

## Significant Changes in Adopted LAMP from 2016 Standards

The LAMP and related ordinance amendments represent substantial changes to the requirements for permitting OWTS in Santa Cruz County. Following are some of the key changes (and the estimated number of affected parcels):

- Minimum groundwater separation for replacement systems will increase from 1-3 ft to 5-8 feet unless enhanced treatment is used (1500-3000 parcels).
- All new and replacement systems in fast percolating sandy soils in nitrate concern areas will require enhanced treatment with nitrogen removal (1500-2000 parcels).
- Enhanced treatment will be required for replacement of all seepage pits (1000-2000 parcels).
- System repairs may no longer be designed by a contractor, but will be designed by a qualified professional, who also must conduct required soil and percolation testing.
- All OWTS will be evaluated at the time of property transfer, including system condition, permitted status, performance, and likely requirements for future upgrades. Those that have deferred installation of enhanced treatment will have to do so at that time.

The tighter requirements for conventional systems will provide increased water quality protection and will require a much greater use of enhanced treatment systems where the conventional standards cannot be met. It is estimated that the percentage of permits requiring enhanced treatment will increase from 16% of all current permits to 30-40% of future permits.

Following are summaries of the more specific changes (with references to the related code section(s)):

1. Large Systems: Systems with flows over 10,000 gallons per day and the must obtain a permit from the Regional Board. However, it is likely that the Regional Board may still delegate authority to the County to inspect system installations and provide some ongoing oversight. (7.38.042(H)(1))
2. Public Water Systems: There are additional setback requirements for new and replacement OWTS in the vicinity of water system wells and surface water intakes. (7.38.043)
3. Slope: Installation of system replacements on slopes between 30% and 50% will require a slope stability report prepared by a registered professional. New systems on slopes greater than 30% are still not allowed. (7.38.095(B)(4)(c), 7.38.130(F))
4. Allowances for Repairs: Repairs of failing systems on constrained lots may continue to use reduced dispersal area (Low-Flow Systems) or defer installation of enhanced treatment (Interim Nonconforming Systems) (7.38.095(C),7.38.150(A)(2))
5. Soil Evaluation for Replacements: Soil testing and evaluation will be required for design of system repairs and upgrades unless adequate information for that site already exists, as demonstrated by the qualified professional. (7.38.120(A))
6. Karst: Areas with karst geology will require geologic evaluation and 100 ft setback from karst features. (7.38.120(E), 7.38.150(B)(4))
7. Design by Qualified Professional: OWTS, including repairs must be designed by a qualified professional (not a contractor), who will also be responsible for soil and groundwater evaluation and other site assessment. (7.38.120(H))

8. Dispersal Sizing: The design flow for a one-bedroom house is increasing from 215 to 250 gpd with the design flows per additional bedroom increasing from 55 gpd to 75 gpd. The application rates will vary more with the soil percolation rate, going from 0.24 gpd/sf to 0.4 gpd/sf for a soil that percolates 35 MPI, as an example. (7.38.150(A)(2)). Required dispersal area will generally be less under the new standards for fast and medium percolation soils. For repairs only, a low flow system will be allowed with a lower design flow and less dispersal area.
9. Stream Setback: System upgrades less than 100 ft from a stream will require enhanced treatment. (7.38.095(B)(2), 7.38.150(B)(9))
10. Drainageway and Stormwater infiltration Setback: The setback from a drainageway that flows more than 12 hours but less than 7 days after rain stops increases from 25 ft to 50 ft. (7.38.130(I), 7.38.150 (B)(4)).
11. Unstable Land Mass: Dispersal systems must be set back 100 ft from an unstable land mass unless an approved geologist report indicates a closer setback is acceptable (7.38.150(B)(4), (5)).
12. Dispersal Depth: Standard dispersal trenches for new and upgraded systems will have a maximum infiltration surface of 4 square feet per linear foot. Up to 10 square feet per linear foot may be utilized for repairs if it is demonstrated that there are constraints on the parcel limiting available dispersal area. Enhanced treatment will be required for dispersal depth greater than 10 ft. (7.38.150(B)(1),(6)).
13. Groundwater Separation: The minimum required groundwater separation for conventional replacement systems will increase from 1-3 feet to 5-8 feet, providing greater water quality protection and potentially requiring enhanced treatment for some 1500-3000 parcels. The specific requirements for new and replacement systems will be as follows (7.38.150(B)(9)):
  - a. 20 ft for a conventional system outside a nitrate concern area in fast perking soils (1-5MPI)
  - b. 8 ft for a conventional system in medium percolating soils (5-30 MPI)
  - c. 5 ft for conventional system in slow percolating soils and for repairs in medium perk soils
  - d. 5 ft for enhanced treatment systems without disinfection
  - e. 2 ft for enhanced treatment with disinfection
  - f. 10 ft for all seepage pits, with enhanced treatment, affecting 1000-2000 parcels
  - g. 5 ft for greywater sumps
14. Sandy Soils: Enhanced treatment for nitrogen removal will be required for all new and replacement systems in sandy soils that percolate faster than 5 MPI in nitrate concern areas. (7.38.150(B)(9); 7.38.183(A)). This will potentially affect 1500-2000 parcels.
15. Pavement: Installation of more than 50% of dispersal systems under impermeable material will require enhanced treatment (7.38.130(P), 7.38.150(B)(11)).
16. Enhanced Treatment System Maintenance: Requirements for maintenance are provided, including mandatory service contracts, testing and telemetry (7.38.184(E)(6)).
17. County Approval of Qualified Professionals: All qualified professionals, contractors and service providers must be approved by the County and County approval may be suspended for violation of code. (7.38.190)
18. Property Owner Maintenance Requirements: Requirements for ongoing property owner maintenance and operation of their OWTS have been added. (7.38.215).
19. Property Transfer Evaluation: All OWTS must be evaluated at the time of property transfer, including system condition, permitted status, performance, and likely requirements for future upgrades

(7.38.216). Those that have deferred installation of enhanced treatment will have to do so at that time (7.38.095(D)).

Allowances Available for Systems that Cannot Fully Meet Standards:

New Parcels and New Development:

- Enhanced Treatment for reduced groundwater separation and/or dispersal area

Upgrades for Bedroom Additions, ADUs and Major Remodels (>500 sf)

- Enhanced Treatment for reduced groundwater separation, stream setback and/or dispersal area
- Slopes 30-50% with Geologic Report
- Reduced setback to seasonal drainageway of 25-50 ft
- Use of seepage pits with enhanced treatment
- Existing functional dispersal systems less than 10 ft flow depth that meet groundwater separation and stream setback may be utilized to support bedroom additions, with a maximum credit of up to 10 square feet of absorption area per linear ft. (7.38.080(B)(2)).

Repairs of Old or Failing Systems: Same as Upgrades plus:

- Reduced groundwater separation of 5 ft for medium percolation soils
- Reduced setback to streams of 50-100 ft
- Deeper Dispersal up to 10 square feet per linear foot
- Low-Flow System, with reduced dispersal area
- Interim Nonconforming System, with deferral of enhanced treatment