nitrogen" means the sum of nitrite-nitrogen, nitrate-nitrogen and ammonia-nitrogen.
- (3) "Treated sewage" means sewage treated by a treatment works.

(4) "Treatment works" ~~means treatment works, as is~~ defined in section 6111.01 of the Revised Code.

(U)

(1) "UIC class V injection well" means underground injection control (UIC) class V injection well as ~~defined classified~~ in paragraph (E) of rule 3745-34-04 of the Administrative Code.

(2) "Unrestricted access site" means a site on which treated sewage or liquid industrial waste may be placed with a high potential for the public to come into contact with the treated sewage or liquid industrial waste. Such sites include, but are not limited to, golf courses, parks, lawns and playing fields.

(3) "U.S. EPA" means United States environmental protection agency.

(V) [Reserved.]

(W)

(1) "Water pollutant" means any sewage, industrial waste or other waste, as defined elsewhere in this section and by section 6111.01 of the Revised Code.

(2) "Waters of the state" ~~means waters of the state, as is~~ defined in section 6111.01 of the Revised Code.

(3) "Wellhead protection program" means Ohio EPA's program based on the Safe Drinking Water Act, 42 U.S.C. 300 (f), as amended in 1986, and approved by U. S. EPA, November 1992.

[Comment: The Code of Federal Regulations and federal statutes listed in this rule can generally be found in public libraries, and can be viewed electronically online at <http://www.gpo.gov/fdsys/https://www.govinfo.gov> and purchased by writing to: "Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954."]

Effective: 11/13/2025

Five Year Review (FYR) Dates: 8/19/2025 and 11/13/2030

CERTIFIED ELECTRONICALLY

Certification

10/24/2025

Date

Promulgated Under:	119.03
Statutory Authority:	6111.03
Rule Amplifies:	6111.03, 6111.44, 6111.45, 6111.46
Prior Effective Dates:	01/01/1974, 08/15/1982, 09/18/1987, 11/17/1988 (Emer.), 03/09/1989 (Emer.), 06/12/1989, 10/08/1993, 06/01/1994, 04/12/1996, 04/27/1998, 11/30/2001, 10/17/2003, 12/01/2005, 09/01/2009, 03/31/2017, 01/31/2022