LASSEN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT 1445 PAUL BUNYAN ROAD SUSANVILLE, CA 96130

(530) 251-8528 • Fax (530) 251-2668

INDIVIDUAL SEWAGE DISPOSAL SYSTEM INSTALLATIONS

The design and construction of an individual sewage disposal system must conform to the specifications of the Uniform building Code and the Uniform Plumbing Code. Approval of the Health Department is not a guarantee that the proposed installation will operate successfully, but merely that the system meets the minimum requirements of the Health Department. The following procedure has been developed for your convenience to guide you and to eliminate delays in obtaining Health Department approval for your septic system.

APPLYING FOR A PERMIT

A completed sewage disposal permit application, including a to-scale plot plan, must be submitted to the Health Department for any construction that requires the installation of a new, or the replacement of an existing sewage disposal system. Only after the Health Department has approved a sewage disposal application can the Building Department issue any permits. The septic system permit is paid for at the Building Department 707 Nevada Street, Susanville, CA.

I. PROPERTY DEVELOPMENT REQUIREMENTS

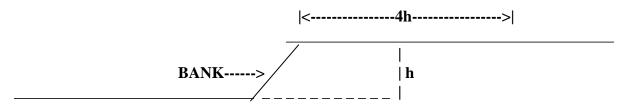
To assure that property development complies with all applicable codes, a septic system application must be approved by this department prior to approving a well application for the property.

II. LOCATION OF THE SEWAGE DISPOSAL SYSTEM:

The location of the septic system must be approved by the County Environmental Health Specialist and not be in an area in which there is high ground water, filled ground, a proposed improvement, an easement, or sloping ground in excess of 30 percent. Any lot that is 30,000 square feet or more in size must set the sewage disposal system back at least 50 feet from all property lines. Half the width of a county road adjacent to the property may be used as part of the setback on that side. Lots of less than 30,000 square feet in size and using an individual sewage disposal system and water supply require special consideration because of their small size and may not be developable. The septic system installation must also comply with the following criteria:

| MINIMUM HORIZONAL DISTANCE REQUIRED FROM | BUILDING SEWER | LEACHING TRENCH SYSTEM | SEPTIC TANK |
|---|----------------|---------------------------|-------------|
| Building or Structure | 2 feet | 8 feet | 5 feet |
| Property Line | | | |
| -with wells | 25 feet | 50 feet | 50 feet |
| -without wells | Clear | 5 feet | 5 feet |
| Private Water Wells | 50 feet | 100 feet | 100 feet |
| Public Water Wells | 100 feet | 100 feet | 100 feet |
| Lake or Reservoir (measured | | | |
| from the high water line) | 50 feet | 200 feet | 50 feet |
| Flowing Streams | 50 feet | 100 feet | 50 feet |
| Water Line | 1 foot | 5 feet | 5 feet |
| Pressure public water main | 10 feet | 10 feet | 10 feet |

| MINIMUM HORIZONAL DISTANCE REQUIRED FROM | BUILDING SEWER | LEACHING TRENCH SYSTEM | SEPTIC TANK |
|---|----------------|---------------------------|-------------|
| Ephemeral Streams | 25 feet | 50 feet | 25 feet |
| Cut Bank | 10 feet | 4 h | 25 feet |
| Distribution Box | | 5 feet | 5 feet |
| Large Trees | | 10 feet | 10 feet |



III. TESTING THE SOIL:

All soils testing shall be performed by a Professional Engineer, Engineering Geologist, Registered Environmental Health Specialist, or an A, B, C-36 or C-42 licensed septic contractor with experience in onsite sewage disposal. The percolation test results are to be submitted with the plot plan to the Environmental Health Specialist at the time of the onsite inspection of your property. Soil profiles (i.e. eight (8) foot deep backhoe excavations) are required to determine the depth and composition of the soil and the distance to ground water.

IV. PREPARING A PLOT PLAN:

A plot plan is required and shall include all of the following information:

- 1. North direction
- 2. Location of all property lines and easements.
- 3. Dimensional outlines and locations of all existing or proposed improvements; including buildings, decks, patios, driveways, walks, etc.
- 4. General slope of area.
- 5. Location of existing or proposed wells, whether in use or abandoned, either on the property or within 100 feet of property.
- 6. Location of any streams, ponds, irrigation ditches, or drainage channels.
- 7. Location and nature of any existing sewage disposal system on or within 100 feet of the property.
- 8. Location of any existing tree to remain in place which may affect the location of the septic tank or leaching trench.
- 9. Location of house sewer outlet and proposed location of septic tank and leaching field.

