

# LINN COUNTY ENVIRONMENTAL HEALTH PROGRAM

PO Box 100, 315 SW 4<sup>TH</sup> AVE, 2<sup>ND</sup> FLOOR, ALBANY, OR 97321

PHONE (541) 967-3821 FAX (541) 924-6904

<http://www.co.linn.or.us/health/eh/eh.htm>



## FACT SHEET: SITE EVALUATIONS

### GENERAL INFORMATION

A site evaluation is the first step in obtaining a permit for new site development that will use a septic system. The purpose of the evaluation is to identify the best location and type of system for the site. Applicants must describe their proposal and dig test pits so the sanitarian can evaluate soil conditions. They must also submit a plot plan of the parcel showing locations of existing features, proposed development, and test pits.

The site evaluation report indicates whether a permit for a septic system can be issued. **It IS NOT a permit. A separate application and fee are required for the permit to install the system.** A favorable site evaluation report is good indefinitely unless conditions on the site or on adjacent properties are changed in a way that affects the approval.

### APPLICATION INSTRUCTIONS

Complete the application form and include **all** of the information requested. The property owner or the owner's legally authorized representative must sign the application. If signed by an agent, the agent must submit a written contract, power of attorney, or other documentation of authority. A detailed plot plan must accompany the application and must include all of the items listed under "Required Plot Plan Information". We will provide you with a scaled outline of your property to assist you in drawing a plot plan. A sample plot plan is available.

***You must indicate on the application when the site will be ready for inspection. If preparation for the evaluation has not been completed when the sanitarian arrives and the work must be rescheduled, a re-inspection fee may be charged.***

Submit the **completed application, plot plan, and required fee** to this office.

### TEST PIT PREPARATION

A minimum of **2 test pits** are required in the proposed drainfield area. Look for a logical spot on the property for a disposal system. Explore the desired area and if possible avoid placing test pits in the following areas:

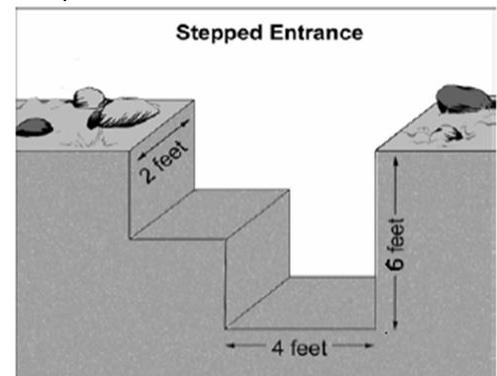
- On a steep slope (more than 45%).
- Within 50 feet upslope of sharp slope changes, escarpments, or cuts.
- In swale areas, drainageways, or where surface water is likely to collect.
- Where soil is saturated for extended periods during the winter months.
- Within 100 feet of springs and proposed or existing wells.
- Within 50 feet of intermittent streams or irrigation ditches.
- Within 50 feet (100 feet is preferable) of rivers, lakes, or streams (measure from the high bank).
- Within 10 feet of property lines or easements.
- Within 10 feet of foundations of existing or proposed buildings.
- Any area used or proposed to be used for roadway, driveway, or parking.
- Any area that has been filled or has had soil removed.

### TEST PIT CONSTRUCTION

Each pit must be 2' wide, 4' long, and 6' deep.

***Pits must be constructed in a manner that will allow the sanitarian to get in and out of them.***

*Example:*



To ensure timely completion of your site evaluation, the following requirements for test pits must be met:

1. Pits should be separated by a distance of 75' to 100'. Mark the test pits with the flagging ribbon provided by the department. If the test pits cannot be seen from the road, provide a well-marked trail to follow.
2. If the sanitarian finds that the soils are unsuitable, new test pits may be dug and will be evaluated without additional fees within ninety (90) days after the applicant is notified of the situation.
3. Occasionally, the sanitarian may require additional test pits before the site evaluation report is issued. For example, if two test pits are vastly different and there are no surface features that explain the difference, more pits may be needed to make sure that the approval is located in the more suitable area.
4. On large acreage, or for multiple sites, an appointment may be arranged so that the sanitarian can meet with a backhoe operator on the property.

