

Subsurface sewage treatment systems well setbacks

The distances required between water supply wells and septic systems

Subsurface sewage treatment system (SSTS) well setbacks are the distances that must be maintained between septic systems and water supply wells – including domestic wells, irrigation or other “nonpotable” water-supply wells, industrial-supply wells, sandpoint/drivepoint wells, and abandoned but unsealed wells. A setback is also required between septic systems and water service pipes. Setbacks apply when:

- Installing septic systems.
- Installing water-supply wells.
- Repairing or modifying septic systems, where the SSTS components that hold or disperse sewage are being altered.
- Wells and septic systems on neighboring properties are within setback distances.

Setback distances vary, depending on the source of contamination and the type of well. The Minnesota Department of Health (MDH) regulates wells through Minn. Stat. §103I and Minn. R. ch. 4725 (Well Code), which specifies the setback distances for SSTS. Setback distances are referred to as “isolation” distances in the Well Code.

Plumbing rules from the MN Department of Labor and Industry require a ten-foot separation between any contamination source and a water service pipe, which is defined as the pipe from the water main or other source of water supply to the water-distributing system of a building.

Common SSTS setback distances

See [Minn R. ch. 4725](#) for a complete list of SSTS setbacks. Distances are expressed in feet.

SSTS component	Sensitive well ¹	Water supply well ²	Community public well ³
Buried sewer pipe – untested, unapproved	50	50	50
Buried sewer pipe – tested, approved	20	20	50
Cesspool	150	75	75
Gray-water dispersal area	100	50	50
Holding tank	50	50	50
Leaching/seepage pit, dry well	150	75	75
Privy	100	50	50
Septage land application site	100	50	50
Septic tank	50	50	50
Sewage sump with a capacity of 100 gallons or more, including lift stations, grinder tanks, and other pump tanks	50	50	50

SSTS component	Sensitive well ¹	Water supply well ²	Community public well ³
Sewage sump with a < 100 gallons capacity, in compliance with MN R. ch. 4715 ⁴	20	20	50
Subsurface dispersal field ⁵	100	50	50
Subsurface dispersal field, system design flow > 10,000 gpd	600	300	300
Subsurface dispersal field serving a facility with infectious or pathological wastes	300	150	150
Watertight sand or peat filter, or constructed wetland	50	50	50
Disposal area for water treatment backwash	100	50	50

¹Often referred to as a 'shallow' well. Does not have 50' or more of watertight casing or does not have watertight casing that penetrates 10' or more of a confining layer

²Includes wells used to supply drinking water, irrigation wells, wells supplying processing water, and drive point wells

³Provides water to 15 or more year-round residences or dwelling units

⁴Does not apply to collector sewer, municipal sewer, sewer handling infectious or pathogenic wastes, or to community public wells

⁵Includes all Type I-V soil dispersal systems

Setbacks from abandoned septic systems and wells

Unless specified in the local ordinance, a setback distance is not required between a properly abandoned and sealed well and a septic system. A setback is also not required between a properly abandoned septic system and a new well. However, setbacks still apply if the septic system was abandoned without these proper procedures:

- Septic tank, holding tank, sewage sump, or other sewage tank has been pumped out, disconnected, and filled with soil and rock; is crushed and filled; or pumped out and completely excavated and removed.
- Cesspool, seepage pit, leaching pit, or dry well has been pumped and the entire structure has been excavated and removed.
- All subsurface dispersal field piping has been excavated and removed.
- Any visibly contaminated soils or material within, beneath, and surrounding the structure are excavated and removed.
- Any contaminated materials, soils, or other excavations have been disposed of in accordance with state and local requirements.

Well setbacks for sewers

[Minn. R. 4725.4450](#) also specifies setbacks for the installation of a new buried sewer, and the replacement of an existing buried sewer. Sewer is defined as a pipe or conduit carrying sewage, or into which sewage can back up, including floor drain and traps.

Setback variances

Local governments can't issue variances for well setback distances. Only the MDH can issue variances, or the MDH and a county or city with a delegated well program. The MDH may grant setback variances if equivalent protection to nearby wells can be provided through favorable site characteristics, special construction, or other conditions.