

APPLICATION PROCEDURES AND INFORMATION
FOR
ONSITE WASTEWATER SYSTEM PERMITS



SUMMIT COUNTY PUBLIC HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH

0037 Peak One Dr.
P.O. Box 5660
Frisco, Colorado 80443
(970) 668-4070
FAX (970) 668-4255

Other forms you may need:

OWS Permit Application
Setback Table
Sample Plot Plan
Septic Contractor List
Engineer List

It is the goal of the Summit County Onsite Wastewater Systems (OWS) Program is to assure prospective homebuilders that the septic system they will be installing to serve their new home is appropriate for their needs and is protective of the environment. Environmental Health staff strives to provide accurate and timely information so that projects can move ahead with minimal delay.

This information packet is not a complete set of laws governing septic systems. The information is targeted towards answering some common questions and attempts to give step-by-step guidance through the process of designing, permitting and installing a new septic system.

Summit County Public Health Department, Environmental Health is open 8:00 AM to 12:00 PM and 1:00 PM to 5:00 PM Monday through Friday. Should you need to speak to an inspector, we encourage you to call.

COMMON QUESTIONS OF NEW HOMEBUILDERS

Where do I start?

To begin the septic system design process your property needs to be identified with conspicuous signage and then surveyed to begin developing a conceptual site plan. In developing this plan, it is important that you have a good idea of the location of all water wells and septic systems on all adjacent properties, even those across roadways. Information concerning the actual or permitted location of wells and septic systems on adjacent properties can be obtained through research of our septic system records or contacting the State Department of Natural Resources (970 945-5665). You should also know the location of any surface waters, disturbance envelopes, wetlands or other surface features that may require significant setback distances (refer to the setback table and sample plot plan). It is also important to know the percent of slope in the area of the proposed leach field. If working with a design engineer, he/she will find this information. At the time you submit your conceptual plan, we will ask you to submit an application for a septic system permit.

What soils tests are required?

Initially, a soil profile survey is required. A soil profile hole is a deep pit at least 8 feet deep and a minimum of 4 feet below the bottom of the proposed leach field. The profile hole may be less than 8 feet deep if bedrock is encountered. Our staff must conduct an inspection of the profile hole. A \$95.00 fee is required prior to this inspection. This inspection enables us to determine if groundwater, bedrock, impervious clay layers or other problem conditions exist in the area of the proposed leach field. The inspection also helps to identify the most appropriate soil layers to install the leach field in, thereby determining the depth of your leach field. The profile hole is usually dug with a backhoe and needs to be wide enough to permit visual observation of soil layers to the bottom of the pit. To prevent accidents and injuries on your site, the profile hole and any other soil test pits need to be securely covered or barricaded if left unattended.

When can a soil profile survey be conducted?

Soils can be evaluated at any time during the year provided that the soil is not frozen and both equipment and our staff can safely access the site. Many portions of Summit County exhibit seasonally high water tables. In these areas, a profile hole inspection may be required during maximal seasonal groundwater periods (usually mid-May through mid-June). If your profile hole cannot be inspected during this period additional conditions may be required on your permit (i.e.-a French drain or mound, etc). A spring re-check of your profile hole may be conducted at no extra charge. If the results of the profile hole re-check determine that you do not need the additional conditions they may be removed from your permit at that time provided the design engineer is agreeable.

Is a percolation test required?

Soils evaluations can be conducted by performing a percolation test, sieve analysis or other approved alternative that is equivalent to the percolation test outlined in the OWS Regulations. Sieve tests or soils textural analysis must correspond to the U.S.D.A. soil classification system. All tests require multiple sample sites so make sure to have all pits dug at the time the profile hole is dug to avoid additional expense and delays in getting an excavator to return to the site. Consult with the Engineer or Geologist conducting the testing for more information. In general, tighter soils (i.e. clays) will require a larger square footage of leach field area. However, several alternatives can be utilized to minimize the financial impact of a larger sizing requirement. Your design engineer can assist you with deciding on the best alternative.

Do I need to hire an engineer?

All soils tests must be performed by a Registered Professional Engineer or a Professional Geologist. Although the OWS regulations allow for some systems to be designed by a lay person, nearly all systems are designed by a professional engineer specializing in the wastewater field because of the difficult and unique geology of Summit County.