## **FEES**

- Fees are indicated on a separate fee schedule.
- Site evaluation fees for commercial developments are based on the projected sewage flow.
- A portion of each application fee is paid to the Oregon Department of Environmental Quality to support statewide program administration and training. Please see the current Linn County Fee Schedule for the current surcharge amount.
- ***If preparation for the evaluation has not been completed when the sanitarian arrives and the work must be rescheduled, a re-inspection fee may be charged.***
- In the event that an application is incomplete and additional action by or information from the applicant is required for completion, we will close the file one year after the application date and the application fee will be forfeit. A new application and fee will be required to re-activate the file.

## **LAND USE COMPATIBILITY STATEMENT**

**A favorable Land Use Compatibility Statement (LUCs) must be received before we can issue or sign off on any permit.** Upon receipt, your application will be forwarded to the local Planning Authority for completion of the LUCs. If the LUCs is not approved, or otherwise not favorable, you will be notified prior to us proceeding with your application. Once notified, you may choose to withdraw your application and request a refund, or ask that we place your application on hold until any conditions are met.

## **SETBACKS FOR SEPTIC SYSTEMS**

Minimum required setbacks include but are not limited to the following for **disposal trenches**: 10' setback from property lines, building foundations or water lines; 100' setback from any well, year-round stream, creek, pond, spring, etc. (a good rule of thumb is to get 100' away from any water).

For **septic tanks**, required setbacks include but are not limited to: 5' setback from property lines, and building foundations; 50' setback from any well, stream, river, creek, pond, irrigation ditch (a good rule of thumb is to be 50' from any water).

*Please refer to the "Preserve Your Suitable Disposal Areas: Know Your Setbacks" fact sheet for a detailed list of all required setbacks.*



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 ALBANY, OR 97321  
 PHONE: (541) 967-3821  
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OFFICE USE ONLY	
DATE RECEIVED:	RECEIVED BY:
FEE:	RECEIPT #:
TRANSFER TO/FROM:	
RECORD #:	
PIN:	

## APPLICATION FOR ON-SITE SEWAGE DISPOSAL

### A. OWNER INFORMATION

Title holder     Contract purchaser     Legal Representative

Name \_\_\_\_\_ Contact Person (if owner is a Business, Trust, etc.) \_\_\_\_\_

Mailing address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone Number \_\_\_\_\_ Second Phone Number \_\_\_\_\_

### B. APPLICANT INFORMATION (if different from owner) Authorization or contract enclosed

Name (include name of contact person if applicant is a Business, Trust, etc) \_\_\_\_\_ Relationship to owner \_\_\_\_\_

Mailing address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone Number \_\_\_\_\_ Second Phone Number \_\_\_\_\_

### C. PROPERTY DESCRIPTION

Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_ Tax Lot \_\_\_\_\_ Property size (Acreage) \_\_\_\_\_

Site Address ( existing address, or  address of adjacent property) \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Directions to Property \_\_\_\_\_

### WATER SUPPLY

Existing Private Well/Spring     Proposed Private Well/Spring     Public Water System

### D. APPLICATION TYPE

Site Evaluation     Major Repair Permit     Major Alteration Permit     Authorization Notice

Site Evaluation Amendment     Minor Repair Permit     Minor Alteration Permit     Planning Review

Construction/Installation Permit     Permit transfer     Permit renewal

# APPLICATION FOR ON-SITE SEWAGE DISPOSAL

<b>OFFICE USE ONLY</b>	
RECORD #:	_____
PIN:	_____

## E. PROPOSAL

Does this application concern an existing system?  Yes  No    Is the system failing?  Yes  No

### What is connected to the system?

Single Family Residence – # of Bedrooms: \_\_\_\_\_  Add. Hardship Residence – # of Bedrooms: \_\_\_\_\_

Commercial – Type of business: \_\_\_\_\_

Max # of Shifts: \_\_\_\_\_ Max # of employees/Shift: \_\_\_\_\_

Fixtures (type and # of each): \_\_\_\_\_

### What will be connected to the system after any changes are made?

Single Family Residence – # of Bedrooms: \_\_\_\_\_  Add. Hardship Residence – # of Bedrooms: \_\_\_\_\_

