



Community Development Department  
 108 8<sup>th</sup> Street, Suite 401  
 Glenwood Springs, CO 81601  
 (970) 945-8212  
[www.garfield-county.com](http://www.garfield-county.com)

**ONSITE WASTEWATER  
 TREATMENT SYSTEM  
 (OWTS)  
 APPLICATION CHECKLIST**

**SEWAGE DISPOSAL PERMIT CHECKLIST**

Permit applications can be obtained and submitted to the Garfield County Community Development Department located at 108 8th Street, Suite 401, Glenwood Springs, CO. See below for additional information. All applications are required to be submitted in person.

**PERMIT APPLICATION & SUBMITTAL REQUIREMENTS:**

- Complete application.
- 1 Copy of a Site Plan that includes well, all streams, irrigation ditches and any water courses. Draw in your house, septic tank and system, detached garages and driveway. If a change of location is necessary, you must submit a corrected drawing.
- Engineered Systems will need a copy of soil evaluation/ perk rate and design for our records prior to final inspection.

**FEES: FEES ARE NOT REFUNDABLE. Payment is required at time of submittal.**

**Make Check payable to: Garfield County Treasurer**

- Septic Permit for a New installation .....\$123.00
- Septic Permit for Alteration and/or Repair .....\$75.00
- Septic Perk test .....\$150.00

**ATTACHMENTS:**

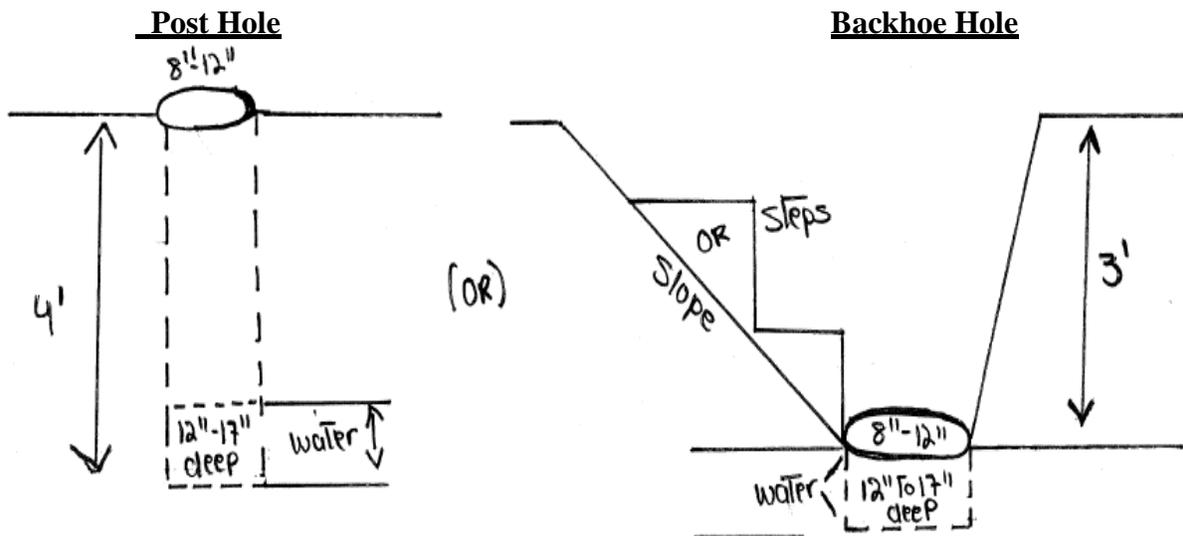
- Percolation Test Instructions.
- Recommended minimum requirements for Onsite Wastewater Treatment System (OWTS).

**FINAL INSPECTION:**

- When all components are in place, connected and ready to cover, request a final inspection by the County Inspector.
- **DO NOT** backfill any part of the system prior to the inspection.
- The initial fee covers the percolation test and one (1) inspection before cover up. Any additional percolation test will be charged at \$150.00 each and additional inspections will be charged at \$50.00 each.
- Upon final approval, carefully cover the entire system.
- Engineered Systems are inspected by the Engineer prior to backfill. A final sealed letter by the Engineer is required to be submitted to Garfield County. As built drawings are required.

