

# ON-SITE WASTEWATER SURVEY

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Interview Date:	October 25, 2006

## I. Permit Process and Design Requirements

### A. Permits required for:

#### 1. New Construction on Existing Parcels

##### a. Permit process

- [Are there separate site evaluation and system construction applications?](#)

Yes, its called a Land Use Review

- [What are the steps through the process?](#)

For the Land Use Review, the process starts with a soil map review. If the parcel is shown with certain soil types, no further site review is required. If not, then a PE textures the soil and does perc test. There is a special form for the soil texturing process and staff tries to oversee the texturing at the time it is performed by the PE.

Next there is the Construction Permit and the PE designs the system. **(even gravity systems??)** Staff performs a final inspection for the system installation.

- [How long are site evaluations valid?](#)

As long as the drainfield location, site conditions, and regulations do not change.

- [How long are construction permits valid?](#)

One year and renewable for one additional year.

##### b. Design Flow

- What is used as the daily design flow per bedroom for single family residences?

150 gpd for first bedroom and 75 gpd for each bedroom thereafter, with a minimum design flow of 150 gpd

- How are design flows determined for other types of development?

Table.

c. Septic Tank Sizing

- What are your septic tank sizing requirements per bedroom for single family residences?

1500 gal for 1-6 bedrooms.

- How is septic tank sizing determined for other types of development?

1 ½ day retention

- Are septic tanks inspected or certified for water tightness?

Yes. All tanks are filled with water and checked by staff to confirm that there is no more than 1 inch drop after 24 hours.

d. Minimum Lot Size?

- Governed by General Plan and Zoning? No.

- Wastewater Ordinance?

Yes, based on 900 gpd/acre for gravity system and 1800 gpd/acre for supplemental treatment, using gross land area and minimum design flow of 150 gpd.

e. Slope

- Is there a maximum slope? What is it?

30%. Town used to have special requirements for steep slope systems but does no longer approve them.

f. Soil

- What is the range of allowable soil textures?

None specified in code or manual.

- What is the range of allowable percolation rates?

5-60 mpi for standard length drainfield, 61-120 mpi requires additional length drainfield, 5-30 mpi when drainfield is located underneath a driveway.

- Do you rely on textural classification, perc tests, or both

Both for a certain types of soil, neither for others.

- Are perc tests optional or mandatory?

Mandatory, depending on soil type or if located underneath driveway.

g. Vertical Separation or Total Effective Soil Depth

- Are your system design requirements based on soil maps, vertical separation, depth of effective soil, or a combination?

All the above.

- What are your vertical separation and/or effective soil requirements for gravity systems?

48 inches of vertical separation, except 24 inches vertical separation from a perched, seasonal watertable.

- For alternative systems?

Same as for gravity systems.

- Do you distinguish between perched, seasonal water table in measuring vertical separation?

Yes.

h. Groundwater

- Do you rely on evaluation of the soil profile or winter monitoring to determine presence of groundwater?

Soil profile, with winter observations required when site is questionable.

i. System Design

- Who determines Type of System, county staff, a consultant, both?

Staff determines whether supplemental treatment is required, PE determines type of alternative system.

2. Creating New Parcels through Subdivision Process

- Is minimum lot sized determined by wastewater requirements or by the General Plan and Zoning?

Zoning first, then wastewater ordinance.

- Does your sewage regulation have minimum lot sizes? If so, how are they determined and what are they?

Table used that is similar to Butte County's Appendix 7 that specifies net lot area requirements based on a wastewater generation rate of 300 gpd.

- Does your regulation have requirements for minimum useable drainfield areas?

No, just net land area as found in the table.

- Are there more stringent requirements for subdivisions than for existing parcels in the following areas:
  - Allowable soil texture No.
  - Allowable percolation rate No.
  - Required vertical separation or total effective soil depth? No.
  - Maximum slope? No.
  - Use of supplemental treatment to allow creation of new parcels? Yes.
  - Required setbacks? No.
- Are determinations of nitrogen or phosphorous loading required? Sometimes nitrogen loading.

