

Columbia County Public Health

1002 S. 3rd Street, Suite 2
Dayton, WA 99328
Phone: 509 382-2181 Fax: 509 382-2942

APPLICATION FOR ON-SITE SEWAGE DISPOSAL PERMIT

TYPE OF PERMIT New System \$375.00 Replacement/Repair/Addition \$200.00
 Site/Soil Evaluation Only \$175.00 Connection \$200.00 Multiple Lots \$175.00 & 100.00

Owner/Applicant Information

Owner's Name	Address	Phone #
Applicant's Name (if different)	Address	Phone#

Property Information

Property Address _____ Parcel# _____
Name of Subdivision/Short Plat _____ Block# _____ Lot# _____
Property Size (Sq. Feet/Acres) _____ Distance to Public Sewer System _____ Ft.
Water Supply: Individual Well Spring Public System (name) _____
Directions to Property _____

Planning Department Approval (needed for new installations only)

Approved Site Plan: Yes No Approval Date: _____
Signed By: _____ Title: _____

Building Information

If Single Family Home: Built Onsite Prefabricated Mobile Home
Number of Bedrooms _____ (To determine living capacity of the home)
Name of Building Contractor _____ Phone# _____
If Other Than a Single Family Home: Type of Structure _____
Number of Persons/Day or Gallons of Sewage/Day _____

Sewage System Will be Installed By: Property Owner Licensed Installer _____

I understand if this application is denied, I have the right to request an appeal hearing before the Health Officer. I understand this request for hearing must be made in writing within 30 days of notification of denial, and that a hearing will be set within 30 days of the receipt of my request for hearing. I further understand that if the appeal to the Health Officer is not successful, I have the right to appeal that decision to the County Board of Health.

Applicant's Signature: _____ **Date:** _____

Permit# _____ Amount Paid _____ Receipt# _____ Public Health Initials _____

SITE/SOIL EVALUATION AND PERMIT PROCEDURE FOR ONSITE SEWAGE DISPOSAL

- 1) A Site/Soil evaluation is necessary to develop any home site that is not served by approved public water and sewer. Onsite Sewage Disposal Systems (OSS) must be approved by the Columbia County Public Health Department and meet the requirements of WAC 246-272 and WAC 246-272A. If the directions given are followed this process can be completed easily.
- 2) In order to get a site evaluation you will need to fill out completely an Onsite Sewage Application and Plot Plan. The plot plan for your site **shall have as a minimum the following features:**
 - a. Lot dimensions and property lines.
 - b. Directional arrow indicating North.
 - c. Road location and any exiting or proposed driveways.
 - d. All proposed and existing structures, their dimensions and distance to each other, to property lines and to centerline of road.
 - e. Location of test holes (flagged) proposed drainfield and reserve areas and their distances to proposed structures or projects.
 - f. Location and distance to any surface water, rives, streams, springs, drainage ditches.
 - g. Location and distance to any proposed or exiting wells.
 - h. Location and distance to cuts, banks, steep hills, fills, and land slide areas.
 - i. Indicate all easements, right-of-ways, and adjacent property addresses and uses.
- 3) Call or visit the county building department and obtain an address. Mark the property access from the nearest road with a flagged stake.
- 4) **Once you have fully completed the instructions given in steps 1-4 above, return the completed Onsite Sewage Application and Plot Plan along with the current survey or tax map to the Health Department and pay the site evaluation fee.**
- 5) An inspection date will be set and the inspection made. The Environmental Health Specialist will complete the evaluation report and mail results to the person named on the application. The report will declare the site acceptable, conditionally acceptable or unacceptable for an onsite sewage disposal.
- 6) The property owner may apply an OSS Construction Permit for the approved site on the property **after obtaining** an approved onsite sewage system site/soil evaluation. A permit fee must be paid prior to construction of an on-site sewage system.
- 7) **All requirements in WAC 246-272 for OSS approval must be met. All lots must have an adequate reserve area (100%) for a repair system should failure occur.**
- 8) A site evaluation report issued by the Health Department may be reviewed at the request of the applicant. The application for review shall be submitted to the Health Department within thirty (30) days of site evaluation report issuance date and be accompanied with the review fee.
- 9) An application for a waiver of State Codes may be submitted to the Health Officer for review. Any decision made by the Health Department may be appealed in writing to the Columbia County Board of Health within 10 days of notice.

