

Plumas County Code Title 6 Sanitation and Health

CHAPTER 11. - WASTE DISPOSAL FROM AND WATER SUPPLY TO LAND DEVELOPMENTS^[4]

Footnotes:

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Editor's note—Ord. No. 04-1002, § 4, adopted Apr. 20, 2004, repealed the former Ch. 11, §§ 6-11.01—6-11.05, and enacted a new Ch. 11 as set out herein. The former Ch. 11 pertained to similar subject matter. See the Disposition of Ordinances, Table 2.

Sec. 6-11.01. - Basis for adoption.

(a) This chapter is adopted in order to implement the "Guidelines for Wastewater Disposal from Land Developments" adopted by the California Regional Water Quality Control Board, Central Valley Region.

(b) This chapter, Chapter 6 of Title 6 of Plumas County Code, and the Plumas County Local Agency Management Plan (LAMP) comprise the 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).

~~(a)(c)~~ -This chapter also establishes standards for water supply and protection, and provides for the long-term protection of public health, safety and welfare and the environment.

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

Sec. 6-11.02. - Scope.

(a) Requirements. The requirements of this chapter shall apply to new developments and land divisions where individual, ~~or~~ shared or community sewage disposal systems are to be used and where individual wells, shared water supplies, ~~or~~ State Small Water Systems or public water systems are to be used. These requirements are applicable to single-family residential, commercial and industrial zoned property and shall supersede any less restrictive requirements of the Uniform Plumbing Code, Manual of Septic Tank Practice, Regional Water Quality Control Board Guidelines or Title 6, Chapter 6 of Plumas County Code.

(b) Data submittal. All the information and test data required by this chapter shall be submitted to the Planning Director as part of the planning and land use application. Testing locations shall also be shown on the tentative map, and marked prominently in the field, if applicable. This includes:

- (1) All percolation tests, soil profile and groundwater monitoring data, and location of tests performed,
- (2) Location of the designated sewage disposal area for each proposed lot,

- (3) Submittal of all quantity and quality data for the proposed water supply,
- (4) Location of the water supply source, piping, storage and other infrastructure,
- (5) Other data as required to determine project compliance with this chapter.

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

Sec. 6-11.03. - Definitions.

- (a) Additional information map: Part of the final recorded map. An additional information map shall show specific data to demonstrate compliance with this chapter, including the location of the designated sewage disposal area and the designated well site.
- (b) Common sewage disposal area: A location for the disposal of wastewater from 2 or more separate parcels or lots. Such areas may have any combination of individual or shared sewage disposal systems but cannot exceed 10,000 gallons of estimated daily wastewater flows without Waste Discharge permit or other approval from the Regional Water Quality Control Board.
- (c) Community sewage disposal system: A system that receives liquid waste from five (5) or more connections. This may include centralized sewers, community leachfields and/or any combinations thereof.
- (~~e~~d) Designated sewage disposal area: Area acceptable for sewage disposal based on slope, soil depth, percolation data and other siting requirements. This area must be designated for the exclusive use of liquid waste disposal.
- (~~e~~e) Development: For the purposes of this chapter, development includes subdivisions, parcel maps, ~~and~~ other land divisions that create new parcels, ~~as well as~~ and lot line adjustments where sewage disposal or water supply are affected.
- (~~e~~f) Engineered system: A wastewater disposal system designed by a California Registered Professional Civil Engineer.
- (~~f~~g) Final map: The map that is officially recorded by the County Surveyor-Engineer.
- (~~g~~h) Groundwater: Water found at any depth below the ground surface that is capable of flowing into a well or piezometer.
- (~~h~~i) Groundwater level monitoring: The direct observation of groundwater in a piezometer to determine the highest seasonal groundwater level. The monitoring season extends through the rainy season from November 1 to May 31.
- (~~i~~j) Impermeable layer: A layer of soil or rock that does not allow the penetration of water or other liquids. Defined as a percolation rate of 120 minutes per inch or slower.
- (~~j~~k) Normal year: A year in which seventy-five (75%) percent or more of the average annual precipitation for the entire year falls prior to April 15.
- (l) OWTS Policy: 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, Chapter 6 of Title 6 of Plumas County Code and the conditions set forth in the Policy.

~~(km)~~—Percolation test: A measure of how quickly soil will absorb fluid under saturated conditions, with the units of minutes per inch (mpi).

~~(ln)~~ Piezometer: A perforated pipe installed in the soil to a depth of approximately eight feet below grade for direct observation and measurement of groundwater.

