## **Section 17 Variance Requirements**

- A. Requests for variances of State and/or County regulations may be granted only when the Director of the Permit Authority, or his/her designee, determines that the requested variance is consistent with the minimum standards for public health and water quality protection. Any variance request must provide a corresponding mitigation measure(s) or justification to assure that public health and water quality protection at least equal to that established by the rules, is provided.
- B. Variances shall be considered only if no other reasonable alternative exists on the property.
- C. The Permit Authority shall review the variance request(s) for a site development, evaluating the proposed variance mitigation measure(s) for consistency with the public health/water quality protection intent of the OWTS standards.
- D. Variances cannot be approved for the prohibitions listed in section 4.2.C unless there is a corresponding mitigation measures listed in section 4.3.
- E. Variance Justification. The variance justification shall include the following:
  - 1. The special circumstances affecting the property that make the strict application of the standards impractical.
  - 2. The standard proposed to be varied.
  - 3. The proposed substitute measure and when it would apply.
  - 4. How the substitute mitigation measure achieves the same intent or goal as the standard being varied.
  - 5. The soil type, according to the USDA Sonoma County Soil Survey.
  - 6. Soil profile logs.
  - 7. Depth to groundwater.
  - 8. Preliminary OWTS design
- F. Typical variance items and approved acceptable mitigation measures approved are shown in Table 17.
- G. Variance requests for undeveloped parcels and upgrades to existing OWTS that would result in a potential increase in flow are prohibited in areas identified in Section 18.

## **Table 17 Minimum Requirements for Variance Requests**

Variance Specific Item	Approved Mitigation Measure
Slopes >30% (section 4.2.C.4)	<ol> <li>Subsurface drip dispersal or shallow trench pressure distribution OWTS only</li> <li>Drip/leach lines installed by hand</li> <li>Slope Stability Report prepared by a registered professional</li> <li>No benching</li> <li>Trees with diameters greater than 6 inches not to be removed.</li> <li>Minimum 36" soil depth below drip/leach lines or no evidence of saturation.</li> <li>75 ft (undeveloped parcels) or 50 ft (developed parcels) setback to cutbanks and/or unstable land forms</li> </ol>
100 ft setback from leachfield to perennial watercourse	<ol> <li>For developed parcels with no increase in flow, reduction to no less than 50 ft (setback will be the greatest possible and no closer than existing OWTS) with PRMD approved pretreatment unit</li> <li>For developed parcels with a proposed increase in flow, reduction to no less than 50 ft (setback will be the greatest possible and no closer than existing OWTS) with PRMD approved pretreatment unit and disinfection unit.</li> </ol>
50 ft setback from leachfield to ephemeral watercourse	<ol> <li>For developed parcels, reduction to no less than 25 ft (setback will be the greatest possible) with PRMD approved pretreatment unit</li> <li>For undeveloped parcels, reduction to no less than 40 ft (setback will be the greatest possible) with PRMD approved pretreatment unit</li> <li>Or, existing piped watercourse to be encased in a watertight pipe with water tight joints</li> <li>Or, adequate protective site specific conditions existing, such as physical settings with low hydrogeologic susceptibility from contaminant infiltration (e.g. evidence of confining layer(s), watercourse upgradient</li> </ol>
50 ft setback from septic tank or sump to perennial stream, ocean, lake or reservoir	<ol> <li>Waterproof surface barrier applied to concrete tank consistent with Manual of Concrete Practice ACI 515.1R</li> <li>Flexible rubber boots or compression seals meeting ASTM C 1173 used for inlet and outlet connections to provide flexibility in case of tank settlement while still maintaining watertight seal.</li> <li>An approved double wall fiberglass tank may be used in lieu of a concrete tank.</li> <li>Tank leakage test</li> </ol>
100 ft setback from well to leachfield	<ol> <li>Reduction of setback to 50 ft for existing wells on same parcel.</li> <li>New leachfield shall be no closer to the well than the leachfield that is being replaced (50 ft is a minimum, the setback will be the greatest possible).</li> <li>Provide an approved non-standard OWTS or an approved pretreatment unit on a standard OWTS.</li> </ol>
Installation of OWTS in fill material	Evaluation of structure, texture, consistency, pore space, percolation rate of fill material.

Property line setback reductions	<ol> <li>Consultant and property owner clearly state in writing and on the approved OWTS plan that the location of the OWTS is clearly on his/her property.</li> <li>If there is disagreement and the location is not clear, a survey of the property line is required.</li> </ol>
Structure(s) setbacks	<ol> <li>A reduction to a setback to a non-structural cement slab, path, patio, pool deck can be approved provided the setback reduction will not interfere with the performance of the OWTS.</li> <li>Structural engineer certification that the tank or dispersal field will not impact the integrity of the structures foundation or cause pollution of the structure (e.g. pool, spa, pond) and that the access to the tank and dispersal field will not be impeded.</li> </ol>
Installation of a Non- Standard OWTS in permeable soil below an impermeable soil lens	Provide an approved pretreatment unit.
Prohibition 4.2.C.6 Periodic Monitoring	Enrolled in the Operational Permit Program
Prohibition 4.2.C.8-9 Vertical Separation to Groundwater	Apply to the appropriate Regional Water Board for a set of waste discharge requirements, waiver of waste discharge requirements or a conditional waiver of waste discharge requirements.
Prohibition 4.2.C.11-12 Horizontal Separation from Water Sources	Utilize supplemental treatment to achieve treatment standards listed in Table 4-3.

