

## Plumas County Code Title 6 Sanitation and Health

### CHAPTER 6. - SEWAGE DISPOSAL<sup>[1]</sup>

Footnotes:

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**Editor's note**—Ord. No. 04-1002, § 2, adopted Apr. 20, 2004, amended Chapter 6 in its entirety to read as herein set out. Former Chapter 6, §§ 6-6.01—6.16 pertained to similar subject matter. See Disposition Table 2.

Sec. 6-6.01. - Scope.

- (a) The provisions of this chapter shall apply to all territory of the County.
- (b) Every ~~sewage-on-site wastewater treatment and~~ disposal system shall be designed, located, constructed, and maintained to ~~dispose-treat, and~~ adequately and safely dispose of all the wastewater generated from the structure or facility it is serving.
- (c) Every ~~sewage-on-site wastewater treatment and~~ disposal system shall be designed, located, constructed and maintained to prevent discharge of sewage or partially treated sewage, into the structure served, on the ground surface, into surface waters, or in the subjacent groundwater.
- (d) The Plumas County Local Agency Management Plan (LAMP) for wastewater disposal, adopted by the Plumas County Board of Supervisors by Resolution on May 3, 2016 is hereby adopted as a part of this Code by reference.
- (e) This chapter, Chapter 11 of Title 6 of Plumas County Code, and the Plumas County Local Agency Management Plan (LAMP) comprise the domestic wastewater management program for Plumas County. This program complies with the State Water Resources Control Board's June 19, 2012 Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS) and thereby conditionally waives the requirement for owners of OWTS to apply for and receive Waste Discharge Requirements in order to operate their systems.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.02. - Definitions.

- (a) Domestic Wastewater: Means wastewater with a measured strength less than high strength wastewater and is the type of wastewater normally discharged from, or similar to, that discharged from plumbing fixtures, appliances, and other household devices including but not limited to toilets, bathtubs, showers, laundry facilities, dishwashing facilities, and garbage disposals. Domestic wastewater may include wastewater from commercial buildings such as office buildings, retail stores, and restaurants, or from industrial facilities where domestic wastewater is segregated from industrial wastewater. Domestic

wastewater may include incidental recreational vehicle holding tank dumping but does not include significant portions of recreational vehicle holding tank wastewater such as at commercial dump stations. Domestic wastewater does not include wastewater from industrial processes.

(b) Environmental Health: Shall mean the Plumas County Department of Environmental Health.

(c) High Strength Wastewater: Means wastewater having a 30-day average concentration of biochemical oxygen demand (BOD) greater than 300 milligrams per liter; of total suspended solids greater than 330 milligrams per liter; or a fats, oil, and grease concentration greater than 100 milligrams per liter prior to the septic tank or other OWTS treatment component.

(d) Onsite Wastewater Treatment System (OWTS): Means individual disposal systems, community collection and disposal systems, engineered collection and disposal systems, and advanced collection and disposal systems that use subsurface disposal. An OWTS may also be called a 'sewage disposal system' or 'septic system'. OWTS do not include graywater systems pursuant to Health and Safety Code Section 17922.12. OWTS do not include systems that treat or dispose of high strength wastewater, or treat or dispose of greater than 10,000 gallons of wastewater per day.

(e) OWTS Policy (Policy): Means the Water Quality Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems promulgated by the State Water Resources Control Board. The Policy conditionally waives the requirement for owners of OWTS to apply for and receive Waste Discharge Requirements in order to operate their system when they meet the requirements of this Chapter and the conditions set forth in the Policy.

(f) Public Water System: Means a system for providing water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year as defined in Section 116275 (h) of the California Health and Safety Code.

(g) Public Water Well: Means a well connected to and supplying a public water system as a primary or alternate source.

(ah) Sewage: Means wastewater flow or drainage containing solid or liquid infectious or putrescible matter. Sewage includes toilet, bath, shower, laundry, lavatory and kitchen-sink wastes. It includes water solutions that contain waste substances dangerous and injurious to human health.

~~(b) Environmental Health: Shall mean Plumas County Public Health Agency, Environmental Health Division.~~

(§ 2, Ord. 04-1002, April 20, 2004)

Sec. 6-6.03. - Facilities required.

- (a) It shall be unlawful to construct, maintain or use any residence, place of business, or other building, structure or facility where any individual resides, or where people congregate, or are employed, which is not provided with means for sewage disposal approved by the Director of Environmental Health.
- (b) It shall be unlawful to occupy or reside upon any private property or any public place for a period of seventeen (17) consecutive days or more unless it is served by an onsite wastewater treatment ~~sewage disposal~~ system that meets the requirements of this chapter.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.04. - Public sewer connection.