~~(mo)~~—Public water system: A water system that serves fifteen (15) or more connections or regularly serves at least twenty-five (25) individuals daily at least sixty (60) days per year. The California ~~Department of Health Services~~Water Resources, Division of Drinking Water provides oversight and permitting for public water systems serving two hundred (200) or more connections and Environmental Health provides oversight and permitting for public water systems serving less than two hundred (200) connections.

(p) Public water well: A well connected to and supplying a public water system as a primary or alternate source.

~~(q)~~ Separation distance: The minimum horizontal distance required between a designated sewage disposal area and any other feature, including wells, seasonal drainages, lakes etc. See Table I.

~~(r)~~ Shared sewage disposal system: A system that receives liquid waste from two (2) to four (4) connections~~lots or parcels~~.

~~(s)~~ Shared water supply: A drinking water source that serves two (2) to four (4) connections.

~~(t)~~ Slope: The natural grade of the ground surface measured in percent, or rise over run; the gain in elevation (rise) per horizontal distance (run).

~~(u)~~ Soil depth: The vertical thickness of soil present between the ground surface and the highest seasonal groundwater level, fractured bedrock and/or an impermeable layer.

~~(v)~~ Soil profile: A backhoe excavation to examine subsurface features such as: soil types, depth to an impermeable layer and/or to groundwater, soil color, mottling, root zones etc.

~~(w)~~ State small water system: A water system that serves between five (5) and fourteen (14) connections.

~~(x)~~ Tentative map: The first map submitted to the Planning Department along with the land division or development application.

(§ 4, Ord. 04-1002, adopted April 20, 2004; § 5, Ord. 05-1027, adopted May 17, 2005; § 8, Ord. 05-1027, adopted May 17, 2005)

Sec. 6-11.04. - Designated sewage disposal area.

For every development and land division utilizing individual sewage disposal, a single sewage disposal area shall be designated on each lot. This area shall be reserved for the exclusive use of disposing of liquid waste and shall not be developed for any other purpose without specific prior approval by Environmental Health. Designated sewage disposal areas shall satisfy the surface and subsurface suitability requirements specified in Sections 6-11.05 and 6-11.06. This requirement shall apply to all lots or parcels of a development unless the resultant lot or parcel has existing dwellings. In this case, only adequate leachfield and replacement area must be designated.

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

Sec. 6-11.05. - Surface suitability and evaluation.

The designated sewage disposal area shall be located on natural ground with acceptable slope and shall meet all applicable separation distances.

- (a) Slope. Natural ground slopes greater than thirty (30%) percent shall be unacceptable.
- (b) Separation distances. Designated sewage disposal areas shall meet the separation distances specified in Table I.

Table I: Separation Distances in Feet

Feature	Designated Sewage Disposal Area
Water Individual, shared, or State Small <u>Water System</u> supply wells	100'
<u>Public water wells</u>	<u>150'</u>
Perennial streams	100' from high water line
Seasonal drainages, marshy meadows, ephemeral streams	50' from edge of channel or meadow
Springs	100' <u>**</u>
Cut or fill banks; natural escarpments >50% slope	Four times the vertical bank height as measured from the top of the bank; 100' maximum

Lakes or ponds	200'
<u>Lakes, reservoirs, ponds or other water with a surface water intake point for a public water system</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>
Property lines where individual wells are used*	50'
Existing or proposed structures	8'
Vehicular traffic areas and easements	Clear

* This may be reduced to five feet if well sites are designated on every parcel.

**If the spring supplies a public water system, the setback shall be increased to 150 feet.

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

Sec. 6-11.06. - Subsurface suitability and evaluation.

The designated sewage disposal area shall have adequate soil permeability and sufficient soil depth to a limiting layer.

- (a) Percolation testing. A minimum of one percolation test per designated sewage disposal area is required. Percolation rates less than five (5) mpi or greater than 120 mpi shall be unacceptable. For designated sewage disposal areas requiring an engineered design per Section 6-11.07(b), additional percolation data may be required to demonstrate consistent soil percolation rates throughout the designated sewage disposal area.
- (b) Soil depth to an impermeable layer. Designated sewage disposal areas shall have adequate soil depth from the ground surface to an impermeable layer. A minimum of one soil profile per designated sewage disposal area is required. Soil depth less than three (3') feet from grade to an impermeable layer shall be unacceptable. For designated sewage disposal areas requiring an engineered design per Section 6-11.07(b), additional soil profile data may be required to demonstrate sufficient soil depth throughout the designated sewage disposal area.
- (c) Soil depth to groundwater. Designated sewage disposal areas shall have adequate soil depth from the ground surface to the highest seasonal groundwater level. Soil depth

less than three (3') feet from existing ground surface to the highest seasonal groundwater level shall be unacceptable. Groundwater monitoring via piezometer shall be required if signs of high groundwater are present, including soil mottling or other signs from the soil profile data, hydrophilic vegetation, certain geological and/or topographical features, or as otherwise determined by the Director of Environmental Health.