	Variance Request	Minimum Mitigation Measures*
1	Soil Depth less than 3 feet below trench bottom	<ul> <li><u>Use of pretreatment</u></li> <li><u>UV disinfection</u></li> <li><u>Use of Nonstandard system types</u></li> </ul>
2	Less than 15% fines	<ul> <li>Applicable for developed parcels only</li> <li>Nonstandard system types</li> <li>Pretreatment</li> <li>UV if depth of groundwater is &lt;5 feet below trench bottom</li> <li>Depth of groundwater 2 foot minimum</li> <li>Percolation rate of &gt;1 MPI</li> </ul>

3	Soils with greater than 50% gravels	<ul> <li>Applicable for developed parcels only</li> <li>Must have a percolation rate of 1-5MPI</li> <li>Use of pretreatment</li> <li>UV (may be required)</li> <li>Standard systems with pretreatment</li> <li>Nonstandard system types</li> </ul>
4	Perc rate <1MP1	<ul> <li>Applicable for developed parcels only</li> <li>Nonstandard system with pretreatment and UV</li> </ul>
<u>5</u>	Slopes >30% (Section 4.2.C.4)	<ul> <li>Subsurface drip dispersal or shallow trench pressure distribution OWTS only</li> <li>Drip/leach lines installed by hand</li> <li>Geotechnical Report prepared by a registered professional which addresses slope stability, unstable land forms and the potential for effluent breakout/surfacing.</li> <li>No benching</li> <li>Trees with diameters greater than 6 inches, not to be removed</li> <li>Minimum 36" soil depth below drip/leach lines or no evidence of saturation</li> </ul>
<u>6</u>	100 ft setback from leachfield to perennial or intermittent watercourse	<ul> <li>For developed parcels with no increase in flow, reduction to no less than 50 ft (setback will be the greatest possible and no closer than existing OWTS) with Department approved pretreatment unit</li> <li>For developed parcels with a proposed increase in flow, reduction to no less than 50 ft (setback will be the greatest possible and no closer than existing OWTS) with Department approved pretreatment unit and disinfection unit</li> </ul>
7	50 ft setback from leachfield to ephemeral watercourse or drainage ways >18" in depth	<ul> <li>For developed parcels, reduction to no less than 25 ft (setback will be the greatest possible) with Department approved pretreatment unit</li> <li>For undeveloped parcels, reduction to no less than 40 ft (setback will be the greatest possible) with Department approved pretreatment unit</li> <li>Or, existing piped watercourse to be encased in a watertight pipe with watertight joints</li> <li>Or, adequate protective site specific conditions existing, such as physical settings with low hydrogeologic susceptibility from contaminant infiltration (e.g. evidence of confining later(s), or watercourse upgradient.</li> </ul>

8	50 ft setback from septic tank or sump to perennial stream, ocean, lake or reservoir Or 25 ft setback from septic tank to ephemeral watercourse or drainage >18" in depth	<ul> <li>Waterproof surface barrier applied to concrete tank consistent with Manual of Concrete Practice ACI 515.1R</li> <li>Flexible rubber boots or compression seals meeting ASTM C 117 used for inlet and outlet connections to provide flexibility in case of tank settlement while still maintaining watertight seal</li> <li>An approved double wall fiberglass tank may be used in lieu of a concrete tank</li> <li>Tank leakage test</li> </ul>
9	100 ft setback from well to leachfield	<ul> <li>Reduction of setback to 50 ft for existing wells on same parcel</li> <li>New leachfield shall be no closer to the well than the leachfield that is being replaced (50 ft is a minimum, the setback will be the greatest possible)</li> <li>Provide an approved nonstandard OWTS or an approved pretreatment unit on a standard OWTS</li> </ul>
<u>10</u>	Installation of OWTS in areas considered Altered Terrain	<ul> <li>Evaluation of soil structure, soil texture, pore space and percolation rate of dispersal area per section 7.</li> <li>Groundwater determination per section 7.</li> </ul>
11	Property line setback reductions	<ul> <li>Consultant and property owner clearly state in writing and on the approved OWTS plan that the location of the OWTS is clearly on his/her property</li> <li>If there is a disagreement and the location is not clear, a survey of the property line is required</li> <li>For nonstandard dispersal system downslope 25 ft reduced to 10 ft on slopes no &gt;12.5%. Must modify the placement of the downslope monitoring well to edge of surveyed property line</li> </ul>

<u>12</u>	Structure setbacks	<ul> <li>A reduction to a setback to a non-structural cement slab, path, patio, or pool deck can be approved provided the setback reduction will not interfere with the performance of the OWTS</li> <li>Structural engineer certification that the tank or dispersal field will not impact the integrity of the structure's foundation or cause pollution of the structure (e.g. pool, spa, pond) and that the access to the tank and dispersal field will not be impeded</li> </ul>
<u>13</u>	Installation of a nonstandard OWTS in permeable soil below an impermeable soil lens	Provide an approved pretreatment unit
14	Prohibition 4.2.C.6, Periodic Monitoring	Enrolled in the Operational Permit Program
<u>15</u>	Prohibition 4.2.C.8-9 Vertical Separation to Groundwater	Apply to the appropriate Regional Water Board for a set of waste discharge requirements, waiver of waste discharge requirements or a conditional waiver of waste water discharge requirements
<u>16</u>	Prohibition 4.2.C.11-12 Horizontal Separation from Public Water Sources	Utilize supplemental treatment to achieve treatment standards listed in Table 4-3

<sup>\*:</sup> The listed minimum mitigation measures may be cumulative or individual depending on the proposal and site constraints.