Can I design my own septic system?

You are encouraged to hire a professional engineer to design your septic system; after all it is a very expensive and **critical part** of your new home design. However, there are certain conditions that allow a non-engineer to design their own septic system. Such conditions include favorable soil testing results, favorable site steepness and the lack of groundwater or bedrock. Consult with an inspector for more information on whether or not you can design your own septic system, after having soils testing done and completing a site plan. Please note that an inspector's job is to approve/disapprove submitted designs and so therefore cannot design a system for you.

When do I get my permit?

Before a permit can be issued, a site inspection must be conducted to determine if the proposed system can meet all setback requirements. All components of the septic system, as well as proposed building, well, water lines and property lines must be indicated by stakes on your property for this inspection. A fee of \$95.00 is required in advance of this inspection. If the site inspection is conducted at the same time as the profile hole survey, a combination inspection fee of \$120.00 will be charged. Arrangements for the site inspection should be made at least one day in advance of the requested inspection time. You and/or either your design engineer or contractor may meet our inspector at the property to assist with the site inspection. If the inspector finds that the proposed system meets all regulations, the application will be approved for permitting. Once you have submitted your permit fee, design information and final plot plan, the permit will be issued.

How long is the permit valid?

The septic system permit is valid for a period of one year from the date of issuance. An expired permit may be renewed for a period of twelve months upon receipt of a written request to Environmental Health. At the end of the permit renewal period, if the Onsite Wastewater system has not been installed, the permit is considered invalid, and the owner may apply for re-issuance of the permit. A fee of \$200.00 is required to reissue a permit, provided no changes are made to the design. Environmental Health staff will also need to conduct another On Site inspection to verify the design is still appropriate for the site. This inspection is \$95. If permit expires prior to receiving a request for reissuing then a new application is required and may be subject to all fees required for a new permit.

Who can install a septic system?

You are encouraged to have a licensed professional install your septic system. A professional is generally more familiar with the construction requirements and can generally install your system more efficiently. Visit www.co.summit.co.us for the latest contractor list. However, you do have the option of installing your own system. In order to do so, you must take the homeowner/builder test at our office. The test must be taken and passed prior to beginning construction of your septic system. The cost of the test is \$77.00. It is an open-book test taken from the Summit County Onsite Wastewater System Regulations. You may either download and print the regulations from our website (www.co.summit.co.us) or purchase a bound copy from the Department for \$18.50.

Any earth disturbing activities in Summit County greater than 500 square feet requires a Grading and Excavation Permit from the Summit County Engineering Department. Most septic systems fall into this category; therefore, a Grading and Excavation Permit is required prior to beginning construction of the septic system.

What inspections are required during installation?

Your OWS permit fee entitles you to four inspections during the construction process (2 if a minor repair). Additional inspection fees will be charged if more inspections are necessary. All components of the system must be left exposed until the inspection is completed unless otherwise approved in advance by the inspector. Arrangements for all inspections should be made at least one business day in advance of the requested inspection time. You should know that since dosing systems are required for all septic systems in Summit County, an inspection is required of the dosing system and final grading over the septic/dosing tank(s) before we can sign-off for a Certificate of Occupancy. This inspection is one of the four allowed under your permit, so care should be taken to plan your inspections accordingly, especially if you are planning to obtain your Certificate of Occupancy during the winter months.

Can I obtain a well permit through your office?

No. The Summit County Environmental Health does not issue well permits. Information regarding well permits may be obtained by contacting:

Colorado Department of Natural Resources
Division of Water Resources
1313 Sherman St., 8th Floor
Denver, CO 80203
(303) 866-3587

A copy of the approved State Well Permit must be submitted with your building permit application as this will be reviewed by Environmental Health prior to receiving sign-off for the Building Permit. Any other type of non-public water supply is subject to review and approval by Environmental Health, and plans for such non-public water supplies must accompany the submittal of plans to the Building Department. Quality of a private water supply is the responsibility of the owner. Prior to receiving sign-off for a Certificate of Occupancy, an "Absent" bacteriological test must be submitted to Environmental Health. The Department does provide this sampling service at a rate of \$78.

The following forms may be obtained at our office or on our website at www.co.summit.co.us

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