- (d) Professional required. A California Registered Professional Engineer, Geologist or Environmental Health Specialist shall conduct all percolation testing, soil profile evaluations and groundwater monitoring.

(§ 4, Ord. 04-1002, adopted April 20, 2004; § 8, Ord. 05-1027, adopted May 17, 2005)

Sec. 6-11.07. - Minimum area required.

- (a) Sizing. Each designated sewage disposal area shall be sized according to the surface and subsurface characteristics identified in Sections 6-11.05 and 6-11.06. The minimum size of the designated sewage disposal area shall be 4,000 square feet. Additional contiguous square footage shall be added based on the percolation rate(s), slope, soil depth to groundwater and soil depth to an impermeable layer, to a maximum size of 18,000 square feet. See Table II for sizing requirements and specifications. Commercial and industrial zoned parcels may require additional area to accommodate the maximum daily flows from these businesses.
- (b) Standard design. Parcels acceptable for a standard sewage disposal system design have percolation values between five (5) to sixty (60) mpi, slope between zero (0) to thirty (30%) percent, soil depth greater than six (6') feet from the existing ground surface to the highest recorded groundwater table, and soil depth greater than five (5') feet from the existing ground surface to any impermeable layer. Parcels with soil depth between six (6') to eight (8') feet from the existing ground surface to the highest groundwater table, and/or soil depth five (5') to seven (7') feet from the existing ground surface to an impermeable layer shall record on the Additional Information Map the following restriction: "These parcels require a shallow sewage disposal system, not to exceed a total installation depth of twelve (12) inches below the existing ground surface. Otherwise, an engineered sewage disposal system is required."
- (c) Engineered design. Parcels acceptable for an engineered sewage disposal system design have any or all of the following characteristics: percolation values between sixty (61) to 120 mpi, soil depth three (3') to six (6') feet from the existing ground surface to the highest recorded groundwater table, and/or soil depth three (3') to five (5') feet from the existing ground surface to any impermeable layer. Parcels with six (6') feet or less of soil depth from the ground surface to a limiting layer such as groundwater or an impermeable layer shall record on the Additional Information Map the following restriction: "These parcels require an engineered design."

Table II: Sizing Requirements for the Designated Sewage Disposal Area
Based on Surface and Subsurface Evaluations

Surface/Subsurface Evaluation	Value	Additional Sq. Ft. Required (use 4,000 sq. ft. as minimum size)
Percolation Data	5—60 mpi	Add 0 sq. ft.
	61—90 mpi	Add 2,000 sq. ft.
	91—120 mpi	Add 4,000 sq. ft.
Slope	0— 20%	Add 0 sq. ft.
	20—30%	Add 2,000 sq. ft.
Separation to Groundwater (from grade)	≥ 8 ft.	Add 0 sq. ft.
	6—8 ft.	Add 2,000 sq. ft.
	3—6 ft.	Add 4,000 sq ft
Separation to an Impermeable Layer (from grade)	≥ 7 ft.	Add 0 sq. ft.
	5—7 ft.	Add 2,000 sq. ft.
	3—5 ft.	Add 4,000 sq. ft.

Sec. 6-11.08 - ~~Shared Common~~ sewage disposal areas serving two (2) to four (4) lots.

~~The requirements stated in this section shall apply to developments where two (2) to four (4) lots are served by a Shared Sewage Disposal Area.~~

- (a) Location and sizing. The ~~Shared Common~~ Sewage Disposal Area shall meet the surface and subsurface suitability requirements specified in Sections 6-11.05 and 6-11.06. The ~~Shared Common~~ Sewage Disposal Area shall be sized pursuant to Section 6-11.07 and the resultant area shall then be multiplied by the number of parcels that will be served by the area. This requirement applies when wastewater disposal will be via a shared system or individual systems.
- (b) Design. Four (4) or fewer individual waste disposal systems in a common sewage disposal area do not require an engineer design provided the individual systems can be clearly identified as to ownership, proper operation, and other owner responsibilities and provided all other site characteristics are acceptable for a standard design. When a Shared Sewage Disposal ~~Area-system~~ serves two (2) lots, a standard sewage disposal system design is acceptable, provided all other site characteristic are acceptable for a standard design. When a Shared Sewage Disposal ~~Area-system~~ serves three (3) to four (4) lots, an engineered sewage disposal system design is required.
- (c) Management agreement. ~~If applicable, a~~ An Additional Information Document shall be recorded concurrently with the final map that details the legal responsibility of each individual owning a parcel that ~~is connected to~~ utilizes the ~~Shared Common~~ Sewage Disposal Area. This document shall identify each parcel and their right to dispose of liquid waste, and when applicable shall specify each parcel owner's obligation to share cost with regards to system maintenance and operation of any shared sewage disposal works.

