

Noncommunity Public Water System Wellhead Requirements

Background

This document is intended to help those persons who operate Noncommunity Public Water Systems understand the wellhead requirements found in Minnesota Rules, chapter 4725. The document offers guidance for uniform and consistent practices. A listing of applicable wellhead requirements may be found at the end of this guidance document in the order they appear.



Wellhead Integrity

- The well cap must weatherproof, insect-proof, and tightly secured.
- It is recommended that existing older style well caps be replaced with an overlapping well cap with a compression gasket and integral screened vent.
- The well must have a screened vent that is pointed downward and terminating a minimum of 12 inches above the established ground surface or the floor of a building. (Note: A well vent is not required for a drive point well or a flowing well.)
- All exposed above grade electrical wiring must be contained in electrical conduit; connections made to the casing or cap must be watertight and vermin-proof.
- The property owner must have defective parts of a well repaired, including a broken, punctured, or otherwise defective or unserviceable casing, screen, fixture, seal, connection, cover, or cap.
- As an alternative to the overlapping well cap, some wells have a sanitary well seal. For more information, refer to [Sanitary Well Seal \(PDF\)](https://www.health.state.mn.us/communities/environment/water/docs/sanitarywellseal.pdf) (<https://www.health.state.mn.us/communities/environment/water/docs/sanitarywellseal.pdf>).

Casing Height

- A casing or casing extension must extend vertically at least 12 inches above the established ground surface, the floor of a building (well house), or a concrete slab.
- A casing for a hand pump may terminate a minimum of six inches above a concrete slab if the concrete slab is at least six inches above the established ground surface.
- The established ground surface, slab, or floor immediately adjacent to the casing must be graded to divert water away from the casing.
- If the well is located in an area prone to flooding, the well casing may need to be extended to at least five feet above the regional flood level. Contact MDH for additional information.

Additional Requirements and Recommendations

Following these requirements and recommendations can help keep the well water safe and avoid costly repairs from damage to the well, pest infestation, or bacterial contamination.

Requirements:

- It is required that all water well construction, well sealing, or alteration/repair work be performed by a water well contractor licensed by the Minnesota Department of Health.
- Must meet and maintain minimum isolation distances between wells and sources of contamination. For more information, refer to [Isolation Distances From a Water-Supply Well \(PDF\)](#)
(<https://www.health.state.mn.us/communities/environment/water/docs/wells/construction/isolate.pdf>)

Recommendations:

- Mark the well with reflective or high visibility material that is taller than snow cover.
- Physically protect against accidental damage from vehicles, lawnmowers, or snowplows by installing at least three protective posts, or other protective barricades around the well.
- Clear any debris, such as lawn clippings and leaf litter, from around the well.
- Periodically inspect the casing, cap, and electrical conduit for damage, deterioration, and separation.

Reference Documents

[Minnesota Rules, part 4725.3150 - Casing Connections and Caps](#)

(<https://www.revisor.mn.gov/rules/4725.3150/>)

[Minnesota Rules, part 4725.2175 – Location of Well or Boring in a Building](#)

(<https://www.revisor.mn.gov/rules/4725.2175>)

[Minnesota Rules, part 4725.5450 – Venting Water-Supply Wells](#)

(https://www.revisor.mn.gov/rules/4725.5450/?keyword_type=all&keyword=4725.5450)

[Minnesota Rules, part 4725.3750 – Repair, Correction, or Sealing of Wells](#)

(<https://www.revisor.mn.gov/rules/4725.3750/>)

[Minnesota Rules, part 4725.2250, Subpart 11 – Casing Height](#)

(<https://www.revisor.mn.gov/rules/4725.2250/>)

[Minnesota Rules, part 4725.4350 – Water-Supply Well Distance from Water Bodies](#)

(<https://www.revisor.mn.gov/rules/4725.4350/>)

[Minnesota Rules, part 4725.4450 – Water-Supply Well Distances from Contamination](#)

(<https://www.revisor.mn.gov/rules/4725.4450/>)

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