Every building or structure where persons reside, congregate or are employed which is within 200 feet of an approved public sanitary sewer, provided right-of-way can be obtained, shall be connected to the public sanitary sewer and all private sewage disposal facilities shall be abandoned. This requirement shall not apply until the manager of the public sanitary sewer certifies that adequate capacity exists to serve the building or structure.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.05. - Failing ~~sewage disposal~~ Onsite Wastewater Treatment systems.

- (a) A failing or malfunctioning ~~sewage disposal system~~ OWTS shall be repaired, or replaced, or its use shall be discontinued.
- (b) No person shall maintain or use any septic tank, cesspool, leach line or other drainage system, sewage treatment works, sewer pipes or conduits, or other pipes or conduits for the treatment or disposal of sewage, whereby such facilities overflow any land surface, discharge to any surface waters, or discharge into any structure served.
- (c) If a failing OWTS is within 150 feet of a public water well or within 2,500 feet of a public water system intake point and located such that the failing system could potentially impact water quality at the intake point, Environmental Health shall notify the water system owner and the State Water Board Division of Drinking Water within 72 hours of the discovery.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.06. - Permit required.

- (a) No person shall abandon, construct, build, install, repair or replace or allow any other person to abandon, construct, build, install, repair or replace, any ~~sewage disposal~~

~~system~~OWTS without first obtaining a valid permit for completion of such work from the Environmental Health Department.

- (b) It shall be unlawful to construct any building or structure, where an individual or individuals will congregate, reside or be employed, without first obtaining from the Environmental Health a permit for installation of a ~~n OWTS-sewage disposal system~~, unless the building or structure will be connected to a public sanitary sewer.
- (c) It shall be unlawful to rebuild or remodel, or change the use of building or structure in any way that increases anticipated or estimated sewage flows, without first obtaining from Environmental Health a permit for installation of a ~~n OWTS-sewage disposal system~~, unless the building or structure will be connected to a public sanitary sewer. This requirement may be waived by the Director of Environmental Health if it is satisfactorily demonstrated that the existing ~~sewage disposal system~~OWTS, including leachfield replacement area, is adequate to dispose of the sewage generated.
- (d) Whenever any work for which a permit is required by this section has been commenced without first obtaining said permit, a special investigation shall be made. An investigation fee, in addition to the permit fee, shall be collected. The investigation fee shall be equal to the amount of the permit fee that would be required by this section if a permit were to be issued.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

#### Sec. 6-6.07 – Permit Notifications

- (a) Prior to issuing an installation or repair permit for an OWTS, if the OWTS is located within 1,200 feet of an intake point for a surface water treatment plant serving a public water system, Environmental Health shall notify the owner of the public water system in writing.
- (b) Prior to issuing an installation or repair permit for an OWTS, if the OWTS is located within 150 feet of a public water well, Environmental Health shall notify the owner of the public water system in writing.

Sec. 6-6.~~07-08~~ - Required permit application information.

Applications for a permit to construct an ~~on-site sewage disposal system~~OWTS shall include all applicable site information. A preliminary plot plan, drawn to scale on an 8½" × 11" sheet shall be submitted at time of application and shall include:

- (a) Owner's name.
- (b) Assessor's Parcel Number and subdivision unit and lot number as applicable.
- (c) Indicate scale of plot plan (example 1" = 20').
- (d) True north arrow.
- (e) Property boundary lines showing accurate configuration and dimension of the parcel. Indicate location of any property monuments and how property corners/lines can be located in the field by the Environmental Health representative;

- (f) Show location of all preliminary site information such as percolation test locations, soil profile excavations, etc.
- (g) Show location(s) of proposed ~~sewage disposal system(s)~~OWTS, and any existing systems (if applicable) with appropriate replacement areas.
- (h) Show all of the following that are within 200 feet of the proposed ~~sewage disposal system~~OWTS location: existing or proposed water wells, geothermal heat exchange wells, public water mains or laterals; year-round and seasonal water courses and streams; springs, bodies of water, meadows, wet marshy area(s);
- (i) Show all of the following that are within 100 feet of the proposed OWTS location: cut or fill banks, including proposed cuts for driveways and building pads; and natural escarpments in excess of fifty (50%) percent slope.
- (j) Show area(s) of current and/or future buildings, structures, roadways, easements, areas of vehicular traffic and driveways.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.~~0809~~. - Record information required.