Commercial – Type of business: \_\_\_\_\_

Max # of Shifts: \_\_\_\_\_ Max # of employees/Shift: \_\_\_\_\_

Fixtures (type and # of each): \_\_\_\_\_

Will the size of the property change?  Yes  No    Proposed lot size (acres): \_\_\_\_\_

What portion of the property does this application concern? (West side, Parcel A, etc): \_\_\_\_\_

**\*\*When will the site be ready for inspection?\*** (Test pits ready/system uncovered, etc): \_\_\_\_\_

Specific Proposal – What do you want to do on this property?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## F. REQUIRED PLOT PLAN INFORMATION

\*Check each **existing or proposed** feature below as: **N/A** (not applicable) or **Shown** (labeled on your plot plan)\*

- |                          |   |
|--------------------------|---|
| <b>N/A</b>               | <b>Shown</b>  |
| <input type="checkbox"/> | <input type="checkbox"/> All wells/water lines            |
| <input type="checkbox"/> | <input type="checkbox"/> Neighboring wells/waterlines     |
| <input type="checkbox"/> | <input type="checkbox"/> Buildings and fences             |
| <input type="checkbox"/> | <input type="checkbox"/> Septic tanks & drainfields       |
| <input type="checkbox"/> | <input type="checkbox"/> Roads, driveways, parking        |
| <input type="checkbox"/> | <input type="checkbox"/> Areas of excavation (cuts/fills) |

- |                          |  |
|--------------------------|--|
| <b>N/A</b>               | <b>Shown</b>   |
| <input type="checkbox"/> | <input type="checkbox"/> Lakes, springs, streams, ditches, etc.    |
| <input type="checkbox"/> | <input type="checkbox"/> Neighboring waterbodies (w/in 100')       |
| <input type="checkbox"/> | <input type="checkbox"/> Field drainage tiles (French drain, etc.) |
| <input type="checkbox"/> | <input type="checkbox"/> Test pits (w/ distance to property lines) |
| <input type="checkbox"/> | <input type="checkbox"/> Direction of Slope                        |
| <input type="checkbox"/> | <input type="checkbox"/> Easements, deed restrictions, etc         |

By my signature, I certify that all information provided on this application and the accompanying plot plan or system plan is correct; and I hereby grant the Department of Environmental Quality and its authorized agents permission to enter onto the above-described property for the purpose of this application.