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

Sec. 6-11.09. - ~~Community Common~~ sewage disposal ~~system~~ areas serving 5 or more lots.

New developments and land divisions where five (5) or more lots are served by a ~~community common~~ sewage disposal ~~system-area, whether through community or individual systems,~~ shall have an engineered system or systems. Community sewage disposal systems shall be reviewed and approved by Environmental Health and the Central Valley Regional Water Quality Control Board. Community sewage disposal system serving developments with more than 10,000 gallons daily flows shall require a Waste Discharge Permit or other authorization from the Central Valley Regional Water Quality Control Board.

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

Sec. 6-11.10. - Water supply.

New developments and land divisions shall identify the water supply for each lot. The water supply shall be designated as individual wells, a shared water supply, a state small water

system or a public water system. Unless otherwise noted, data shall be submitted with the tentative map showing proof of water quality and quantity, and shall demonstrate compliance with all construction and location requirements per Sections 6-11.11, 6-11.12 and 6-11.13.

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

Sec. 6-11.11. - Individual wells.

- (a) Location. The designated well site on each lot shall be located a minimum of one hundred (100') feet from any designated sewage disposal area or leachfield and fifty (50') feet from any sewer line or septic tank. If the well sites are not designated, each designated sewage disposal area shall be located a minimum of fifty (50') feet from every property line on each lot.
- (b) Quantity. Proof of water quantity for the total proposed number of lots shall be based on a minimum of one (1) test well per ten (10) lots or fraction thereof, up to thirty (30) lots. For proposed subdivisions of over thirty (30) lots, the number of test wells for water production shall be as required by the County Surveyor-Engineer and the Environmental Health Director. The stabilized sustained yield for each well shall be at least five (5) gallons per minute during a two-hour test or at least three (3) gallons per minute during an eight-hour test. In lieu of test wells as specified above, a report by a California Registered Professional Civil Engineer or California Registered Professional Geologist for water production, including analysis of depth, yield, and quality of a sufficient number of existing wells in the general area, may be considered for acceptance.

(§ 4, Ord. 04-1002, adopted April 20, 2004; § 8, Ord. 05-1027, adopted May 17, 2005)

Sec. 6-11.12. - Shared water supply.

- (a) Quality. Proof of water quality shall be demonstrated by a one-time test for total and fecal coliform bacteria. This test shall be performed by a state certified laboratory and shall be completed prior to recording the final map.
- (b) Quantity. Proof of water quantity shall be demonstrated per the number of test well(s) as described in Section 6-11.11(b). Each shared water supply must be capable of providing at least 1,000 gallons per connection per day through a combination of source (sustained yield pump test) and storage.
- (c) Design. When a Shared Water Supply serves two (2) lots, no special design is required. When a Shared Water Supply serves three (3) to four (4) lots, a California Registered Professional Civil Engineer shall engineer the water supply source and infrastructure.
- (d) Management document. An Additional Information Document shall be recorded concurrently with the final map that details the legal responsibility of each individual owning a parcel that is connected to the Shared Water Supply. This document shall identify each parcel and their right to take water, and specify each parcel owner's obligation to share cost with regards to system maintenance and operation.

(§ 4, Ord. 04-1002, adopted April 20, 2004; § 8, Ord. 05-1027, adopted May 17, 2005)

Sec. 6-11.13. - State small water system.

For developments with a water supply that serves five (5) to fourteen (14) connections, a California Registered Professional Civil Engineer shall engineer the water system source and infrastructure.