Once an OWTS ~~sewage disposal system~~ is installed, an accurate description of the system location must be submitted to Environmental Health at the time of or prior to the construction inspection. A sewage disposal system shall not be covered or backfilled until the required information is submitted to and approved by Environmental Health. The submitted information shall identify the location of the absorption field or trench in relation to the septic tank. Distance triangulation shall be recorded from the center of the manhole access risers of the septic tank to each corner of the absorption field or trench. Alternatively, distance triangulation may be performed from the corners of the residence to each corner of the absorption field or trench. This information can be submitted as:

- (a) A record plot plan consistent with Section 6-6.~~07-08~~ (a) through (j); or
- (b) In a table format approved by Environmental Health.

The submitted plot plan or table must contain sufficient information, as determined by Environmental Health, in order to accurately locate the sewage disposal system once it has been backfilled.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.~~0910~~. - Surface suitability standards.

All sites proposed for an OWTS~~sewage disposal~~ must satisfy the surface suitability standards set forth in this section.

- (a) (a) — Separation distances. Table No. 1 lists the minimum separation distances for installation of ~~sewage disposal systems~~OWTS.

~~(a)~~

- (b) Slope. No drainage system shall be installed on slopes greater than thirty (30%) percent. Benching of such slopes for disposal system installation may be permitted provided all other installation criteria, including but not limited to, depth to bedrock, groundwater or impermeable soil, and percolation rate can be satisfied.
- (c) Replacement area. One hundred (100%) percent drainage system replacement area must also be available which satisfies the location requirements of this section.
- (d) Exclusion area. Drainage systems shall not be located in any area designated as leach exclusion on any map or additional information map recorded with the County Recorder unless the conditions which necessitated the exclusion have changed or are outdated as determined by the Director of Environmental Health.
- (e) Flood hazard. In an area of special flood hazard identified by the Federal Insurance Administration of the Federal Emergency Management Agency:

(1) All new ~~sanitary sewage disposal system~~OWTS installations proposed in an area identified as a special flood hazard shall be monitored for groundwater. If acceptable groundwater monitoring data is obtained and all applicable ~~on-site sewage disposal~~OWTS-system requirements can be met, a California Engineer, Geologist or Environmental Health Specialist shall submit sewage disposal plans for review by Environmental Health.

(2) Any replacement ~~sanitary sewage disposal system~~OWTS proposed in an area identified as a special flood hazard shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the system into flood waters. A California Registered Civil Engineer, Geologist or Environmental Health Specialist shall submit sewage disposal plans for review by Environmental Health.

(3) ~~On-site sewage disposal systems~~OWTS shall be located to minimize impairment to them or contamination from them during flooding.

(f) A new or replacement OWTS located within the horizontal setback of a public water well or surface water intake point for a public water system as shown on Table No. 1 may only be considered if the system is equipped with advanced treatment for nitrogen and pathogens.

~~(f) Variances. Variances to this section may be granted by the Board of Supervisors or another duly appointed board, acting as a board of appeal in consultation with the Director of Environmental Health. Variances to this section can only be granted upon finding of unusual circumstances and upon finding that the variance will ensure protection of public health and the environment.~~

Table No. 1  
Minimum Separation Distances in Feet

Facility	Septic Tank or Sewer Lines	Drainage System
Water supply well <u>serving other than a public water system</u>	50*	100
<u>Public water well</u>	<u>100</u>	<u>150</u>
Perennial streams or springs	50	100 from the 10 year high water mark
Drainage courses, ephemeral streams	25	50
Meadows, wet marshy areas	25	50
Lakes, reservoirs, ponds or other surface water impoundments	50	200 from high water line**
<u>Lakes, reservoirs, ponds or other water with a surface water intake point for a public water system</u>	<u>50</u>	<u>400 from high water mark if the drainage system is within 1,200 feet of the intake and within the catchment of the drainage</u>
Cut or fill banks	10	4 × vertical bank height or a maximum of 100
Natural escarpments in excess of 50% slope	25	4 × vertical bank height or a maximum of 100
Private property lines	5	5***
Buildings or structures	5	8
Public water supply main	<del>4025</del>	<del>4025</del>
<u>Individual water line</u>	<u>10</u>	<u>10</u>

Sewage drain systems	3	6****
Roads, driveways, areas of vehicular traffic, or utility easements	Clear	Clear
Geothermal Heat Exchange Wells	25	50

~~\* Distance must be increased to 100 feet for community water supply wells.~~

\*\* Lake Almanor drainage system separation shall be 100 feet from high water line.

\*\*\* Distance shall be increased to 50 feet where wells have not been installed or well sites have not been designated on the subject and adjacent properties.

\*\*\*\* 15-foot minimum separation required for deep trench disposal systems.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.~~10~~11. - Subsurface suitability evaluation.

All sites proposed for sewage disposal must be evaluated for suitability on a case-by-case basis. When required, percolation testing, soil profile testing and groundwater level testing shall be in accordance with the provisions of this section.