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MINIMUM SPECIFICATIONS FOR CONVENTIONAL ON-SITE SEWAGE SYSTEMS

SEPTIC TANKS

- **All wastewater** from homes or other building must be treated and disposed of in an approved on-site sewage system if a public sewer is not available. Wastewater from the toilet, bath, kitchen, laundry, etc. flows first into a septic tank located at least 5 feet from the building foundation.
- **Only septic tanks approved by this department may be installed.** All septic tanks must have two compartments or consist of two tanks in series. Tanks must be installed with cleanouts and inspection access to finished grade. All septic tank access riser covers must be installed at finished grade. All septic tanks must have effluent filters and risers to finish grade.
- **Required minimum capacities** are based on the number of bedrooms in a home: 1000 gallons for 4 bedrooms or less, 1250 gallons for 5 bedrooms, 1500 gallons for 6 bedrooms. Other buildings must be served by tanks sized at least 1.5 times the daily flow.

SEWER LINES

- **Pipe used to and from the septic tank must be of required material:** 4 inch ABS Schedule 40 or PVC 3034. Cast iron or sleeved (double-cased) approved pipe must be used under driveways and parking areas.
- **Sewer pipe must be installed at the following slope:** 1/8 to ¼ inch per foot (or 45 degrees to vertical) between building and septic tank, 1/8 inch per foot to vertical between tank and drainfield. All joints must be watertight.
- **A cleanout extended to finished grade must be installed within 2 feet of the building.**

DISTRIBUTION BOXES OR TEES

- **A distribution box or level tee is required** to provide equal distribution of effluent to the disposal system.
- **Use of a distribution box** is required if the drainfield is installed on a slope. Use of distribution boxes for other installations may be optional.
- **If distribution boxes are used the following is required:** The box must be bedded properly with gravel or concrete to assure that it is level and must be water tight. (Water testing will be required during inspection). Sewer pipe into and out of the box shall be of the same specifications as above and shall extend at least 5 feet from the box before the beginning of perforated drain pipe.

SUBSURFACE ABSORPTION SYSTEMS (DRAINFIELDS)

1. **Conventional Drainfield design:** 36 inch trench width; 6 inches of washed rock either round or crushed (3/4 inch-2 ½ inched in diameter) sits in the bottom. A perforated 4 inch pipe is set on top of the drain rock with both drain holes positioned at the 4 and 8 o'clock position facing down. Then another 6 inches of rock to cover the pipe is required (4 inches to cover the pipe and 2 inches over the top rock must be level not mounded). The ends of the pipes shall have monitor ports to finish grade.

Trench depth will be determined by the Health Department, based on the soil type and whether or not there is a water table or impervious layer like basalt or hardpan for a gravity system.

2. In some cases a pump chamber may be required to boost the effluent to a higher elevation or shallower trench in order to meet depth restrictions. There must be at least a 3 feet vertical separation from the bottom of the drainfield trench to water table or an impervious layer like basalt or hardpan for a gravity system. This separation may be reduced if an engineered enhanced treatment design is approved.
3. A minimum of 2 lines is required and all lines should be of equal length.
4. Minimum distance between lines is 10 feet on center.
5. Maximum length of any gravity drain line is 100 ft.
6. The bottom of the drainfield trench shall be level, and the drainfield pipe shall also be installed level. If there is a significant slope to the site, the trenches shall follow the contours to maintain level elevation.
7. **Drainfield lines may not be installed on slopes exceeding 15% (45 inches fall in 25 feet)**
8. An approved unwoven geotextile (filter fabric) is required over the gravel before backfilling the trenches.
9. The drainfield shall not be located under driving or parking areas or be paved or built over. Areas subject to tree roots or surface drainage shall be avoided. Locate the system outside of easements or utility routes.
10. **Required minimum amount of drainfield** is based on the number of bedrooms in a home (or daily sewage flow in other buildings) and the soil type. The Health Department will specify the required drainfield size and design on the permit. The minimum drainfield required shall be based on a minimum of 240 gallons per day.
11. All alternative systems (not gravity flow) must have prior approval by the Health Department before installation.