## PERCOLATION TEST INSTRUCTIONS

- The successful operation of your septic system depends on the rate the soil in which your leach field will be installed will accept water.
- **THIS IS CRITICAL** - If instructions are not followed completely, technician may not do the perk test and you will be charge a \$50.00 fee for 2nd visit.
- The rate of absorption is called the percolation rate and it determines the size of the leach field needed for a particular flow of sewage and in some cases even determines the feasibility of the installation of a septic tank and leach field system.
- PERCOLATION TEST MUST BE DONE AT THE GROUND DEPTH WHERE ABSORPTION WILL TAKE PLACE. STANDARD LEACH FIELDS ARE INSTALLED THREE (3) FEET DEEP, SO THE THREE (3) PERCOLATION HOLES ARE DUG FOUR (4) FEET DEEP, AT LEAST TWENTY (20) FEET APART, IN A TRIANGULAR SHAPE. THE PERCOLATION TEST IS DONE IN THE BOTTOM ONE (1) FOOT OF THE HOLE.



A posthole digger, auger or backhoe can be used to dig the percolation test holes. If a back hoe is used, dig the backhoe hole 3 feet deep, with 2 steps or a ramp. Put a test hole 1 foot deep and 8 to 12 inches in diameter in the bottom. Installation of absorption areas (i.e. drywells) deeper than 3 feet require the permission of the Environmental Health Department. All dry wells shall be designed by an Engineer registered in the State of Colorado.

Saturation with water will affect the percolation rate, and since the system will be expected to operate when the soil is saturated with water, THE LOWER TEST HOLE MUST BE FILLED WITH WATER AT LEAST 8 HOURS BEFORE THE TEST AND ALLOWED TO STAND. More water will be needed to perform the percolation test, so AT LEAST 5 GALLONS OF WATER PER HOLE SHOULD BE ON HAND WHEN THE TEST IS PERFORMED.

AN 8 FOOT PROFILE HOLE IN THE LEACH FIELD AREA IS REQUIRED BY THE STATE OF COLORADO TO DETERMINE THE PROXIMITY OF GROUND WATER AND BEDROCK. One soil profile hole shall be dug to provide observation of the soil profile of the area of the soil absorption system. The hole shall be prepared at least 8 feet deep. The hole may be terminated when ground water or bedrock is encountered. The hole shall be prepared in such a way as to provide identification of the soil profile 4 feet below the bottom of the soil absorption system.

**If ground water is found in any perk or profile hole, an engineered system is required. Percolation rates faster than 5 minutes per inch or slower than 60 minutes per inch will require an engineered system and/ or Board of Health approval.**

(Applicant's Copy)

**RECOMMENDED MINIMUM REQUIREMENTS FOR  
ONSITE WASTEWATER TREATMENT SYSTEM  
(OWTS)**

Before construction is started, the Inspector must be contacted for approval and detailed information concerning the proposed disposal system is needed. Higher standards than those which follow may be required in individual cases to assure attainment of the objective. Those objectives are to locate, construct and maintain onsite wastewater treatment systems in such a manner that existing or contemplated water supplies will not become contaminated and so that sewage will not overflow the ground surface and result in a nuisance or health hazard.

**LIQUID CAPACITY OF TANK (GALLONS)**

(Provide for use of garbage grinder, automatic clothes washer and other water using household appliances).

Number of Bedrooms	Recommended Minimum Tank Capacity
3 or less	1,000 gallons
4 or less	1,250 gallons
For each additional bedroom, add	250 gallons

A Dwelling on less than two acres, areas of high water tables, or areas with a percolation test rate faster than 1 inch in 5 minutes must have alternative sewage facilities, i.e., central collection, holding tanks, individual treatment, etc.

EXEMPTION: Absorption areas may be allowed with percolation rates faster than 1 inch in 5 minutes provided the soil is a sandy texture and no water table problems are encountered. An Engineer is required. Slopes greater than 30% also require an Engineered System.

1. Maximum length of drainage line:	100 linear feet
2. Minimum width of drainage trench:	18 inches
3. Minimum spacing between trenches or pipes:	6 feet
4. Maximum grade of drainage system:	As level as possible
5. Minimum depth rock under drain PVC:	6" under PVC, 2" over PVC
6. Minimum depth of cover over distribution lines:	12 inches
7. Maximum depth of cover over distribution lines:	Variable
8. Minimum grade of house sewer:	1/8 to 1/4" per linear ft.
9. Minimum distance of sewage disposal system from dwelling:	20 feet
10. Minimum distance of septic tank from dwelling:	5 feet
11. Minimum distance of leaching area to a well:	100 feet
12. Minimum distance of septic tank to a well:	50 feet
13. Minimum distance of leaching area to a stream of water course:	50 feet
14. Minimum distance from septic tank and disposal field to property lines:	10 feet for drywell 10 feet for leach field.
15. Minimum sewer pipe and distribution pipe:	4 inch diameter

- Septic tank construction should be of concrete material that will resist deterioration and which can be made reasonably watertight. See code for septic tank specifications.
- If the house sewer line is longer than 10 feet between house and septic tank, a clean-out Y should be installed outside as near as practical to the house.
- Septic tanks should be inspected once a year and cleaned when necessary. Cleaning is recommended when space between the scum accumulation and sludge residue on the tank bottom is less than eighteen (18) inches.
- The Department recommends pumping a septic tank once every four (4) years, when a yearly inspection by the owner is not practical.
- Effluent screen is required in all new and replaced septic tanks, providing access to maintain effluent screen.