- (a) Percolation testing. A percolation test is required on every lot where an ~~OWTS-septic system~~ will be used as the means of sewage disposal. Percolation testing must be performed at the depth of the proposed drainage system. Percolation testing must be conducted by a California Registered Civil Engineer, Geologist, or Environmental Health Specialist. Percolation testing procedures shall be performed pursuant to recognized published standard methods. Any customized procedure based upon professional judgment and site conditions must be approved by the Director of Environmental Health. Percolation test data must include at a minimum: the name and license/registration of the professional performing the test, the percolation testing procedure performed and a site map which clearly delineates the scope of the area represented by the test. The submitted percolation data is only valid for the specific area identified on the site map.
- (b) Soil depth evaluation: Soil depth evaluation may be required at the discretion of the Environmental Health Director when inadequate soil depth information is available for a particular site or parcel. When required, a soil profile excavation must be performed under the direction of and recorded by a California Civil Engineer, Geologist, or Environmental Health Specialist. When a soil profile reveals signs of an elevated

groundwater table within seven feet of the ground surface, groundwater monitoring will be required according to the provisions of this chapter.

- (c) Groundwater level testing: Groundwater level testing shall be required in those areas where site characteristics, soil profile data and/or existing information indicate the potential for an elevated seasonal groundwater table. The depth to groundwater shall be determined by actual measurements of groundwater in observation wells (piezometers) from November 1 to May 31 each year. Piezometer construction methods must be approved by Environmental Health. This testing period may be modified by the Environmental Health Director based on seasonal weather variations and other unusual circumstances in order to assess groundwater conditions during periods of maximum soil moisture content.

- (1) Direct observation measurements. Measurements shall be taken as presented below, unless otherwise approved by the Environmental Health Director.

Measurements shall be taken at two-week intervals until seasonal high groundwater starts to recede, and at four-week intervals thereafter, except that weekly observations shall be recorded for any periods when groundwater is less than eight (8') feet below the ground surface.

At least one (1) piezometer shall be included within each proposed disposal area suspected of having groundwater less than seven (7') feet below the ground surface, except where a nearby piezometer shows groundwater contours representative of the proposed disposal area.

- (2) Qualifications. All groundwater monitoring shall be performed by a California Registered Engineer, Geologist or Environmental Health Specialist.
- (3) Permit required. All groundwater monitoring shall be performed under permit by Environmental Health.

~~(d) Waivers: Requirements of this section may be waived by the Director of Environmental Health if sufficient information is available to ensure protection of public health and the environment.~~

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6. ~~1112~~. - Subsurface suitability standards.

The type of ~~sewage disposal system~~ OWTS that is suitable for a particular site is based on the results of the subsurface suitability evaluation as follows:

- (a) Percolation. Percolation test results, in conjunction with projected sewage flows or the number of bedrooms served, determine the absorption area sizing requirements of the drainage system. Areas with percolation rates ranging from five (5) minutes per inch to sixty (60) minutes per inch will be considered acceptable for a standard sewage disposal system. Areas with percolation rates faster than five (5) minutes per inch or

ranging from sixty-one (61) minutes per inch to 120 minutes per inch will require an engineer design or alternative treatment system. Areas where percolation rates exceed 120 minutes per inch are unacceptable.

- (b) Vertical separation to impermeable layer or bedrock. The minimum vertical separation between the existing ground surface and an impermeable layer or bedrock shall be five (5') feet for all standard sewage disposal systems. This distance may be reduced to not less than three (3') feet ~~when with~~ an engineer design or not less than two (2') feet when an alternative treatment system is utilized. Table 2 compares separation distances to an impermeable layer for various ~~system-QWTS~~ designs.

Table No. 2  
Separation Distances for Impermeable Layers

	Distance Between Ground Surface and an Impermeable Layer	Distance Between Bottom of Disposal Area and an Impermeable Layer
Standard System	≥ 5 ft.	4 ft.
Engineered System	3—5 ft.	4 ft.
Advanced Treatment System	2—3 ft.	3 ft.

- (c) Vertical separation to groundwater. Minimum vertical separation between the existing ground surface and the highest recorded seasonal groundwater elevation shall be no less than six (6') feet for all standard sewage disposal systems. The minimum vertical separation between the existing ground surface and the highest recorded seasonal groundwater elevation may be reduced to no less than three (3') feet provided an engineered sewage disposal system is utilized. The minimum vertical separation between the existing ground surface and the highest recorded seasonal groundwater elevation may be reduced to no less than eighteen (18") inches provided an advanced treatment system is utilized ~~with appropriate mitigation measures approved by the~~

~~Central Valley Regional Water Quality Control Board and on file with the Director of Environmental Health.~~ Table 3 compares separation distances to highest groundwater level for various system designs.

