

Who Regulates Septic Systems in Idaho?

The Idaho Department of Environmental Quality (DEQ) has established the Individual/Subsurface Sewage Disposal Rules for the design, construction, siting, and use of individual and subsurface sewage disposal systems, which include septic systems.

Idaho's seven local health districts administer these rules under a formal agreement with DEQ. The health districts inspect and grant permits for septic systems.

Installing a Septic System

Careful early planning is essential to properly install a septic system. Some building sites have limited areas suitable for septic systems, so placement of the septic system may take priority over choosing a house location. Septic system drainfields must be sited and constructed properly to ensure continued operation and prevent contamination of ground water.

Before a septic system can be properly installed, the landowner must obtain a permit from the local health district and have the health district conduct a site evaluation to determine if the site is suitable for a septic system.

Temporary Wells

During site evaluation, a contractor will dig test pits to inspect the soil. If soil mottling or other signs indicate possible high ground water, a temporary well to measure the depth to ground water may be necessary. A temporary well can be installed in the test pit or in an augered hole.

Temporary wells made from plastic pipe buried in the soil can be used to estimate the highest seasonal level of ground water. This estimate is important for proper placement of septic system tanks or drainfields. Temporary wells must be removed before finalizing the permit.

For More Information

Idaho Department of Environmental Quality

1410 N. Hilton
Boise, ID 83706
(208) 373-0502

www.deq.idaho.gov/water/prog_issues/waste_water/onsite_septic_systems.cfm

Idaho Health Districts

Panhandle Health District
8500 N. Atlas Road
Hayden, ID 83835
(208) 415-5100
www.phd1.idaho.gov

Central District Health Department
707 N. Armstrong Place
Boise, ID 83704
(208) 375-5211
www.cdhd.idaho.gov

North Central Health District
215 10th St.
Lewiston, ID 83501
(208) 799-3100
www.idahopublichealth.com

South Central Public Health District
1020 Washington St. N.
Twin Falls, ID 83301
(208) 734-5900
www.phd5.idaho.gov

Southwest District Health Department
920 Main St.
Caldwell, ID 83605
(208) 455-5300
www.publichealthidaho.com

Southeastern District Health Department
1901 Alvin Ricken Dr.
Pocatello, ID 83201
(208) 233-9080
www.sdhdidaho.org

Eastern Idaho Public Health District
1250 Hollipark Dr.
Idaho Falls, ID 83401
(208) 522-0310
www.idaho.gov/phd7

Printed on recycled paper, February 2010. Costs associated with this publication are available from the Department of Environmental Quality in accordance with Section 60-202, Idaho Code.



Installing a Temporary Well to Measure Depth to Ground Water

for Proper Septic Drainfield Placement

Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706
(208) 373-0502
www.deq.idaho.gov



Site Considerations

Before installing a temporary well to measure the depth to ground water, take these steps:

- Examine the lay of the land, such as the overall slope and high or low spots. Avoid areas with marshy or wetland-type vegetation, standing water, and the bottom of slopes.
- Avoid areas close to streams or irrigation canals; they are more likely to have high ground water.
- Install the temporary well in an area where soil conditions are appropriate for a septic drainfield and where the depth to ground water is expected to be greatest. Install several wells, if needed.
- Temporary wells are installed in test pits dug by backhoes. Try to orient the test pit's long axis with the slope to minimize surface water runoff that may enter the test pit and be mistaken for ground water.

Materials

- Perforated or solid plastic pipe at least 1" in diameter and approximately 15 feet long to use as well casing. The pipe can be either one piece, or two pieces threaded or glued together.
- Caps that fit snugly on the plastic casing pipe.
- Filter cloth or sock to protect the perforated pipe from clogging. Geotextile fabric used for landscaping or a nylon stocking might be used.

Equipment

- Backhoe or hole auger. The auger should be at least 2" larger in diameter than the plastic pipe used to case the temporary well.
- Steel tape long enough to measure the length of the longest pipe.
- Carpenter's chalk to coat the initial length of measuring tape that will encounter water.
- Power tools to perforate the plastic pipe.
- Water level monitoring table (see sample at right).

Temporary Well Design and Monitoring

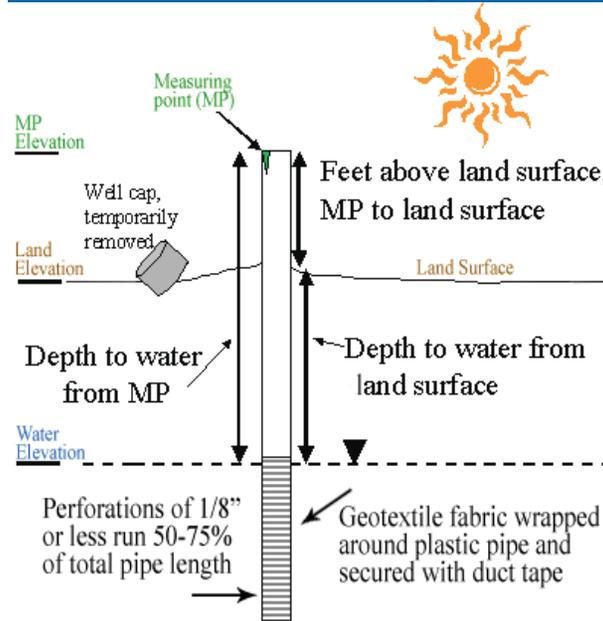


Diagram adapted from Nebraska Department of Environmental Quality.

Measuring the water level inside the temporary well gives the depth to ground water. Sites with high ground water may not be suitable for septic systems.

Sample Water Level Monitoring Table

Height of pipe above native soil surface: _____	Internal depth of pipe after installation: _____
A. Date and Time	B. Depth of Well from MP
C. Wetted Chalk Point	D. Depth to Water from MP (item B minus item C)
E. Water Depth Below Ground Surface (item D minus MP elevation)	F. Notes (weather conditions, well conditions, person measuring)

Monitor weekly during the seasonal high ground water period.

Installation

Typically, temporary wells are no deeper than 15 feet. However, this depth depends on soil type and other factors. Consult your local health district.

- Pipe casing should rise at least 24" above the original soil surface.
- Perforate the plastic pipe for 50% to 75% of its total length with slots or holes 1/8" or less in size.
- Cap the end of the pipe above ground.
- Wrap the perforated section of pipe with geotextile filter fabric and secure in place with duct tape.
- Place the prepared pipe in the test pit as close as possible to the pit's vertical wall. The pipe must be placed on undisturbed soil to prevent settling. Hold the pipe as vertical and as straight as possible while soil is backfilled around it, otherwise ground water measurements will be unusable.
- Measure the height of the pipe above the native soil surface and record in the monitoring table.
- Mound the soil around the pipe as high as practical without covering the top. Account for soil settling so that the mound surrounding the pipe remains after settling.
- Measure the internal depth of the pipe to the top lip and record in the monitoring table.

Water Level Measurements

- Take measurements with a commercial water-level sensor or a steel tape marked with carpenter's chalk. Record measurements to the nearest 1/4".
- Measure at least weekly throughout the time when ground water levels are expected to be highest. Continue until you are sure the time has passed when ground water levels are highest. Local conditions will vary; work with your local health district to determine when high ground water is likely to occur.