Owner Signature \_\_\_\_\_ Date \_\_\_\_\_

Applicant Signature \_\_\_\_\_ Date \_\_\_\_\_



County Courthouse, Room 115  
PO Box 100 Albany, OR 97321

# Linn County Department of Health Services

Environmental Health Program

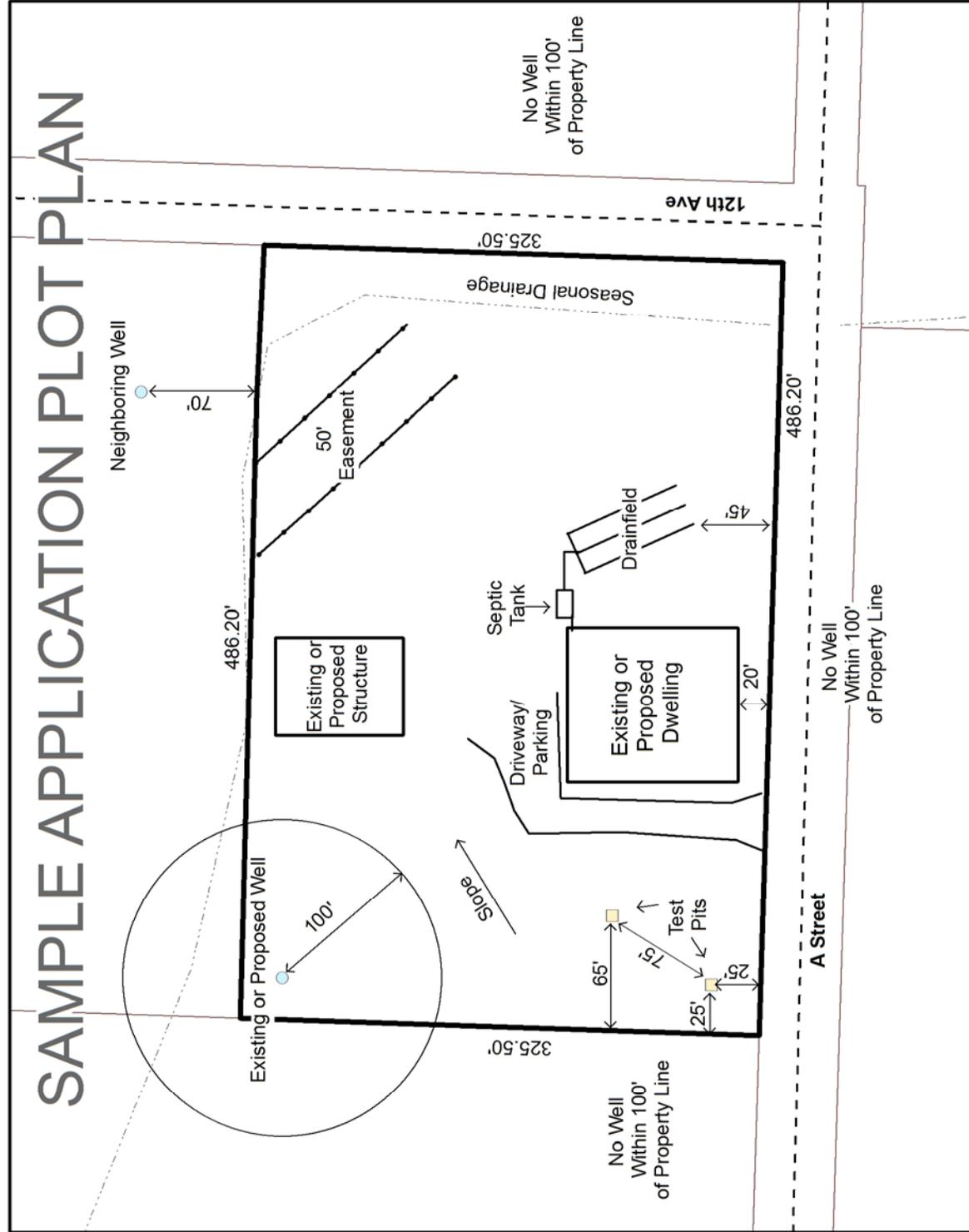
Phone (541) 967-3821  
Fax (541) 926-2060

## Application Plot Plan

Property ID: 00S00W000 00000  
Record Number: 00000  
Date Produced: 1/11/2008

## REQUIRED PLOT PLAN INFORMATION

- Owner Name
- Legal Description/Map #
- North arrow
- Property dimensions
- Neighboring wells/waterlines (w/in 100' of property line)
- All wells/waterlines on property
- Roads, driveways, parking areas
- Buildings and fences
- Septic tanks and drainfields
- Areas of excavation (cuts, fills)
- Easements, deed restrictions, etc.
- Lakes, springs, streams, ditches, etc.
- Neighboring water bodies (w/in 100' of property line)
- Field drainage tiles (French drain, etc)
- Test Pits (w/ distance to property lines)
- Direction of slope



- Wells
- Test pits
- Drainages



By my signature I certify that the information provided on this plot plan is complete and accurate.