- (a) Quality. Proof of water quality shall be demonstrated by completion of all required bacteriological and chemical testing. State Small Water Systems shall comply with the quality standards and requirements commencing with Title 22, Section 64211 of the California Code of Regulations.
- (b) Quantity. The minimum sustained yield per connection shall be three (3) gallons per minute through a combination of source and storage. A sustained yield of less than three (3) gallons per minute may be considered by the Director of Environmental Health provided the following conditions are met:
 - (1) The engineer demonstrates that the water usage in the subdivision will not exceed the proposed source and storage capacities.
 - (2) Water use restrictions may be recorded with the final map as needed to comply with the conditions stated in subsection (1). These restrictions may be placed on nonessential activities, such as certain types of landscaping and gardening, if applicable.
- (c) Management entity. A mutual benefit water corporation or similarly approved management entity shall be created pursuant to Title 22, Section 64216 of the California Code of Regulations. This management entity shall record an Additional Information Document concurrently with the final map that details the legal responsibility of the management entity with respect to the maintenance, care, and operation of the State Small Water System. This document shall identify each parcel and their right to take water, and each parcel owner's obligation to share cost with regards to system maintenance and operation.
- (d) System construction and permitting. State Small Water Systems shall meet all construction, testing, and permitting standards as required by Title 6 Chapter 9 of the Plumas County Code and Title 22 of the California Code of Regulations.

(§ 4, Ord. 04-1002, adopted April 20, 2004; § 8, Ord. 05-1027, adopted May 17, 2005)

Sec. 6-11.14. - Public water system.

For developments utilizing or planning to utilize at full build-out a public water system with fifteen (15) or more connections or a public water system regularly serving at least twenty-five (25) individuals daily at least sixty (60) days out of the year, the requirements of the California Safe Drinking Water Act, as adopted in Title 6 of Chapter 9 of the Plumas County Code, shall be satisfied. Environmental Health shall have authority over community systems serving less than

two hundred (200) connections, and the California Department of Health Services, Division of Drinking Water shall have authority over systems serving two hundred (200) or more connections.

(§ 4, Ord. 04-1002, adopted April 20, 2004; § 6, Ord. 05-1027, adopted May 17, 2005)

Sec. 6-11.15. - Final recording requirements.

- (a) Sewage disposal. The Designated Sewage Disposal Area or Shared Sewage Disposal Area shall be recorded on an Additional Information Map. For developments utilizing a Shared Sewage Disposal Area, all applicable easements and Additional Information Document(s) shall be recorded. For developments utilizing a Community Sewage Disposal System, all map recording requirements shall be satisfied as required by the Central Valley Regional Water Quality Control Board and the County Surveyor-Engineer.
- (b) Water supply. The Additional Information Map shall record the type of water supply that will serve the development. All applicable information shall be recorded per the type of water supply identified.
 - (1) Individual wells. The designated well site shall be recorded on the Additional Information Map. If well sites are not designated, the designated sewage disposal area shall be located a minimum of fifty (50') feet off of every property line on the Additional Information Map.
 - (2) Shared water supply. All quality and quantity testing requirements described in Section 6-11.12(a) and (b) shall be completed prior to recording the final map unless otherwise approved by the Director of Environmental Health. The shared well site shall be recorded on the Additional Information Map. All applicable easements and Additional Information Document(s) shall be recorded pursuant to Section 6-11.12(d).
 - (3) State small water system. An Additional Information Document pursuant to Section 6-11.13(c) shall be recorded concurrently with the final map. All applicable easements shall be recorded on the Additional Information Map. All improvements related to constructing and maintaining the State Small Water System (source and infrastructure) shall conform to all requirements of Title 6 Chapter 9 of the Plumas County Code.
 - (4) Public water system. All improvements related to constructing and maintaining the Public Water System (source and infrastructure) shall conform to all requirements of the California Safe Drinking Water Act. All applicable easements shall be recorded.

(§ 4, Ord. 04-1002, adopted April 20, 2004; § 7, Ord. 05-1027, adopted May 17, 2005)

Sec. 6-11.16. - Variances.

Variances to this chapter may be granted by the Board of Supervisors 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. Land developments generating projected wastewater flows of over 10,000 gallons per day without Regional Water Quality Control Board approval and permit;

c. Land developments that utilize effluent disposal on or above the post installation ground surface without Regional Water Quality Control Board approval and permit;

d. Designated sewage disposal area on slopes greater than 30 percent without a slope stability report signed by a registered professional;

e. Designated area based on gravel-less disposal technologies using an absorption area multiplier less than one (1);

f. Use of individual disposal or common sewage disposal area utilizing supplemental treatment without requirements for periodic monitoring and inspections;

g. Land developments dedicated to receiving significant amounts of wastes dumped from recreational vehicle holding tanks without Regional Water Quality Control Board approval and permit;

h. Designated sewage disposal area with separation from the bottom of the dispersal system to groundwater less than two (2) feet in which case advanced treatment is required;

i. New developments where public sewer is available in accordance with section 6-6.04 of Title 6 Chapter 6; and

j. Designated sewage disposal area 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.