(Applicant's Copy)



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# ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) PERMIT APPLICATION

**TYPE OF CONSTRUCTION**

<input type="checkbox"/> New Installation	<input type="checkbox"/> Alteration	<input type="checkbox"/> Repair
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**WASTE TYPE**

<input type="checkbox"/> Dwelling	<input type="checkbox"/> Transient Use	<input type="checkbox"/> Comm./Industrial	<input type="checkbox"/> Non-Domestic
<input type="checkbox"/> Other Describe _____			

**INVOLVED PARTIES**

**Property Owner:** \_\_\_\_\_ **Phone:** (\_\_\_\_) \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

**Contractor:** \_\_\_\_\_ **Phone:** (\_\_\_\_) \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

**Engineer:** \_\_\_\_\_ **Phone:** (\_\_\_\_) \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

**PROJECT NAME AND LOCATION**

**Job Address:** \_\_\_\_\_

**Assessor's Parcel Number:** \_\_\_\_\_ **Sub.** \_\_\_\_\_ **Lot** \_\_\_\_\_ **Block** \_\_\_\_\_

**Building or Service Type:** \_\_\_\_\_ **#Bedrooms:** \_\_\_\_\_ **Garbage Grinder** \_\_\_\_\_

**Distance to Nearest Community Sewer System:** \_\_\_\_\_

**Was an effort made to connect to the Community Sewer System:** \_\_\_\_\_

<b>Type of OWTS</b>	<input type="checkbox"/> Septic Tank	<input type="checkbox"/> Aeration Plant	<input type="checkbox"/> Vault	<input type="checkbox"/> Vault Privy	<input type="checkbox"/> Composting Toilet
	<input type="checkbox"/> Recycling, Potable Use	<input type="checkbox"/> Recycling	<input type="checkbox"/> Pit Privy	<input type="checkbox"/> Incineration Toilet	
	<input type="checkbox"/> Chemical Toilet	<input type="checkbox"/> Other _____			
<b>Ground Conditions</b>	Depth to 1 <sup>st</sup> Ground water table _____			Percent Ground Slope _____	
<b>Final Disposal by</b>	<input type="checkbox"/> Absorption trench, Bed or Pit	<input type="checkbox"/> Underground Dispersal	<input type="checkbox"/> Above Ground Dispersal		
	<input type="checkbox"/> Evapotranspiration	<input type="checkbox"/> Wastewater Pond	<input type="checkbox"/> Sand Filter		
	<input type="checkbox"/> Other _____				
<b>Water Source &amp; Type</b>	<input type="checkbox"/> Well	<input type="checkbox"/> Spring	<input type="checkbox"/> Stream or Creek	<input type="checkbox"/> Cistern	
	<input type="checkbox"/> Community Water System Name _____				
<b>Effluent</b>	Will Effluent be discharged directly into waters of the State? <input type="checkbox"/> Yes <input type="checkbox"/> No				

**CERTIFICATION**

Applicant acknowledges that the completeness of the application is conditional upon such further mandatory and additional test and reports as may be required by the local health department to be made and furnished by the applicant or by the local health department for purposed of the evaluation of the application; and the issuance of the permit is subject to such terms and conditions as deemed necessary to insure compliance with rules and regulations made, information and reports submitted herewith and required to be submitted by the applicant are or will be represented to be true and correct to the best of my knowledge and belief and are designed to be relied on by the local department of health in evaluating the same for purposes of issuing the permit applied for herein. I further understand that any falsification or misrepresentation may result in the denial of the application or revocation of any permit granted based upon said application and legal action for perjury as provided by law.

**I hereby acknowledge that I have read and understand the Notice and Certification above as well as have provided the required information which is correct and accurate to the best of my knowledge.**

\_\_\_\_\_

**Property Owner Print and Sign**

\_\_\_\_\_

**Date**

**OFFICIAL USE ONLY**

Special Conditions:

<b>Permit Fee:</b>	<b>Perk Fee:</b>	<b>Total Fees:</b>	<b>Fees Paid:</b>
<b>Building Permit</b>	<b>Septic Permit:</b>	<b>Issue Date:</b>	<b>Balance Due:</b>

BLDG DIV: \_\_\_\_\_

APPROVAL DATE