

APPENDIX E: Water Testing

In Pennsylvania, protection and maintenance of a private well is largely the responsibility of the homeowner. A private well is typically a safe, dependable source of water if sited wisely and constructed properly.

However, even the best constructed well, placed in an appropriate location, is still vulnerable to contamination. The homeowner, interested in learning more about the quality of their well water, must take the initiative to have their water tested.

Based on groundwater contaminants that have been detected in residential and community wells in Pike County, listed below are some of the main water quality parameters to consider testing along with suggestions for how often to test for them:

Primary Concern:

- Total Coliform bacteria. Test annually (see note below).
- pH (measures acidity). Test every 3 years.
- TDS (Total Dissolved Solids). Test every 3 years.

If some or all of the pipes carrying your household drinking water are made of copper or other metals, test for the following*:

- Corrosivity
- Copper
- Lead (Testing for lead is recommended when metal pipes, installed prior to 1991, are part of a home's plumbing system).

*Test for these parameters in a new home or when testing a water supply for the first time. Consider repeating if a change is made to a home water supply system, such as the installation of a new well or if plastic plumbing is replaced with copper pipes.

Note:

- If total Coliform bacteria tests positive, follow-up with a test for E. coli.
- Nitrates: Consider testing if you have knowledge of your own or a neighbor's on-lot sewage system malfunctioning, if on-lot systems occur in high densities in your community or if there are any small-scale livestock operations (horses, llamas, goats) in the

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vicinity of your residence, particularly in proximity to your wellhead.

Secondary Concern: These parameters are related to any observed stains, tastes, odors, etc.

- Iron – test if orange stains or a metallic taste in your water is present. Common in this region.
- Manganese – test if black flecks or metallic taste in your water is present. Common in this region.

To help ensure accurate results, follow instructions for taking and storing water samples. PA DEP recommends that residents use a state certified lab to perform testing of samples collected. Check your phone book, visit the DEP website, at www.dep.state.pa.us/labs/ or contact the Conservation District for a list of certified labs offering water testing. Residents can also contact the Conservation District (570-226-8220) or their local Penn State Cooperative Extension office (570-296-3400) for more information on water testing.

Resources for More Information

Penn State University: www.age.psu.edu/extension/factsheets/f/. Includes fact sheets on water treatment.

Penn State University. Water Tests: What do the Numbers Mean? pubs.cas.psu.edu/freepubs/pdfs/agrs90.pdf

Wilkes University Drinking Water Testing and Information: www.water-research.net/helpguide.htm