Table No. 3  
Separation Distances for Groundwater

	Distance Between Ground Surface and Highest Groundwater Elevation	Distance Between Bottom of Disposal Area and Highest Groundwater Elevation
Standard System	≥ 6 ft.	5 ft.
Engineered System	3—6 ft.	5 ft. for gravity distribution, OR 4 ft. for pressure distribution
Advanced Treatment System	1.5—3 ft.	3 ft.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6. ~~1213.~~ - Standard ~~sewage disposal systems~~OWTS.

Any proposed standard ~~sewage disposal system~~OWTS shall consist of a septic tank and a drainage system (leach bed, trench or gravel-less chamber) as follows:

- (a) Septic tank required. Unless otherwise noted, all ~~sewage disposal systems~~OWTS described in this chapter must consist of a septic tank that satisfies the construction requirements described below.
- (b) Septic tank construction. Septic tanks must be constructed as a one piece unit unless the tank is assembled prior to retail sale by a manufacturer-certified assembler and the watertight seal between pieces is provided by a continuous-loop, ASTM F477-compliant elastomeric gasket. Two piece, field assembled septic tanks are prohibited. Each septic tank- shall consist of two (2) compartments, with the first compartment

being twice the size of the second. Access to each septic tank shall be provided by at least two (2) manholes twenty (20") inches in minimum dimension. One access manhole shall be located over the inlet and one access manhole shall be located over the outlet and brought to grade. Risers shall be constructed of polyethylene, concrete or other equally durable water and corrosion resistant material. Each riser shall have a securable cover to prevent unauthorized entry and be appropriately sealed to prevent odors from escaping. The inlet and outlet fittings shall be provided with sanitary tees, baffles or the equivalent if satisfactory to the Director of Environmental Health. Septic tanks shall be constructed of reinforced concrete, fiberglass, polyethylene or other equally durable, waterproof and corrosion resistant material. Septic tank construction must be reviewed and approved by the Director of Environmental Health and the County Engineer. Minimum septic tank capacities for residential applications include the following:

1, 2 or 3 bedrooms:	1,000 gallons
4 bedrooms:	1,200 gallons
5 or 6 bedrooms:	1,500 gallons

Minimum septic tank capacities for larger residential, commercial or industrial applications shall be equal to the maximum daily waste water flows according to the California Uniform Plumbing Code and approved by the Environmental Health Director.

- (c) Septic tank effluent pumping system. Where the septic tank effluent cannot be delivered to the drainage system via gravity-flow piping, a septic tank effluent pumping system may be utilized. The effluent pump must be installed in a water-tight sewage holding vault which is separate from the septic tank, or in the second compartment of a modified-design septic tank. When using an integral septic tank pump system, the septic tank shall be oversized to account for the volume displaced by the pump and hardware.

Access to an effluent pump shall be provided by a twenty-inch minimum dimension manhole riser. Manhole risers shall be constructed of polyethylene, concrete or other equally durable water and corrosion resistant material. Manhole risers shall have a securable cover to prevent unauthorized entry and be appropriately sealed to prevent odors from escaping. Maintenance of an effluent pump system is to be performed per the manufacturer's specifications. Electrical connections to a sewage pump must be to the satisfaction of the County Building Official.

(d) Drainage systems. A standard drainage system shall provide five (5') feet of separation to highest groundwater elevation and four (4') feet of separation to an impermeable layer. Standard drainage systems consist of one (1) of the following:

