Section 12 Non-Standard Experimental and Alternative OWTS Approval Process

12.1 General

- A. There are two basic types of non-standard OWTS: Experimental and Alternative. non-standard OWTS are used to overcome one or more adverse site or soil condition such as high groundwater, slowly permeable soils, or other limiting condition or where increased wastewater treatment is needed. Unlike conventional OWTS, non-standard OWTS vary in design and concept depending on the site and soil conditions. Experimental and Alternative OWTS are also subject to the Section 14 requirements.
- B. The Permit Authority monitors the operation and maintenance of all non-standard systems. Inspection frequency is dependent upon the level of monitoring compliance by the system owner/operator.
- C. Because of evolving technology and problems that may be discovered through the monitoring program, the regulations for Non-standard OWTS may change. Property owners are cautioned that regulations for Non-standard OWTS may change by action of the RWQCB or the Permit Authority. Therefore, despite previously performed and accepted work by Permit Authority, any proposal for a Non-standard OWTS must meet the regulations in effect at the time that the Permit Authority approves the OWTS permit application.
- D. When a non-standard OWTS is proposed in order to increase the sewage discharge of an existing use, the existing system must be brought into compliance with all current regulatory requirements.

12.2 Experimental OWTS Criteria

- A. An Experimental OWTS shall meet National Science Foundation (NSF) criteria and shall be NSF certified.
- B. An Experimental OWTS shall be capable of reliably performing settling or solids separation, nutrient and pathogen reduction comparable to a standard system consisting of a two-compartment septic tank with subsurface treatment of three feet of acceptable soil.
- C. Experimental OWTS are not authorized for the following:
 - 1. Greater than 33 percent expansion of use for existing residential and commercial systems;
 - 2. Flow rates of 600 gallons per day or more for new single family homes;
 - 3. Flow rates of 1,000 gallons per day or more for new commercial establishments;
 - 4. Subdivision of land:
 - 5. Properties within a sewer hookup area, septic tank ban area, or County identified Variance Prohibition Areas, except as a repair.

12.3 Experimental OWTS Process

- A. A person or company shall make an application requesting a specific design be entered into the Experimental OWTS Program.
- B. The application contents shall include:
 - 1. Name and address of applicant
 - 2. Trade name and model number, if applicable.
 - NSF Certification
 - 4. Technology description
 - 5. Number of units currently in operation
 - 6. Location of units currently in operation
 - 7. Effluent sampling results
 - 8. Estimated cost of units, installation, operation and maintenance
 - 9. Discussion of specific operational requirements and/or operational training needed to successfully operate the proposed unit
 - 10. Operation and maintenance manual
 - 11. The appropriate filing fee
- C. The Permit Authority Liquid Waste Specialist will review each application and present any promising non-standard Experimental OWTS to the RWQCB for technical review and approval. If both Permit Authority and the RWQCB staff approve the non-standard Experimental OWTS, design parameters, site and soil characteristics, a site specific monitoring program will be established. These provisions will be added to Section 13 of this manual.
- D. Once approved, installation of a maximum of 10 systems per year shall be allowed for new construction within each Regional Board jurisdiction with similar site and soil conditions.
- E. Intensive monitoring (2 or more inspections per year) performed for at least 2 normal winters is required.
- F. The Permit Authority may consider whether an additional period of monitoring or an additional number of systems shall be installed prior to Alternative non-standard OWTS status consideration.

12.4 Alternative OWTS Criteria

- A. An Alternative OWTS shall meet all of the following requirements:
 - 1. The standards for a non-standard Experimental OWTS.
 - 2. Enrollment in the Sonoma County Experimental Program or comparable program municipality or jurisdiction.
 - 3. 50 installed units that are or have been in operation for at least 2 years.
 - 4. Supporting monitoring data demonstrating compliance and/or successful wastewater treatment for the 50 units.

12.5 Alternative OWTS Approval Process

- A. A person or company shall make an application requesting a specific design be entered into the Alternative OWTS Program.
- B. The application contents shall include:
 - 1. The contents listed in Section 12.3.B.
- C. The Permit Authority Liquid Waste Specialist may request the RWQCB's permission to proceed to Alternative non-standard OWTS status if the intensive monitoring indicates satisfactory results.
- D. The Permit Authority Liquid Waste Specialist will review each application and present any promising non-standard Alternative OWTS to the RWQCB for technical review and approval. If both Permit Authority and the RWQCB staff approve the non-standard Alternative OWTS, design parameters, site and soil characteristics, a site specific monitoring program will be established. These provisions will be added to Section 13 of this manual.

12.6 Approved Experimental and Alternative OWTS

A. Appendix A contains a list of these approved systems as well as systems under review. Appendix A will be updated annually.