

Multiple-user Water Systems/Public Water System Two Step

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Helena, MT

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w/ Department of Environmental Quality



MU Water System Requirements

- 3.1 - In selecting the source of water to be developed, the applicant must demonstrate, to the satisfaction of the reviewing authority, that an adequate quantity and quality of water will be available and that the water delivered to the consumer will meet the requirements outlined in this circular.
- 3.2 - Prior to construction of a multiple-user water system, the proposed location and the plans and specifications must be approved by the reviewing authority, and,
- Well locations must be based on source water delineation and assessment report in accordance with PWS-6.

Pre-development Requirements for Proposed MU System

- 3.2.1 – Source Capacity must be verified prior to development.
- 3.2.3 (a & b) – Well Location specifications
 - Verify that the required separation between existing and potential sources of contamination and ground water development are met, and,
 - Verify that the proposed system meets the minimum setback distances of ARM 17.36.323, and,
 - Verify that the well(s) are located greater than 100' from any structures used to convey or retain industrial, storm, or sanitary waste and state or federal highway rights-of-way.
 - Will provide continued protection of the well site from potential sources of contamination - zoning, deed notices, leasing, or other means acceptable to the reviewing authority.
- 3.2.5 – Well Construction plans and specs must be submitted for review.
 - 1.5 inches of grout to a minimum of 25-feet,
 - Permanent steel casing, must extend at least 18-inches above ground surface, with ground sloping away
 - Well must have temporary cap if permanent cap is not approved.

Conditional Approval

- 3.2.1 – Discussion of water quantity based on pump testing
- 3.2.2 – Microbiological, physical and chemical quality standards are met
 - MU wells must be tested for nitrate/nitrite, total dissolved solids, and pH.
 - Other testing requirements may be required by the Department. i.e. arsenic
- 3.2.3 – Location
 - Update PWS-6
 - Well easement deed notice
- 3.2.4 – Well Yield and Drawdown test requirements are met,
 - 24-hour pump test, unless the well stabilized.
 - Stabilized Well if the well changes less than 0.5ft/100feet of drawdown.
 - This is a ratio that is applied to the shallowest and deepest drawdown in the 8-hour period
 - Form 633 submitted electronically and hard copy
- 3.2.5 – Well Construction standards are met,
 - As-Builts must be provided
 - Well log
 - Grouting form
 - Static Water Level Discussion
- 3.2.6 - Aquifer Types Discussion

2nd Step-development Requirements for Proposed MU System

- All criteria in the Conditional Approval are met.
- Now we review the following before construction:
 - 3.2.7 – Well pumps, discharge piping are appurtenances standards are met,
 - 3.2.8 – Well casing standards are met,
 - 3.2.9 – Water level measurement specifications,
 - 3.4 – Booster pumping facilities.
 - 3.4.7 – Storage facilities
 - 3.4.8 – Distribution Mains



Conversion of Existing Individual/Shared Water System into MU Water System

- Will need to complete a source water delineation and assessment report in accordance with PWS-6.
- Will need to address standards 3.2.1-3.2.9 along with standards of 3.4 (if applicable).
- If the existing well location received a previous approval and meets all minimum setback requirements of ARM 17.36.323, then a deviation to 3.2.3 (Well location and minimum setbacks) is not necessary.
 - If the minimum setback distances of ARM 17.36.323 cannot be met, then a deviation to 3.2.3 may be applicable,
 - Also, a variance at the local governing authority may be necessary.
- Additional deviations may be applicable if the above-mentioned standards are not satisfied.

Questions?



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