- (1) Leach bed. A leach bed consists of a shallow, level, rectangular bed-like soil excavation, leachrock, perforated distribution pipe, barrier material and soil cover. The excavation bottom area is used to calculate the absorptive area of this type of system. At least twelve (12") inches of clean-washed drainage rock ( $\frac{3}{4}$ " to 2½" diameter) are placed beneath a four-inch diameter perforated distribution pipe, and at least (2") inches cover the pipe, giving a total rock depth of not less than eighteen (18") inches. In lieu of drainage rock, geo-synthetic aggregate is acceptable however no reduction in excavation bottom absorptive area is given. Perforated pipes are installed a minimum of three (3') feet from the excavation sidewall and a maximum of six (6') feet center to center. Each perforated pipe is fitted with an end cap or plug, all lines are installed level, and all are provided with equal distribution via direct connection to a distribution box or manifold system as needed for multiple perforated lines. Maximum length of each line is 100 feet. The entire leach rock bed area is covered with untreated paper, straw, Geotextile fabric or other suitable material to prevent cover soils from penetrating the leach rock. A minimum of twelve (12") inches of soil is used to cover the bed in a manner which will facilitate surface water run-off. When installed on sloping ground, the bed should be configured and installed so as to parallel slope contour.
- (2) Leach trench. A trench system consists of a narrow, deep trench-like excavation, leachrock, perforated distribution pipe, barrier material and soil cover. The excavation sidewall area is used to calculate the absorptive area of this type of system. Up to six (6') feet of clean-washed drainage rock ( $\frac{3}{4}$ " to 2½" diameter) are placed beneath a four-inch diameter perforated pipe, and at least two (2") inches of rock cover the pipe. In lieu of drainage rock, geo-synthetic aggregate is acceptable however no reduction in excavation sidewall absorptive area is given. The perforated pipe is installed in the center of the eighteen (18") to twenty-four-inch wide excavation. Each perforated pipe is fitted with an end cap or plug, all lines are installed level, and all lines are provided with equal distribution via direct connection to a distribution box or manifold system as needed for multiple perforated lines. Maximum length of each ~~performed-perforated~~ line is 100 feet. The trench is covered with untreated paper, straw, Geotextile fabric or other suitable material to prevent cover soils from penetrating the leach rock. A minimum of twelve (12") inches of soil is used to cover the trench in a manner which will facilitate surface water run-off.
- (3) Gravel-less leaching chambers. A gravel-less leaching system consists of prefabricated interlocking effluent receiving chambers installed in a shallow, level, rectangular bed-like or narrow trench excavation. All gravel-less chambers must be UPC/IAPMO approved and certified. The bottom absorption area (nominal chamber unit width) with a 0.70 multiplier is used to calculate the absorptive area of this type of system. The bottom and sides of the bed or trench excavation are

to be raked to eliminate any smearing that has occurred during excavation. All large rocks and debris is to be removed from the excavation prior to installation of the leaching chambers. The first and last leaching chambers are to be fitted with an end plate, all chambers are installed level, and all chambers are provided with equal distribution via direct connection to a distribution box or manifold system as needed for multiple leaching chambers systems. Maximum length of each leaching chamber system is 100 feet. A minimum of twelve (12") inches of soil is used to cover a leaching chamber system in a manner which will facilitate surface water run-off. All gravel-less leaching chamber systems are to be installed per the manufacturer's design.

- (4) Serial distribution. Serial distribution is an acceptable alternative to equal distribution. Serial distribution is achieved by the use of a modified distribution box(s) connecting individual leach trenches of the absorption system so that each trench is forced to pond to the full depth of the gravel fill before effluent flows into the succeeding trench. All construction specifications of the disposal trenches are the same as (c)(1), (2) and (3).

~~(d) Tracer wire. Once a disposal system is installed, a #12 or greater copper wire shall be installed around the perimeter of the disposal system and both ends of the copper wire are to be tied into the outlet manhole access riser. This will allow physical identification of the disposal system by charging the copper wire and utilizing a meter to locate the perimeter of the disposal system.~~

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.1314. - Engineered ~~sewage disposal systems~~OWTS.

- (a) Design criteria. Areas in which the percolation rates are less than five (5) minutes per inch or exceed sixty (60) minutes per inch, where seasonal high groundwater table is closer than six (6') feet below the existing ground surface, or where an impermeable layer is closer than five (5') feet below the existing ground surface are not suitable for standard sewage disposal systems. Such areas may be suitable for an engineered ~~sewage disposal system~~OWTS provided percolation rates do not exceed 120 minutes per inch, and the depth to seasonal high groundwater or an impermeable strata is not less than three (3') feet below the existing ground surface. Engineered ~~sewage disposal systems~~OWTS must provide, from the bottom of the disposal system, a minimum five (5') feet vertical separation to groundwater and a minimum four (4') feet vertical separation to an impermeable layer unless otherwise specified in this section. Engineered systems must be designed according to the surface suitability standards contained in Section 6-6.09 of this chapter.
- (b) Submittal. Plans for an engineered ~~sewage disposal~~ system must be submitted by a California Registered Civil Engineer, Geologist or Environmental Health Specialist for review by Environmental Health.

