



Ohio Administrative Code

Rule 3701-28-07 Location, operation, and maintenance of private water systems.

Effective: January 1, 2020

(A) Each private water system shall be properly maintained and operated according to the requirements of this chapter, and as follows:

(1) Where two or more dwellings are serviced by a private water system, the entire private water system shall be owned and maintained equally by all parties owning service connections served by the system.

(2) Where a private water system, or portion thereof, is not located on the same parcel as the service connection it serves, there shall be a legally recorded easement to allow access to the system by all parties for the purposes of maintenance, sampling, and repairs.

(B) A private water system shall be located only where the system and its surroundings can be maintained in a sanitary condition, and only where surface and subsurface conditions will not permit contamination of the private water system or aquifer. Where available, hydrogeologic data shall be used to select the location of a well or spring. Any well or spring used as a source of water for a private water system shall be located hydraulically up gradient of any potential or known sources of contamination unless determined by the board of health that no other practical site is suitable or available. The board of health shall document this determination in the permit file. A well or spring shall be located the maximum practical distance from a known or suspected source of contamination.

(C) A private water system shall be located so that it is accessible for cleaning, treatment, repair, alteration, testing, and such other attention as may be necessary.

(1) The walls of a concrete cistern or hauled water storage tank may share a common wall with another structure or be used as a supporting structure provided it is acceptable with local building codes or, where no building codes are applicable, a professional engineer.

(2) Plastic or fiberglass tanks for disinfection retention, supplemental water storage, and low yield



well reservoir tanks less than one thousand gallons may be placed in the basement of a home.

(D) A well, spring box, or pond shall not be located within ten feet of the foundation of a building or dwelling, where termiticides are typically applied, except within a building designed and constructed solely to house a well or spring or pumping and water system equipment. A water well shall not be located closer than five feet to the edge of a deck or porch that is not part of the building foundation for a basement or crawl space, or a slab that has been extended from the residence or building due to limitations for access of large equipment for service.

(E) A new private water system shall not be located within a one hundred year floodplain or a special flood hazard area, except when the board of health determines that either the requirements of rule 3701-28-19 of the Administrative Code for a variance are met, or it is a replacement for an existing system as described in paragraph (E)(1) of this rule. The installation of a new or replacement private water system shall comply with section 1521.13 of the Revised Code or the floodplain management resolution or ordinance adopted by a county or municipal corporation under section 1521.18 of the Revised Code.

(1) A variance is not required for the replacement of a private water system already existing in a floodplain when no other sites are available on that property for construction of a private water system outside of the floodplain as determined from the pre-construction evaluation by the board of health. This information shall be indicated on the private water system application and permit prior to construction.

(2) A well constructed in a floodplain must meet the requirements of paragraph (U)(6) of rule 3701-28-10 of the Administrative Code.

(3) A new private water system shall not be constructed in a floodway.

(F) A water source shall not be located within a sanitary isolation radius of fifty feet of any known or possible source of contamination, except as specified in paragraph (I) of this rule.

(G) A water source shall be located at least ten feet from the established road right-of way. When no right-of-way has been designated, a water source shall be located at least twenty-five feet from the



edge of any normal road driving surface or ten feet from any road utility easement, whichever is greater, as determined by the Ohio department of transportation, the county engineer, or local officials.

(H) Except for when a protective barrier has been constructed and all surface water is directed away from an existing well that is being altered or repaired, a water source shall be located at least five feet from the edge of any private driveway or parking lot.

(I) Watertight sewers and drains outside of the foundation of a building shall be located a minimum of ten feet from a water source or water distribution line when attainable except within five feet of the foundation where both lines enter a building and in circumstances when the water line and sewer line must cross. When a watertight sewer line crosses a water service line then the following applies:

(1) Provide a minimum vertical distance of twelve inches between the outside of the water service line and outside of the sewer. This shall be the case where the water line is either above or below the sewer with preference to the water line located above the sewer.

(2) At crossings, one full length of water pipe shall be located so both joints will be a minimum of ten feet from the sewer line and a twenty-foot length of larger diameter watertight pipe sleeve shall be installed on either the water service line or the sewer line and the pipe sleeve sealed for water tightness at both ends and any joints in the length of the larger diameter pipe sleeve. A water service line and sewer line shall not share the same trench except where they must cross.

(J) Any component of a private well water system located in a grassed pasture used by large animals shall be surrounded by a fence with all sides at least five feet from the well component. A water source shall be located according to the following minimum isolation distances listed in table 1:

Row	Potential Source of Contamination	Isolation Distance (in feet)
1	Lot lines and easements	10
2	Any component of a sewage treatment system (STS) or gray water recycling system (GWRS)	50



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3	A leaching pit or drywell that has not been properly abandoned to render it inoperable	100
4	Watertight vault privies	50
5	Leaching privies	100
6	Waste water treatment plant, except a well used by the facility	300
7	Drainage wells	100
8	Properly sealed well	5
9	Existing properly constructed private water system well	10
10	Existing properly constructed public water system well	outside the sanitary isolation radius of the public water well
11	Water wells or boreholes of unknown or unregulated unpermitted construction	50
12	Vertical open loop geothermal system, sealed with grout materials in compliance with rule 3701-28-09 of the Administrative Code and as documented by a well log on file with the Ohio department of natural resources	25
13	Horizontal or vertical closed loop geothermal system, utilizing propylene glycol as the heat transfer antifreeze	25
14	Horizontal or vertical closed loop direct exchange geothermal system with circulating refrigerant or a heat transfer antifreeze other than propylene glycol	50
15	Horizontal or vertical geothermal system of unknown or undocumented construction	50
16	Permanent bodies of water such as streams, lakes, ponds	25
	Storm water structure or other special conduits or other ditches with intermittent water flows not included in the road right-of-way	15



