

Approval Criteria for Issuance of Septic System Repair Permits

PURPOSE

The purpose of this policy is to help maintain housing stock in the County while preventing the creation or continuation of Public Health nuisances and/or degradation of the waters of the state.

GENERAL

Many septic systems in Sonoma County were installed prior to adoption of codes by the County or when codes were rudimentary. When it becomes necessary to repair these systems, the repair often times cannot fully comply with present day code requirements. It is necessary to balance the need between maintaining a reasonable degree of Public Health protection and accommodating a repair request in cases where current standards cannot be met. This policy supercedes and replaces PRMD Policy 9-2-13 Approval Criteria for Issuance of Septic System Repair Permits (effective date 10/27/02).

AUTHORITY

Uniform Plumbing Code Section 314,
Chapter 7, Sonoma County Code

This policy supercedes Division of Environmental Health Instruction 4-92.

PROCEDURE

All permits for repair of septic systems shall be issued in accordance with the following guidelines. Due to the diversity of situations which will be encountered, flexibility needs to be used in the interpretation and application of these guidelines. Minor deviations may be approved by the field Environmental Health Specialist, however, more significant deviations should be approved by the Supervising Environmental Health Specialist.

The criteria that will apply for various situations are as follows:

A. Setbacks

All installations should comply with current code setbacks (as per Sonoma County Plot Plan Requirements for New Septic Systems) if possible. In cases where it is impossible to adequately repair the septic system given current setbacks, the following minimum setbacks will apply (as measured from any point of the septic tank or disposal field to the closest point of the designated feature):

ON-SITE WELLS	50 feet
NEIGHBORING WELLS (if well is on neighboring property, the repair must maintain a 100 foot setback <u>or</u> must be located no closer than the existing septic system but in no case less than 50 feet)	100 feet
EPHEMERAL STREAMS (this applies to winter drainage courses if in excess of 18" deep)	25 feet to bank of stream
PERENNIAL STREAMS, LAKES, PONDS (streams which are shown as a blue line on the USGS quad maps or known to flow in the summer months)	50 feet to bank of stream
CUTBANKS	25 feet to top of cut
FLOOD AREAS (designated floodway as shown on FEMA maps for Sonoma County)	system cannot be located in a designated floodway

NOTES:

- 1) All other setbacks must meet current standards.
- 2) Seepage pit installations may require increased setbacks.
- 3) A Class III Repair Permit may be issued for the repair of an OWTS that does not meet these setback requirements, provided the Repair OWTS is no closer to sensitive receptors than the existing OWTS. However, any current or future B-BLD Permit application for a remodel or minor addition of habitable space will require a Class I Repair Permit for systems that do not meet these minimum setback requirements.

B. Floor plans

Two copies of a clearly drawn floor plan of the existing dwelling shall be submitted with the permit application. These plans will be reviewed and stamped by the Well and Septic Section but will not be field verified (stamp is to read: reviewed but not field verified).

C. Site plans

Site plans shall generally comply with plot plan requirements for new septic systems (see Private Sewage Disposal System Plan and Packet Completion Checklist for required items).

D. Sizing of a septic system repair

The existing septic tank must be verified as to size, location and condition. It must generally meet current sizing criteria, construction practices, and must be of approved materials (wood or metal is not acceptable). A septic tank that is sub-standard in size but is no less than 810 gallons may be grandfathered in on a voluntary repair but the system will be considered as a Class III

system. All installations of replacement septic tanks must comply with IAPMO standards of approval.

All leachfields will generally be sized based upon soils morphology. Percolation testing may be used for sizing of leachfields if the applicant wishes to use percolation tests as a supplement to soils morphology. Soil profile holes are recommended in all cases. If profile holes are not evaluated by PRMD Well & Septic staff, the Sonoma County Soil Survey and/or information of neighboring lots may be used as a guide. If there is insufficient area on the lot to accommodate an adequately sized leachfield, this shall be noted on the conditional repair statement (see Well and Septic System Procedure).

