

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

- (A) Each private water system shall be properly maintained and operated according to the requirements of this chapter. In the case where two or more dwellings are serviced by a private water system, the entire private water system shall be owned, operated and maintained by one person.
- (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 department that no other practical site is suitable or available. 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) A well, or cistern, hauled water storage tank, or any other water source for a private water system shall not be located within the foundation of any building, except within a building designed and constructed solely to house pumping and water system equipment.
  - (2) 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, as determined by the board of health or a professional engineer.
  - (3) 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 or spring box or pond shall not be located within ten feet of the foundation of a building or dwelling, where termiteicides 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 flood plain or a special flood hazard area, except when the board of health determines that the requirements of rule 3701-28-19 of the Administrative Code for a variance are met unless 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 flood plain when no other sites are available on that property for construction of private water system out of the flood plain as determined from the pre-construction evaluation by the board of health. This information shall be indicated on the private water system application /permit prior to construction.
  - (2) A well constructed in a floodplain must meet the requirements of paragraph (Q)(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) 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 follow 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 section larger diameter pipe sleeve shall be installed on either the water service line or the sewer line and the pipe sleeve sealed at both ends. A water service line and sewer line shall not share the same trench except where they must cross.
- (J) A water source shall be located according to the following minimum isolation distance requirements:
- (1) Lot lines and easements..... ten feet

- (2) Sewage tanks ..... fifty feet
- (3) Sewage absorption fields ..... fifty feet
- (4) Leaching pit or dry well ..... one hundred feet
- (5) Watertight vault privies ..... fifty feet
- (6) Leaching privies ..... one hundred feet
- (7) Human waste management facility, except a well used by the facility .....  
..... three hundred feet
- (8) Drainage wells ..... one hundred feet
- (9) Properly sealed well ..... ten feet
- (10) Existing properly constructed water well ..... ten feet
- (11) Water wells or boreholes of unknown or unregulated construction,  
including boreholes and horizontal excavations for geothermal use.  
..... fifty feet
- (12) Regulated closed loop geothermal systems utilizing propylene glycol as the  
heat transfer antifreeze. .... twenty-five feet
- (13) Permanent bodies of water such as streams, lakes, ponds .....  
..... twenty-five feet
- (14) Storm water or other ditches with intermittent water flows not included in  
the road right-of-way ..... fifteen feet
- (15) State and local road salt storage piles ..... one hundred feet
- (16) Underground or above ground fuel oil, diesel, chemical or gasoline storage  
tanks or other refined or unrefined petroleum liquids (less than 1100  
gallons) ..... fifty feet
- (17) Fuel operated motors used for well pumps without secondary  
containment..... fifty feet
- (18) Underground or above ground fuel oil, diesel, chemical or gasoline storage  
tanks other refined or unrefined petroleum liquids (greater than 1100  
gallons with secondary containment designed in accordance with  
Administrative Code rule 3745-55-93) ..... one hundred fifty feet
- (19) Underground or above ground fuel oil, diesel, chemical or gasoline storage  
tanks or other refined or unrefined petroleum liquids (greater than 1100  
gallons without secondary containment) ..... three hundred feet
- (20) Natural gas or propane home heating tanks above or below ground  
..... twenty feet

- (21) Oil and gas wells ..... one hundred feet
- (22) Landfills: operating and closed
- (a) Municipal solid waste, residual waste, and industrial waste .....one thousand feet
  - (b) Construction and demolition debris facility ..... five hundred feet
- (23) Agriculture facilities
- (a) For the purposes of this rule "human or animal waste management facility" means a class I, II, or III compost facility as defined in paragraph (C) of rule 3745-27-01 and classified in rule 3745-27-40 of the Administrative Code; or
  - (b) A regional sewage sludge storage facility and other bulk storage facility for non-exceptional quality biosolids as defined in paragraph (A) of rule 3745-40-01 of the Administrative Code; or
  - (c) A manure storage or treatment facility, fabricated manure storage structure, manure storage pond, or manure treatment lagoon as defined in rule 901:10-1-01 of the Administrative Code; or
  - (d) A wastewater treatment facility as defined in rule 3745-33-01 of the Administrative Code or storage facility as defined paragraph (A) of rule 3745-42-13 of the Administrative Code.
  - (e) Animal waste management facility located at a major, large, medium and small concentrated animal feeding facility (CAFF) as defined by section 903.01 of the Revised Code, except a well used by the facility, which should be constructed at the maximum practical isolation distance.
    - (i) Major and large ..... three hundred feet
    - (ii) Medium ..... three hundred feet
    - (iii) Small; number of animals between medium and three percent of a medium CAFF ..... one hundred fifty feet
    - (iv) Small; three percent rounded up of the number of animals of the lower limit of a medium defined CAFF for animal housing, holding pens with no grassed cover, stables, manure piles, fabricated manure storage and waste or treatment buildings.....fifty feet
  - (f) A private well 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.
  - (g) "Land application area" for the purposes of this chapter means:

- (i) A land application field, staging, stockpiling or field storage area for non-exceptional quality biosolids as defined in paragraph (A) of rule 3745-40-01 of the Administrative Code;
  - (ii) A land application field, staging, stockpiling or field storage area as defined in rule 901:10-1-01 of the Administrative Code; or
  - (iii) A wastewater land application area as defined in paragraph (A) of rule 3745-42-13 of the Administrative Code.
  - (iv) The board of health or the Ohio environmental protection agency shall be contacted prior to the construction of a private water system source to determine the location of the approved land application sites or to modify the land application location in order to achieve the appropriate isolation distance from the private water system source. This information must be included on the proposed site plan.
  - (v) 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. .... three hundred feet
  - (vi) 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.....two hundred feet
  - (vii) 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. ....one hundred feet
  - (h) Storage or preparation area for commercial application of fertilizers or pesticides. .... one hundred fifty feet
- (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) For construction of a new private water system on a new building lot be within two percent from the boundary of minimum isolation distance requirements for any on-site sewage treatment system and ten percent from the boundary of the required minimum distances for all other isolation distance requirements set in this rule, unless otherwise specified;
  - (4) For replacement of a private water system at an existing home or building be within ten percent 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.

When a private water system is to be constructed where the system can not 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 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/ permit prior to activation of the permit by the department.
- (M) 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.

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