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17	Bulk salt storage piles	100
18	Underground or above ground fuel oil, diesel, chemical or gasoline storage tanks or other refined or unrefined petroleum liquids (less than eleven hundred gallons)	50
19	Fuel operated motors used for well pumps without secondary containment	50
20	Underground or above ground fuel oil, diesel, chemical or gasoline storage tanks or other refined or unrefined petroleum liquids (greater than eleven hundred gallons without secondary containment)	300
21	Natural gas or propane (LP/liquid propane) home heating tanks above or below ground	20
22	Oil and gas wells or the oil and gas well pad, except a well that is used by the facility, which should be constructed at the maximum practical isolation distance	100
23	Municipal solid waste, residual waste, industrial waste, and class I, II, or III solid waste composting facilities, operating or closed, from the boundaries of the entire facility including the permitted boundaries of future waste placement, except a well that is used by the facility, which should be constructed at the maximum practical isolation distance	1000
24	Construction and demolition debris solid waste facility, and class IV solid waste composting facilities, except a well that is used by the facility, which should be constructed at the maximum practical isolation distance	500



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25	A regional storage facility as defined in paragraph (DDDD) of rule 3745-40-01 of the Administrative Code or other bulk storage facility for biosolids (sludge), except a well that is used by the facility, which should be constructed at the maximum practical isolation distance	300
26	Animal waste management facility located at a major concentrated animal feeding facility (AFF)* as defined by division (N) of section 903.01 of the Revised Code, except a well that is used by the facility, which should be constructed at the maximum practical isolation distance	300
27	Animal waste management facility located at a large concentrated AFF* as defined by division (M) of section 903.01 of the Revised Code, except a well that is used by the facility, which should be constructed at the maximum practical isolation distance	300
28	Animal waste management facility located at a medium concentrated AFF* as defined by division (Q) of section 903.01 of the Revised Code, except a well that is used by the facility, which should be constructed at the maximum practical isolation distance	300
29	Animal waste management facility located at an AFF* not meeting the size designation of major, large, or medium concentrated AFF as defined in section 903.01 of the Revised Code, except a well that is used by the facility, which should be constructed at the maximum practical isolation distance	150
30	Animal housing or holding pens with no grass cover, stables, manure piles, fabricated manure storage and animal waste or treatment buildings not located at an AFF*	50



31	Land application of septage waste, manure, or biosolids (sludge) stockpile, storage or staging area where the Ohio environmental protection agency has determined the aquifer has a high susceptibility to contamination	300
32	Surface land application area for septage, biosolids (sludge), commercially land applied manure, or other similar materials previously approved by the Ohio environmental protection agency or the board of health	200
33	Subsurface incorporation application area using septage, biosolids (sludge), commercially produced manure, or other similar materials previously approved by the Ohio environmental protection agency or the board of health	100
34	Storage or preparation area for commercial application of fertilizers or pesticides	150
	*For the purposes of this rule, "AFF" means "animal feeding facility" as defined in section 903.01 of the Revised Code.	

(K) For purposes of determining compliance with the minimum distance requirements of this rule, all measurements shall:

- (1) Be performed on-site;
- (2) Be measured from the boundary of the water source closest to the boundary of the structure or potential source of contamination;
- (3) When the distance is from a regulated facility or some portion thereof, the regulating authority has scale plans of the facility on file, and these plans are accessible to the health district for verification of the distance from the potential source of contamination to the point of the facility boundary nearest to the private water system, the on-site measurement from the private water system source to the nearest facility boundary may be added to the distance from the facility boundary to the



potential contamination source shown on the facility plans;

(4) For construction of a new private water system on a new building lot, be within two per cent from the boundary of minimum isolation distance requirements for any on-site sewage treatment system and ten per cent from the boundary of the required minimum distances for all other isolation distance requirements set in this rule, unless otherwise specified;

(5) For replacement of a private water system at an existing home or building, be within ten per cent of the minimum required distance without the requirement for a variance when the maximum practical isolation distance from all potential sources of contamination and existing structures is maintained;

(6) When a private water system is to be constructed where the system cannot meet all of the isolation distances of this rule, then the isolation distances shall be maintained at the greatest practical distances from sewage systems, petroleum tanks, roads and right of ways, waste application staging areas, and landfills, in this order. When an isolation distance priority is not specified here, then the board of health shall use their best professional judgment for system placement.

(L) The board of health in consultation with the department may set an isolation distance in excess of those set forth in this rule for a specific site if conditions are determined to exist at a site during a pre-construction evaluation where the distance set forth in this rule is considered insufficient to protect the public health and the private water system from contamination. The additional requirement will not require a variance and shall be described on the application and permit prior to activation of the permit by the board of health.

(M) The board of health or the department may order the replacement or sealing of any private water system existing before the effective date of this rule that does not meet the current isolation distance requirements if it has been determined that a potential health threat exists from the continued use of the system.

(N) A private water system owner shall be responsible for maintaining minimum isolation distances within property owned by the water system owner.