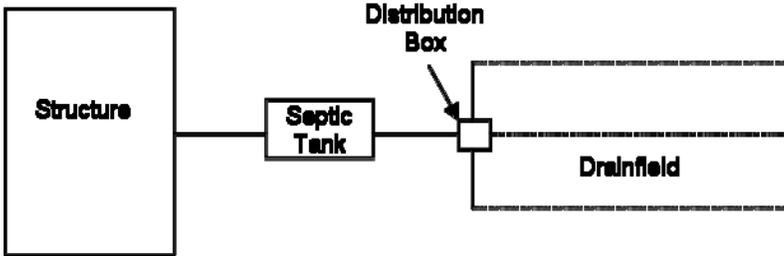
1 inch equals 100 feet

Applicant's Signature

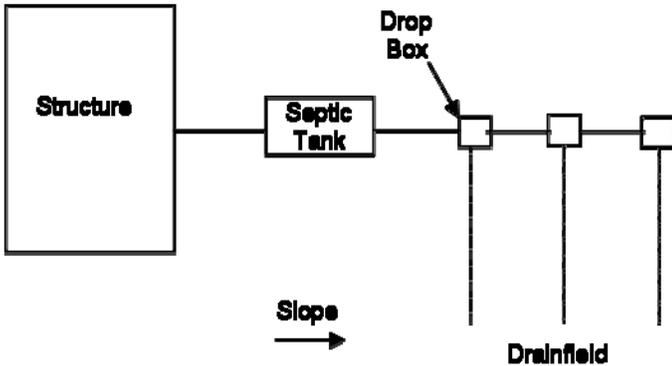
Date

## COMMON DRAINFIELD LAYOUTS

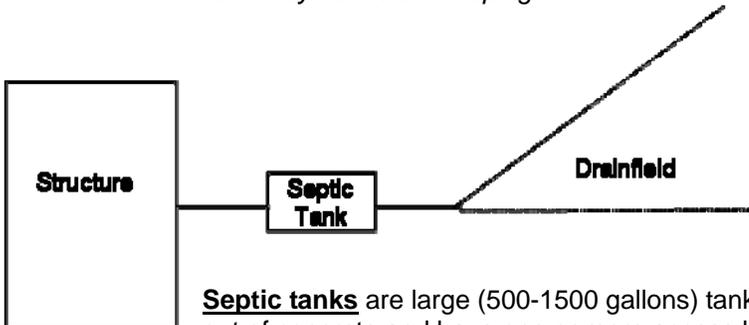
1. Septic tank, distribution box, drainfield  
\* generally used on level ground



2. Septic tank, drop boxes, drainfield  
\* generally used on sloping ground



3. Septic tank, drainfield  
\* generally older systems  
\* site may be level or sloping



**Septic tanks** are large (500-1500 gallons) tanks that settle out and store solids. They are typically made out of concrete and have one or more access holes (about 2 feet across) for inspection and cleaning.

Septic tanks may also be made out of fiberglass, polyethylene (plastic) or older tanks may be made out of steel. Steel tanks may be round and have an access lid as large as the tank diameter (5' across or more). Polyethylene tanks have smaller access holes, like a concrete tank. Typically, effluent moves out of the septic tank and into the drainfield by gravity. If the drainfield is higher than the septic tank, the septic tank will have a pump. Pumps require occasional checking, cleaning, and replacement.

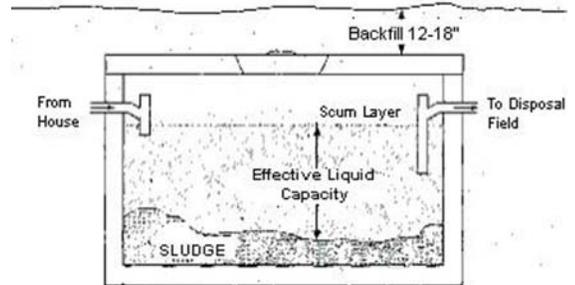
**Distribution boxes** and **Drop boxes** are small concrete or polyethylene vaults which distribute effluent from the septic tank into the drainfield lines.

The **drainfield** is a network of newer plastic chambers, or, pipes or tiles surrounded by gravel that allow effluent to seep into the soil. The size of the drainfield depends on the texture and effective depth of the soil.

**Locating your septic tank:** Septic tanks are usually located fairly close to the house (5' is the minimum distance from foundations). Likely areas are near the kitchen or bathroom plumbing. The top of the tank is usually 0-2 feet below the ground surface. The Environmental Health Department may have a record of your septic tank location. Records are unlikely for systems put in before 1974. Most septic tank pumpers will locate the tank and expose the lid for you for a fee.

### The Septic Tank

The function of the tank is to allow separation of the solids from the raw sewage so that the remaining liquid (effluent) can be absorbed into the soil without clogging the soil. The heavier solid particles in the sewage settle to the bottom of the tank, forming a layer of sludge. Lighter materials, including fats and grease, float to the surface, forming a scum layer. Bacteria called anaerobes, living in the septic tank without oxygen, slowly digest up to 50 percent of the solids, converting them into gases and liquids, and thereby reducing sludge build up.



