

Minimum Isolation Distances for Private Water Systems

All measurements are from the boundary of the water source (well, tank, pond or spring box), to the nearest boundary of the structure or potential source of contamination.

AGRICULTURE

25 feet	Grass Pasture
50 feet	Stables & Manure Piles
100 feet	Animal or poultry yards less than 1000 animal units
100 feet	Drainage Wells
100 feet	Land application of Septage or Sludge
150 feet	Storage or preparation areas for fertilizers or pesticides
300 feet	Manure lagoons
500 feet	Animal or poultry yards greater than 1000 animal units

100 YEAR FLOOD PLAIN

A well constructed in a floodplain must meet the requirements of OAC 3701-28-10(Q)(6)

FUEL OIL, LP, CHEMICAL OR GASOLINE STORAGE

20 feet	Natural gas or propane home heating tanks above or below ground
50 feet	Underground or above ground fuel oil, diesel, chemical or gasoline storage tanks or other refined or unrefined petroleum liquids (less than 1100 gallons)
100 feet	Salt Storage Piles
150 feet	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)
300 feet	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)

SEWAGE SYSTEMS

10 feet	Sewers & Drains (watertight pipe)
50 feet	Sewers & Drains (pipe or tile that is not watertight)
50 feet	Sewage & Aeration Tanks
50 feet	Sewage Absorption Fields
100 feet	Leaching Pit or Privy

GENERAL

10 feet	Structures, buildings & foundations
25 feet	Permanent bodies of water such as streams, lakes, ponds
50 feet	Any other known source of contamination

GEOHERMAL

25 feet	Regulated closed loop geothermal systems utilizing propylene glycol only
50 feet	Vertical or Horizontal Geothermal closed-loop systems

Open Loop systems must be fitted with a backflow prevention device that meets ASSE 1015

Closed Loop systems must be fitted with a backflow prevention device that meets ASSE 1013

Geothermal loops may not be installed in ponds used as part of a potable water system.

ROADS, RIGHTS OF WAY & LOT LINES

5 feet	Private Driveway
10 feet	Road rights-of-way, lot lines and easements
15 feet	Storm water or other ditches with intermittent water flows not included in the road right-of-way
25 feet	Roads and highways

SOLID WASTE

200 feet	Composting facilities
300 feet	Human waste management facility
500 feet	Construction and demolition debris facility, open or closed
1,000 feet	Municipal solid waste, residual waste, and industrial waste landfills, open or closed

WELLS

10 feet	Properly sealed well – construction known or unknown
10 feet	Existing properly constructed water well for which there is a well log
50 feet	Water wells or boreholes of unknown or unregulated construction including boreholes and horizontal excavations for geothermal use.
100 feet	Drainage Wells, Oil & Gas wells

POND WATERSHEDS

*A pond cannot be used for a water supply source when a public water supply is accessible.

The following sources of contamination may not be maintained in a pond's watershed:

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| <ul style="list-style-type: none">• Animal barns,• poultry yards,• pasture,• orchards, | <ul style="list-style-type: none">• cultivated fields,• sewage tanks,• privies,• and other sources of contamination |
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Diversion ditches or similar devices shall be used to direct water of unsuitable quality out of the watershed and away from the pond.

A pond overflow may not share a common tile with a sewage or sump pit drain.

Geothermal loops may not be installed in ponds used for drinking water.

YARD HYDRANTS

Conventional yard hydrants pose a potential source of contamination to the water system because they have a weep hole below grade that allows subsurface water and bacteria to be drawn into the stand pipe. Therefore, a conventional hydrant may not be located directly on a main line. They may be located on an offset of at least 3 that is set in gravel.

A hydrant that meets the ASSE 1057 Standard does not have a weep hole and will not be a potential source of contamination from subsurface water.

All hydrants must be equipped with hose bibs that meet at minimum ASSE 1011.

CROSS CONNECTIONS PROHIBITED

A cross connection is any physical connection between a possible source of contamination and any drinking water system piping. This connection will allow chemical or biological contaminants to enter the drinking water system. A cross connection can occur when a hose is connected to a threaded faucet, when waste water is discharged from a water treatment system or when the water system is part of a heating or cooling system. The water system must be protected from contamination by using an air gap or approved backflow prevention device between the water system and the source of contamination.

PRIVATE WATER SYSTEM EASEMENT

No potential source of contamination may be constructed or permanently placed within the above cited isolation distances from a water supply of a private water system. This may create a limited easement on adjacent properties

A private water system owner shall be responsible for maintaining isolation distances on the property.
* Secondary Containment means an impervious, leak-proof barrier that is able to contain a volume equal to 110% of the largest container stored.

ASSE - The American Society of Sanitary Engineers is a nonprofit organization that develops product performance standards for the plumbing industry.