- (c) Approved designs. Engineered ~~sewage disposal~~ systems that will be considered by Environmental Health for application in areas deemed unacceptable for a standard ~~sewage disposal system~~ OWTS include:
- (1) Elevated mound systems. Elevated mound systems may be applied in areas where vertical separation to groundwater and/or an impermeable strata or bedrock cannot be satisfied for a standard system. For an elevated mound system to be utilized, the minimum vertical separation to groundwater or an impermeable strata cannot be less than three (3') feet below undisturbed ground surface.
  - (2) Pressure distribution. Pressure distribution leach disposal systems may be applied to areas where vertical separation to groundwater and/or standard percolation rates cannot be obtained. Vertical separation between the bottom of the drainage system and the highest recorded groundwater level through native soil may be reduced to four (4') feet when pressure distribution is utilized. Pressure distribution may also be applied to areas where percolation rates fall between the sixty (60) minutes per inch and 120-minute per inch range.
- (d) Alternate designs. ~~Sewage disposal system~~ OWTS technologies and alternative construction methods not specifically referenced in this section will be considered by Environmental Health on a case by case basis provided such systems are submitted by a California Registered Civil Engineer, Geologist or Environmental Health Specialist.

(§ 2, Ord. 04-1002, April 20, 2004)

Sec. 6-6.1415. - Advanced ~~treatment systems~~ OWTS.

- (a) Submittal. Advanced ~~treatment systems~~ OWTS and alternative technologies not specifically referenced in this chapter will be considered on a case-by-case basis provided such proposals are submitted by a California Registered Civil Engineer, the installation is completed under the direction of the design engineer and provided such proposals satisfy Section 6-6.01 of this chapter.
- (b) Design criteria. Areas deemed unacceptable for standard and engineered ~~sewage disposal~~ OWTS as described in this chapter may be suitable for an advanced treatment system provided: groundwater is no closer than eighteen (18") inches below the existing ground surface; an impermeable layer is not closer than two (2') feet below the existing ground surface; and percolation rates do not exceed 120 minutes per inch. An advanced treatment system must provide a minimum three (3') feet vertical separation to groundwater or an impermeable layer unless otherwise specified in this section. Advanced treatment systems must be capable of routinely producing treated effluent with biological oxygen demand (BOD) and total dissolved solids (TDS) concentrations less than thirty (30) milligrams per liter (mg/L) and total coliform concentrations less than 240 MPN/100mL. Advanced treatment systems must be designed according to the surface suitability standards contained in Section 6-6.09 of this chapter.

- (c) System operation and maintenance. Due to the complexity of advanced treatment systems, proper operation and maintenance of these systems is essential. An Operation and Maintenance Manual shall be developed by the system designer and/or manufacturer and provided to the applicant and Environmental Health at time of permit application. This Manual shall include diagrams of system components, descriptions of normal system functions, schedules for routine annual maintenance, descriptions on how to correct common operational problems and other items necessary to ensure proper system function.
- (d) System performance monitoring. A monitoring plan shall be developed by the system designer and provided to Environmental Health for approval at time of permit application. The monitoring plan shall specify proposed effluent sampling, constituent analysis and frequency to ensure proper system performance and must be approved by Environmental Health.
- (e) Maintenance and monitoring service provider. A contract with a qualified service provider for specified system maintenance and monitoring shall be in place prior to final inspection and approval for use of any advanced treatment system. The system owner must notify Environmental Health within thirty (30) days of any revision to or cancellation of the service agreement.
- (f) ~~Annual-Operating~~ permit. All advanced treatment systems shall be operated under a renewable ~~annual~~ permit issued by Plumas County Environmental Health. This permit will specify conditions for system operation including maintenance, monitoring, and reporting that will ensure protection of public health and the environment. A new operating permit is also required any time a property with an advanced treatment system is sold or otherwise falls under new ownership.
- (g) Approved designs.
  - (1) Intermittent sand filters (ISF). An intermittent sand filter may be utilized in areas where the vertical separation between the ground surface and highest seasonal groundwater is at least eighteen (18") inches. All ISFs must be constructed in accordance with Plumas County Environmental Health's Intermittent Sand Filter Design Manual, current Industry Standards, and all the requirements of this chapter.
  - (2) Aerobic treatment systems (ATU). An aerobic treatment unit may be used to replace failing sewage disposal systems for residential and small commercial facilities, where site conditions are deemed unsuitable for standard or engineered ~~sewage disposal systems~~OWTS. Aerobic Treatment Units may replace a conventional septic tank in some applications, based on the engineer's design. ATUs shall be certified by the National Sanitation Foundation (NSF) pursuant to Standard 40 Class I requirements. Evidence of NSF certification shall be submitted at time of application.

All ATUs shall be installed according to the manufacturer's approved design and specifications under the direction of a California Registered Engineer and must satisfy all the requirements of this section.

(§ 2, Ord. 04-1002, 4-20-2004)

Sec. 6-6.~~1516~~. - Community sewage disposal systems.