As the tank fills with sludge and grease, **efficiency of treatment decreases**. It must be periodically removed by pumping out the septic tank contents, which will be discussed in a later section.

# Test Pit Preparation

## When Do You Need a "Test Pit"?

When applying for a site evaluation or a permit to repair or alter an onsite sewage disposal system, a sanitarian from our office will visit the proposed construction site. A *test pit* allows us to evaluate the soil conditions and determine the depth to the water table. From the test pit analysis we can determine if the soil and site conditions allow the installation of a system and if so, the type, location, and specifications of the system.

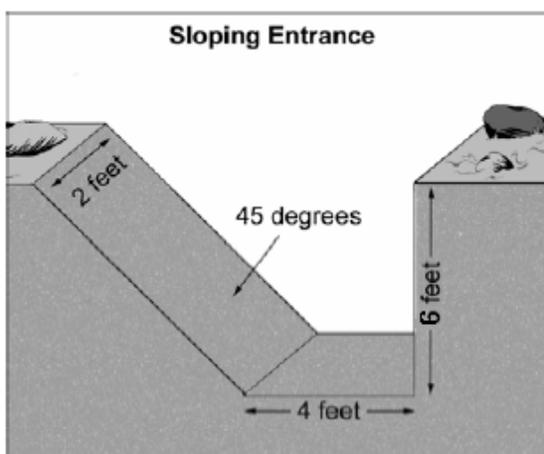
## Preparing the Test Pit

Pits must be constructed in a manner that will allow the sanitarian to safely and easily get in and out of the pits. To provide for pit stabilization and safe access, test pits must be prepared in the following manner:

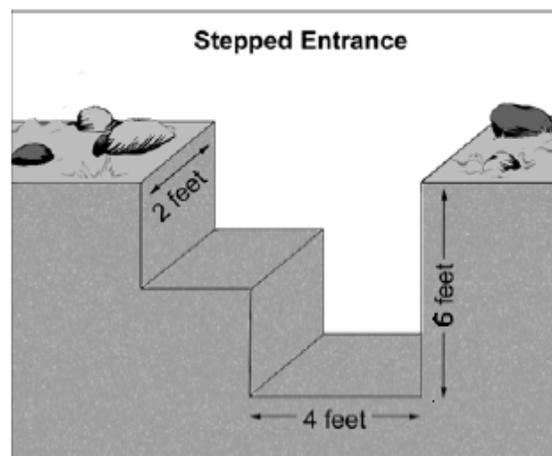
- The bottom of the pit shall be at least 2 feet wide and 4 feet long;
- If possible, all test pits should be 6 feet deep;
- In some instances, pits need only be excavated to the layer of hard rock or to the water table if that layer is less than 5 feet;
- One end of the test pit shall be either: sloped at approximately 45 degrees or less if the soils are dry or loose, or stepped when soils are wet (see diagram below);
- All spoils must be a minimum of 2 feet from the pit edge.

### Providing Access to the Standard Test Pits:

For easy access, one end of the test pit shall be either:



*Sloped at approximately 45 degrees or less if the soils are dry or loose.*



*Stepped when soils are wet.*

All spoils need to be a minimum of 2 feet from the pit edge.

Picture courtesy of DEQ

## Preserve Your Suitable Disposal Areas: KNOW YOUR SETBACKS

A site evaluation is the first step in the process of obtaining a construction permit for an on-site sewage disposal system. For alteration and repair permits, we often waive the fee, formality and some of the restrictions of the site evaluation. Nevertheless, we also delineate an "approved disposal area" for every on-site permit. Two separate areas may be designated for the initial and replacement systems, or a single large disposal area may be designated for both. Sometimes site and soil conditions necessitate the approval of two different types of systems for the initial and replacement areas. Alteration and repair permits may or may not have a designated replacement area.

An on-site sewage disposal system should effectively do two things: Treat and dispose of septic tank effluent. It's obvious when the disposal part isn't working, and we want to make sure the treatment part works to avoid ground water pollution. An approved disposal area, for either the initial or replacement system, may not be altered in any way that will impact the installation or the proper functioning of a disposal system. A system must be installed in native, unaltered soil. Severe soil or site alteration may render an area unsuitable for sewage disposal and void any previous site approvals. The two major problems we find are soil disturbances and setback issues.

