

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD
WELL WATER TESTING

(No.)

CODE 355

DEFINITION

Testing for physical, biological, and chemical characteristics of **groundwater** in wells or spring developments.

necessary, shall be obtained from a source knowledgeable of the testing procedures and objectives.

PURPOSE

This practice may be applied as part of a conservation management system to determine the quality of a groundwater supply for the following intended uses: irrigation, livestock, fish and wildlife habitat, aquaculture enterprises, or agricultural uses.

CONSIDERATIONS

The following items should be considered in planning water supply testing:

- Location and depth of supply, aquifer characteristics, geology and history of the site in relationship to sources of potential contamination such as surface water, septic system, chemical storage facilities, landfills, roads, mines, and animal waste storage or treatment facility or natural occurring sources of contamination.
- Water supply construction practices used such as dug, drilled, casing, or spring development.
- Using a computerized total farm record keeping system for ease of data input, analysis, and retrieval.
- Using a state certified laboratory.

CONDITIONS WHERE PRACTICE APPLIES

This standard applies to water supplies that are used or have potential to be used on farms or ranches.

This practice does not apply to groundwater for human consumption, or wells for monitoring groundwater hydrology or contamination associated with animal waste storage or treatment installations.

CRITERIA

The specific use of the water and the water quality concerns shall be identified.

The required tests and applicable standards shall be determined based on the planned use of the water.

Water samples shall be collected and analyzed in accordance with established procedures. Specific parameters, sampling procedures, and laboratory analysis may be specifically required by local, State, Tribal, or Federal laws and regulations. Contact the testing entity for specific guidance.

Interpretation of test results and recommendations for remedial actions, as

PLANS AND SPECIFICATIONS

Plans and specifications for water testing shall be consistent with this standard to achieve the desired result.

Plans and specifications shall include a description of processes for collecting, storing, transporting, and testing samples; and reporting test results.

OPERATION AND MAINTENANCE

Water testing records that shall be maintained will include:

- Sample site, location, and depth
- Remotely-sensed or in-situ records of water

quality conditions within the well (pH, conductivity, turbidity, etc.)

- Date and time water sample taken,
- Name and title of person who collected sample
- Type of sampler and sample taken
- Standard collection procedure followed
- Water test analysis date
- Laboratory performing the analysis
- Contaminant tests to be performed
- Schedule of additional testing at required frequency according to applicable standard
- Records to evaluate trends and the effects of any remedial action.
- Weather and precipitation data
- Observations on well condition
- Other records as required

REFERENCES

- CSU Cooperative Extension fact sheet 9.307, Drinking Water Quality and Health;
- CSU Cooperative Extension fact sheet 0.513, Domestic Water Quality Criteria;
- CSU Cooperative Extension fact sheet 4.717, Glossary of Water Terminology;
- CSU Cooperative Extension fact sheet 0.520, Selecting an Analytical Laboratory.
- CSU Cooperative Extension bulletin XCM-179, BMPs for Private Well Protection