A permit detailing sizing and design specifications must be issued before installation of any on-site sewage disposal system, and the system is required to be inspected and approved by the Health Department before backfilling. Owner-installed systems must have 2 inspections. If the system is incomplete upon inspection, the remainder, including cleanout and sewer from house must be inspected before final approval. An additional fee will be charged if second follow-up inspection is necessary.

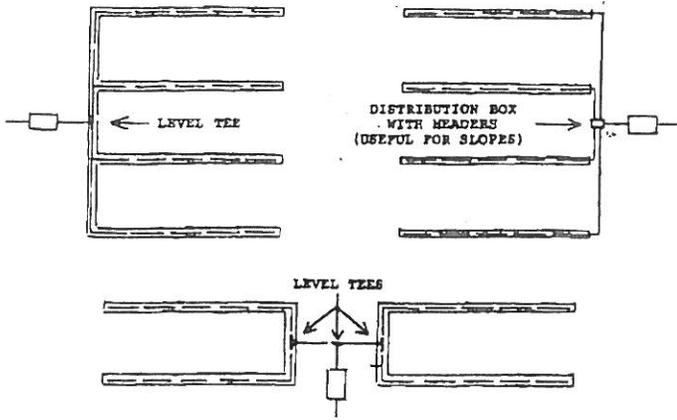
Minimum Horizontal Separations:

Table IV

Items Requiring Setback	Minimum Horizontal Separations		
	From edge of soil dispersal component and reserve area	From sewage tank and distribution box	From building sewer, and nonperforated distribution pipe
Well or suction line	100 ft.	50 ft.	50 ft.
Public drinking water well	100 ft.	100 ft.	100 ft.
Public drinking water spring measured from the ordinary high-water mark	200 ft.	200 ft.	100 ft.
Spring or surface water used as drinking water source measured from the ordinary high-water mark ¹	100 ft.	50 ft.	50 ft.
Pressurized water supply line	10 ft.	10 ft.	10 ft.
Decommissioned well (decommissioned in accordance with chapter <u>173-160</u> WAC)	10 ft.	N/A	N/A
Surface water measured from the ordinary high-water mark	100 ft.	50 ft.	10 ft.
Building foundation/in-ground swimming pool	10 ft.	5 ft.	2 ft.
Property or easement line	5 ft.	5 ft.	N/A
Interceptor/curtain drains/foundation drains/drainage ditches			
Down-gradient ² :	30 ft.	5 ft.	N/A
Up-gradient ² :	10 ft.	N/A	N/A
Other site features that may allow effluent to surface			
Down-gradient ² :	30 ft.	5 ft.	N/A
Up-gradient ² :	10 ft.	N/A	N/A
Down-gradient cuts or banks with at least 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change	25 ft.	N/A	N/A
Down-gradient cuts or banks with less than 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change	50 ft.	N/A	N/A
Other adjacent soil dispersal components/subsurface storm water infiltration systems	10 ft.	N/A	N/A

¹If surface water is used as a public drinking water supply, the designer shall locate the OSS outside of the required source water protection area.

²The item is down-gradient when liquid will flow toward it upon encountering a water table or a restrictive layer. The item is up-gradient when liquid will flow away from it upon encountering a water table or restrictive layer.



GEOTEXTILE STANDARDS

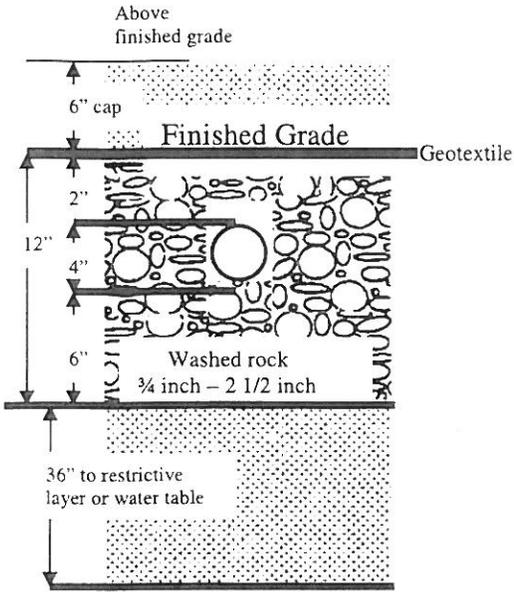
Geotextile must be used to cover the gravel in the drainfield trenches. The fabric shall be nonwoven and meet or exceed the following values:

Property	Test Procedure	Units	Minimum Value
Grab strength	ASTM D4632	LBS	60
Puncture Tear	ASTM D4833	LBS	18
Trapezoid Tear	ASTM 4533	LBS	25
apparent opening size	ASTM D4751	Shall be less than 0.6mm	
Flow rate	ASTM D4491	Gal/sq.ft/min	100

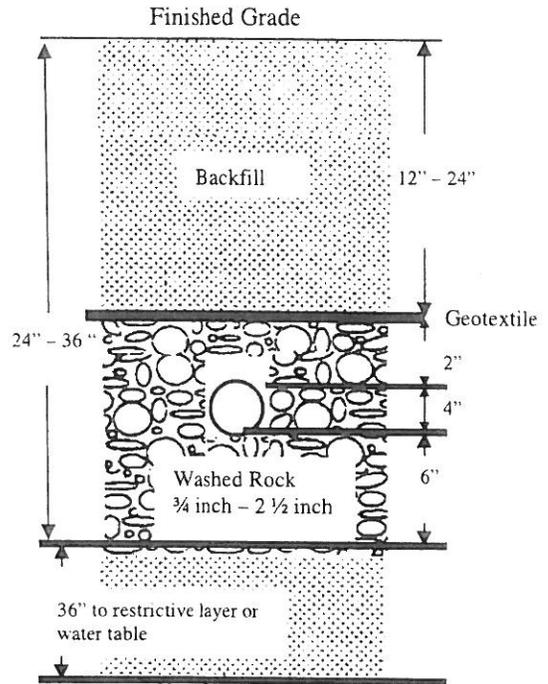
Revised 12/07

Cross- Section of Approved Drainfield Design

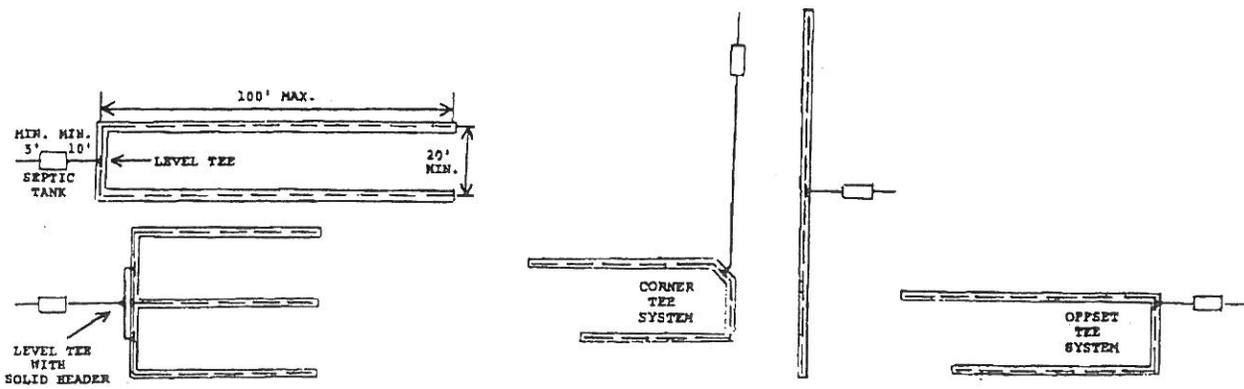
Shallow Trench



Standard Trench



Examples of Drainfield Designs for equal distribution of effluent



Plot Plan

Please Include the Following:

- Property lines lengths & widths
- Location of existing or planned improvements such as buildings, driveways, underground utilities, & water lines
- Slope or contours of the property in the drainfield area.
- Location of Septic System
- Location of your well and your neighbors well
- Location of streams, ponds, irrigation ditches and other bodies of water