Disposal systems serving multiple structures, residential or commercial, are considered community systems. For systems serving one (1) or two (2) structures, variations of the septic tank-leach bed systems are typically employed. Where the number of structures served is three (3) or more, an engineered sewage disposal system is required. Where the number of structures served is five (5) or more, concurrence from the Central Valley Regional Water Quality Control Board is required. Where the estimated wastewater flows for the community sewage disposal system exceed 10,000 gallons per day, Waste Discharge Requirements or other authorizations or permits from the Central Valley Regional Water Quality Control Board are required.

(§ 2, Ord. 04-1002, adopted April 20, 2004)

Sec. 6-6.~~1617~~. - Abandonment and reuse of sewage disposal facilities.

- (a) Any person permanently discontinuing use of a septic tank, sewage holding vault, pit privy or cesspool shall properly abandon it. Abandonment shall consist of pumping and properly disposing of the contents of each compartment as applicable. Subsequently, each compartment shall be filled with an inert solid material such as sand, gravel or soil.
- (b) No septic tank, cesspool, sewage holding vault or pit privy may be considered for reuse at any other location ~~other than reinforced concrete septic tanks. Reuse of reinforced concrete septic tanks will be considered only after thorough inspection and written authorization from the Director of Environmental Health.~~

(§ 2, Ord. 04-1002, 4-20-2004)

Sec. 6-6.~~1718~~. - Prohibited sewage disposal facilities.

- (a) Cesspools. It shall be unlawful to construct, use, or maintain a cesspool as a means for sewage disposal.
- (b) Pit privies. It shall be unlawful to construct, use or maintain a pit privy as a means of sewage disposal.
- (c) Sewage holding vaults. It shall be unlawful to construct, use, or maintain a sewage holding vault without a special written permit from the director of Environmental Health.
- (d) Onsite Wastewater Treatment Systems dedicated to recreational vehicle waste. OWTS dedicated to receiving significant amounts of wastes dumped from recreational vehicle holding tanks are prohibited. For the purposes of this section, significant amounts of recreational vehicle waste means amounts greater than incidental dumping such that volume, frequency, overall strength or chemical additives preclude definition as domestic wastewater. The Central Valley Regional Water Quality Control Board may approve

systems dedicated to such waste if under special waste discharge permit or other authorization.

(§ 2, Ord. 04-1002, 4-20-2004)

Sec. 6-6.19 – Waivers and Variances

- (a) Waivers: Requirements of this chapter may be waived by the Director of Environmental Health if sufficient information is available to ensure protection of public health and the environment and provided the waiver does not include prohibitions included in Section 9.4 of the state OWTS Policy.
- (b) Variances. Variances to this chapter may be granted by the Board of Supervisors or another duly appointed board, acting as a board of appeal in consultation with the Director of Environmental Health. Variances can only be granted upon finding of unusual circumstances and upon finding that the variance will ensure protection of public health and the environment. In no case can variances be granted for:
- a. Use of cesspools of any kind or size;
  - b. Permits to construct OWTS receiving a projected flow of over 10,000 gallons per day without Regional Water Quality Control Board approval;
  - c. OWTS that utilize effluent disposal on or above the post installation ground surface;
  - d. OWTS installation on slopes greater than 30 percent without a slope stability report signed by a registered professional;
  - e. Gravel-less disposal technologies using an absorption area multiplier less than 0.70;
  - f. OWTS utilizing supplemental treatment without requirements for periodic monitoring and inspections;
  - g. OWTS dedicated to receiving significant amounts of wastes dumped from recreational vehicle holding tanks;
  - h. Separation of the bottom of the dispersal system to groundwater less than two (2) feet for new construction;
  - i. Installation of new or replacement OWTS where public sewer is available in accordance with section 6-6.04 of this chapter provided connection and construction costs are not more than twice the total cost of a replacement OWTS and Environmental Health has determined the replacement OWTS would not adversely impact public health or groundwater quality; and
  - a.j. Installation of new or replacement OWTS located within the prescribed setback to public water wells or surface water intakes without advanced treatment unless alternate siting and operational criteria for the proposed OWTS will similarly mitigate the potential adverse impact to the public water source.

Sec. 6-6.1820. - Violations and enforcement.

- (a) A violation of this chapter is an infraction punishable as set forth in Section 1-2.01 of this Code, each day a violation occurs is deemed a separate citable offense. A continuing violation shall constitute a public nuisance to be summarily abated pursuant to Section 1-2.01.
- (b) The administration and enforcement of the laws in this chapter shall be the duty of the Director of Environmental Health of Plumas County. The Director may designate employees of Environmental Health and the Department of Code Compliance to be enforcement officers for purposes of premises inspections and issuance of citations. The Director may seek the assistance of any peace officer in carrying out enforcement responsibilities.

(§ 2, Ord. 04-1002, adopted April 20, 2004)