Guidelines for sizing of leachfields by soils morphology are as follows:

Soil Type	Estimated Perc Rate	Linear Feet/Bedroom
Loamy sand		
Sandy Loam		
loose	<5 mpi	63
friable	5-40	63-143
firm	40-60	143-165
very firm	60+	165+ **
Sandy clay loam		
Loam		
friable	5-60	63-165
firm	60-90	165+ **
very firm	90+	**
Sandy clay		
Clay loam		
Silt loam		
friable	60-90	165+ **
firm	90-120	**
very firm	120-480	**
Clay		**

NOTES:

1. Soils marked ** call for a non-standard system repair (such as a mound, pressure distribution system, at-grade system or sand filter). A non-standard alternative repair is not mandatory but is strongly recommended.
2. If soils profile shows coarse sands or greater than 50% fractured rock, gravel, or cobbles, a sand filter is recommended prior to the disposal field. The sand filter or approved treatment measure must be provided for the installation to meet Class I repair standards.
3. A smaller, larger or non-standard type leachfield may be approved by the District Environmental Health Specialist based upon soils on the site.

4. If a range of estimated perc rates is given above, evaluation as to sizing of the leachfield will be based on soil structure, particle size, porosity, and clay mineralogy.

E. Depth to groundwater

Groundwater determinations are not required unless trenches deeper than 3 feet are proposed on slopes of less than 5%. In any case, the trench depth or system location proposed cannot present a greater potential hazard to groundwater than presently exists on the property. An alternative system repair, such as a mound, is recommended if evidence exists of elevated groundwater conditions.

F. Depth of soil

If an impermeable soil horizon exists within 3 feet below the proposed trench bottom and the leachfield is on a sloping site, then a french drain will be required. This requirement may be waived if unsuitable conditions exist for a french drain installation or if uphill drainage is minimal.

If an impermeable soil horizon exists within 3 feet below the proposed trench and the leachfield site is in a basin, an alternative system, such as a mound, is recommended. Oversizing of the leachfield is recommended when abrupt changes in soil horizon exist (An impermeable soil horizon is one in which there are zone 4 soils or percolation rates slower than 120 mpi).

G. Employment of consultants

1. The system must be designed by a Registered Environmental Health Specialist or a Registered Civil Engineer if the repair is to serve a commercial use or it is proposed as a non-standard system.
2. The system must be designed by a Registered Environmental Health Specialist, a Registered Civil Engineer, a C-42 or a General Engineering Contractor if any of the following exists: limited site conditions, questions as to the ability to maintain required setbacks, waiver prohibition areas, limited or no future reserve repair area, steep topography, a waiver is required or a pump is needed.

H. Seepage pits

May be allowed under the following conditions:

1. They can be no deeper than 6 feet.
2. They can only be installed if a satisfactory leachline installation cannot be installed.
3. They will be considered a Class III system.

4. It is recommended that seepage pits be at least the same size (gallorage capacity) as the septic tank size that would be required based upon the number of bedrooms in the dwelling.
5. All seepage pits shall be completely filled with drain rock. No redwood seepage boxes will be permitted.

I. Class I versus Class III Repair

A Class I Repair is one that meets all of the applicable requirements above. A Class I system (best available system given site specific constraints) may include incorporation of an approved advanced treatment measure to address setbacks to sensitive receptors, depth to groundwater and/or soil conditions. Repairs that do not conform to these standards will be considered Class III. When an addition or remodel is proposed to the structure that is served by the system, the repaired system must have an established record of proper function prior to clearance approval by the Department.

APPLICABILITY

This policy will be used in the review of any septic system repair permit application and in the review of conformance of a septic system to Class I and Class III standards under the Remodel Policy and the application of conditional repair permits.

Approved by:

/s/ Pete Parkinson

Pete Parkinson, Director

Lead Author: Bob Swift

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10/27/02