3. Repair

- Are system repairs brought up to code to the maximum extent allowed by the site?

Yes, except portions of the system that are not failing are not required to be upgraded if they were installed per the original approved permit.

- Are there differences in site evaluation procedures?

Yes. Soils are texturally analyzed for all repaired systems.

- Are there less stringent requirements for repairs than for existing parcels in the following areas:

- Allowable soil texture
- Allowable percolation rate
- Required vertical separation or total effective soil depth?
- Maximum slope?

Repair is brought up to code to the maximum extent allowed by the site; non-failing components do not need to be upgraded

- Are there differences in who may design a repair system?

No restrictions on who may design gravity repair systems, PEs required to design supplemental treatment systems.

**II. Designer Certification**

- Who can design standard, gravity systems?
  - Certified Engineering Geologist? No.
  - Certified Professional Soil Scientist? No.
  - Registered Civil Engineer? Yes.

## On-Site Wastewater Survey

- Registered Environmental Health Specialist? Yes.
- Registered Geologist? No.
- Other Consultant Certified by Environmental Health? No.
- Contractor? Yes.
- Homeowner? Yes.
- County REHS staff? No.
- Who can design supplemental treatment systems?
  - Certified Engineering Geologist? No.
  - Certified Professional Soil Scientist? No.
  - Registered Civil Engineer? Yes.
  - Registered Environmental Health Specialist? No.
  - Registered Geologist? No.
  - Other Consultant Certified by Environmental Health? No.
  - Contractor? No.
  - Homeowner? No.
  - County REHS staff? No.
- How does County assure that someone submitting a design is qualified to design a specific type of system? Check licenses.
- Will the County require certification of system construction by designer? Yes.
- Will the County require inspection of system construction by designer? Yes.

### III. Installation Requirements

#### A. Installers

- Who may install standard and alternative systems?  
A, C-36, and C-42 licensed contractors.
- Is the homeowner allowed to install either or both of these types of systems? Yes.
- Do you certify installers? No.

#### B. Inspections

- Does County staff inspect all components of an installation? Yes.
- Does County staff meet with the installer on the site or consult with the installer prior to initiation of the installation? Upon request.
- How many installation inspections by staff for installation of a standard, gravity system? 1-2 inspections.

- How many installation inspections by staff for installation of a sand filter? 6-7 inspections.

C. As-Built Requirements

- Does the installer provide an as-built drawing? Yes.
- Who provides the as-built drawing for a supplemental treatment system? P.E.

D. Certification of Completion

- How does the county provide final approval of the system and its installation?

After final inspection and receipt of as-built, an operating permit is sent out.

- Is the designer required to inspect and certify the installation as meeting the requirements of the design? Yes.
- Does the installer certify the completion of the system per the design? No.

**IV. Renewable Operating Permits**

- Are ROPs required for the following?
  - Existing systems? Yes.
  - Standard gravity trench? Yes.
  - Pump to gravity? Yes.
  - Pressure dosed? Yes.
  - Supplemental treatment? Yes.

**V. Operation and Maintenance Program**

- Does your county have an O&M program? Yes, for alternative systems?
- Who performs the O&M inspections?
  - Service providers certified by the city? Yes.
  - Services provides certified by the proprietary manufacturer? No.
  - Septic tank pumpers? No.
  - Home owners? No.
  - Professional engineers? No.
  - Consultants other than engineers? No.
  - County staff primarily? Yes, once a year.
- What types of systems receive O&M inspections?
  - Existing systems? No.

## On-Site Wastewater Survey

- Standard gravity trench? No.
- Pump to gravity? No.
- Pressure dosed? No.
- Supplemental treatment? Yes.

### VI. Appeal/Variance Process

- What are the major steps in your appeal/variance process? No variances.
- Who makes the final decision?

Appeals go to on-site official, then town engineer, then town manager, then town council where a fee is charged.