V. OBTAIN ONSITE HEALTH DEPARTMENT APPROVAL OF THE PROPOSED SEPTIC SYSTEM:

Make an appointment by contacting the Lassen County Environmental Health Department for an onsite evaluation of the soils testing done and the suitability of the property to support the proposed sewage disposal system and water supply. Have the permit application, with the completed plot plan, with you at the site. Generally, the best time to speak with an Environmental Health Specialist is between 8-9 am weekdays.

VI. SEPTIC TANK SPECIFICATIONS:

Septic tanks must meet the specifications of the latest Uniform Plumbing Code and be constructed of sound, durable materials which can be made water tight. Septic tanks must be installed level and on a solid bed.

VII. DISPOSAL FIELDS:

The amount and type of disposal field required will be determined by the County Environmental Health Specialist and will be based upon the percolation test data submitted by the applicant. All pipe used in the installation of the sewage disposal system shall meet I.A.P.M.O. standards.

DISPOSAL FIELDS SHALL BE CONSTRUCTED AS FOLLOWS:

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|--|-----------------|--|--|--|
| Minimum number of drain lines per field | 1 | | | |
| Minimum length of leach line | 100 feet | | | |
| Maximum length of each line | 100 feet | | | |
| Minimum bottom width of trench | 18 inches | | | |
| Maximum bottom width of trench | 36 inches | | | |
| Minimum spacing of lines | 6 feet | | | |
| Minimum spacing between trenches | 4 feet | | | |
| Minimum depth of trench | 3 feet | | | |
| Minimum depth of earth cover over line | 12 inches | | | |
| Preferred depth of earth cover over lines | 18 inches | | | |
| Minimum filter material under drain lines | 12 inches | | | |
| Minimum filter material over drain lines | 2 inches | | | |
| Minimum slope of building sewer | ¼ inch per foot | | | |
| Slope of drain line (perforated pipe) | Level | | | |
| Slope of trench bottom | Level | | | |

Gravel Systems: Filter material must be clean rock or gravel varying in size from 1 ½ inch to 3 inches and shall be covered with straw or untreated building paper prior to backfilling. Sufficient area is needed for complete replacement of the leach field in case of failure and no system shall be installed on filled ground. ALL LEACH LINES MUST BE EQUAL LENGTH AND INSTALLED LEVEL. The ends of the leach pipes must be capped.

Chambered Systems: The Lassen County Environmental Health Department requires all plastic leaching chambers be UPC and IAPMO approved. The standard size of chamber approved for use in Lassen County is twelve (12) inches high and thirty-six (36) inches wide.

VIII. ADDITIONAL INFORMATION

A two way clean out shall be installed within 2 to 5 feet of the house. Additional clean outs shall be required at intervals not to exceed 100 feet in straight runs and where changes in alignment or grade occur.

IX. DISTRIBUTION BOXES

Where two or more drain lines are installed, an approved distribution box of sufficient size to receive lateral lines shall be installed at the head of each disposal field. The distribution box outlets shall be level and the inlet shall be at least one inch above the outlets. Distribution boxes shall be designed to insure equal flow and shall be installed on a level concrete slab in natural or compacted soil. Five feet of natural or compact soil shall separate the distribution box from the leach trench.

X. SPECIAL CONDITIONS

Certain conditions such as building in a flood plain, high ground water, less permeable soils (perc rates slower than 60 MPI), or excessive rock may necessitate that the septic system be designed by a Professional Engineer. NOTE: Use of an engineer does not guarantee Environmental Health acceptance or approval of any engineered sewage disposal design submitted. Some existing properties may be unsuitable for the use of individual onsite sewage disposal systems for a variety of reasons.