Oregon Administrative Rule 340-71-220(e) states that a site is only suitable for sewage disposal if it "... has not been filled or the soil has not been modified in a way that would, in the opinion of the Agent, adversely affect functioning of the system." Decisions about sites that have been disturbed must be made at the site and on a case-by-case basis. To avoid problems, do not cut, level or fill the approved area. Felling trees and pulling up stumps with big, heavy tractors on clayey soils in the winter rain is a recipe for voiding your approval. Laying a driveway through the middle of your approved area will usually void your approval. **Before making any changes to the approved area, call us for consultation at (541) 967-3821.**

Table 1 of Oregon Administrative Rule 340-71 lists all the necessary setbacks and is found on the other side of this form. We designate approved areas based on the information supplied on the plot plan with the application. If a feature that requires a setback, such as a neighbor's well, is not disclosed on the plot plan, the required setback may later invalidate the approval. Any changes to the site, such as drilling a new well, must adhere to the required setbacks or the approval may be voided. Different setbacks apply to different site and soil conditions. **If the setbacks that pertain to your site are unclear, call us for a consultation at (541) 967-3821, before making any changes near the approved area.**

The following are some general setbacks. They are by no means all the setbacks that apply to your site.

<u>Setbacks from:</u>	<u>Approved disposal area</u>	<u>Tanks, sand filter, effluent line etc.</u>
Wells (on or adjacent to property)	100'	50'
Year round water bodies	100'	50'
Seasonal water bodies	50'	50'
Downslope cuts	50'	25'
Water lines	10'	10'
Building foundations	10'	5'
Underground utilities	10'	
Property lines	10'	5'

See the back side of this page for complete list.

**Table 1**  
**OAR 340-071-0220**

MINIMUM SEPARATION DISTANCES

Items Requiring Setbacks	From Sewage Disposal Area, Including Replacement Area	From Septic Tank and Other Treatment Units, Effluent Sewer and Distribution Units
1. Groundwater Supplies	100'	50'
2. Temporarily Abandoned Wells	100'	50'
3. Springs: <ul style="list-style-type: none"> <li>● Upgradient</li> <li>● Downgradient</li> </ul>	50' 100'	50' 50'
4. Surface Public Waters: * <ul style="list-style-type: none"> <li>● Year Round</li> <li>● Seasonal</li> </ul>	100' 50'	50' 50'
5. Intermittent Streams: <ul style="list-style-type: none"> <li>● Piped (watertight not less than 25' from any part of the on-site system)</li> <li>● Unpiped</li> </ul>	20' 50'	20' 50'
6. Groundwater Interceptors: <ul style="list-style-type: none"> <li>● On a slope of 3% or less</li> <li>● On slope greater than 3% <ul style="list-style-type: none"> <li>○ Upgradient</li> <li>○ Downgradient</li> </ul> </li> </ul>	20' 10' 50'	10' 5' 10'
7. Irrigation Canals: <ul style="list-style-type: none"> <li>● Lined (watertight canal)</li> <li>● Unlined: <ul style="list-style-type: none"> <li>○ Upgradient</li> <li>○ Downgradient</li> </ul> </li> </ul>	25' 25' 50'	25' 25' 50'
8. Cuts Manmade in Excess of 30 inches (top of downslope cut): <ul style="list-style-type: none"> <li>● Which intersect layers that limit effective soil depth within 48 inches of surface</li> <li>● Which do not intersect layers that limit effective soil depth</li> </ul>	50' 25'	25' 10'
9. Escarpments: <ul style="list-style-type: none"> <li>● Which intersect layers that limit effective soil depth</li> <li>● Which do not intersect layers that limit effective soil depth</li> </ul>	50' 25'	10' 10'
10. Property Lines	10'	5'
11. Water Lines	10'	10'
12. Foundation Lines of any Building, Including Garages and Out Buildings	10'	5'
13. Underground Utilities	10'	--

\*This does not prevent stream crossing of pressure effluent sewer.