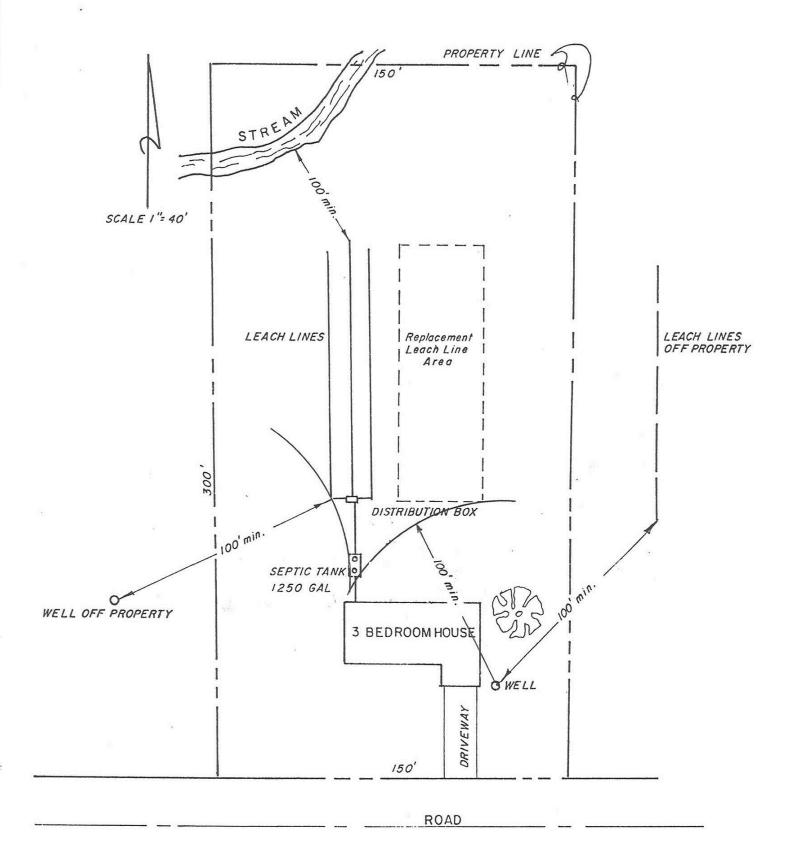
XI. CHANGES IN DESIGN OR LOCATION

Any proposed changes in design or septic system location must be approved by the Health Department prior to installation. If any unexpected problems occur during the installation, consult the County Environmental Health Specialist for advice. Any alternative sewage disposal systems must be designed by a qualified engineer and submitted for approval.

The following inspections by the Lassen County Environmental Health Department will be required and shall be called for by the person or firm constructing the disposal system.

- 1. An initial inspection for site approval.
- 2. The applicant must pay the permit fees at the Lassen County Building Department, 707 Nevada Street prior to construction and/or installation of system. No work shall begin until a permit has been obtained.
- 3. The final inspection shall be made when the complete system has been installed, but before any backfilling is done. Until the final inspection is made, the top of the septic tank and the drainage ditch will not be backfilled. Final inspection must be done before the premises can be occupied. An inspection at the completion of the excavation for the septic tank and drain field, and before actual installation of the facilities may be required.

The responsibility for the satisfactory operation of the sewage disposal system rests with the property owner. The sewage must be kept underground. In the event of a sewage system failure the property owner is solely responsible for the cleanup and repair of the system.



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PERCOLATION TEST PROCEDURE:

All percolation testing shall be performed by a Professional Engineer, Engineering Geologist, Registered Environmental Health Specialist, or an A, B, C-36, or C-42 licensed septic contractor with experience in onsite sewage disposal.

The object in conducting percolation tests of soil, in which a drain field or seepage pit is to be installed, is to determine the length of time required for the soil to absorb one inch of water when the ground has been saturated. The information obtained from these tests, together with knowledge of the approximate amount and type of sewage to be discharged, makes it possible to determine the size of the drain field necessary for a trouble free system.

Holes approximately 4 to 6 inches in diameter have been found to be the most convenient. However, this diameter is not critical and, particularly in very loose soils, it may be easier to dig larger holes. Sides of the holes should be vertical and the depth should be approximately that of the proposed drain field (36"). The holes (2 or more) should be approximately 30 feet apart and in the area where the drain field will be installed.

- 1. The sides should be roughed up to eliminate packing caused by the shovel or posthole digger, which would reduce the percolation rate. Two inches of fine gravel should be placed in the hole to prevent bottom scoring.
- 2. Fill the hole with clear water, being careful to avoid washing down the sides of the hole. By refilling, if necessary, keep at least 24 inches of water in the hole for at least 24 hours. After the above saturation, start with 6 inches of water above the gravel (add water if necessary) and begin the measurements.
- Select a reference point from which to measure (a board laid across the mouth of the hole is satisfactory) and measure the distance from the reference point to the level of the water. Enter the time and distance measured on the chart below.
- 4. Repeat the measurement at the end of 30 minutes. Continue making measurements at 30-minute intervals for 4 hours.
- 5. If the water level drops too low for further readings, refill to the 6-inch level at the end of a 30-minute period, measure, and proceed as before.
- 6. If the hole consistently drains in less than 30 minutes, make readings at 10-minute intervals for 1 hour.

