



Go With The Flow



Nonstandard Systems Monitoring Program
Permit & Resource Management Dept.
Well and Septic Division

WINTER/SPRING 2007

*Wiles Edison, REHS III, Program Coordinator
Pamela Benyak, REHS II, Monitoring Staff
Carrie Muller, Program Administration*

Septic systems are your own private sewage treatment plants. Like sewage treatment plants, they require routine maintenance. This newsletter touches upon maintenance items that should prolong the life of your treatment plants which in turn leads to increased protection of our ground and surface water.

When monitoring, please note the following:

Control/Alarm information

- *Does alarm work** (the audible alarm);
- *Does alarm light work** (some alarms have a light only).
- *Dose Counter* - Most alarm boxes have a dose counter, but many of the older ones do not, and many of the new ones, such as Orenco boxes, have elapsed time instead of dose counters.
- *Dose Counter Manual Mode* - This lever, if pressed, should advance the dose meter by one. This verifies the dose counter is working. If needed, the pump can be run manually by holding this lever in the on-position. This may not apply on the newer Orenco boxes**.
- *Dose readings and more* - Refer to the monitoring form. The system design in gallons per day and maximum daily flow is printed on your annual permit on the bottom right. It is also now printed on the monitoring form at the top.

**These can be tested on many boxes by pushing up the lever on the side of the box where it says alarm test.*

***For those with Orenco boxes, contact your installer or Orenco approved technician to monitor the box and check parameters.*

System is designed for _____ (gal/day) This is the maximum daily flow the septic system was designed for. If the calculated average exceeds the gallons per day the septic system is designed for, problems could result. If this is occurring, have the following checked:

1. The floats in the sump may have changed and are activating "on" sooner than they should be.
2. There could be leaks in the septic tank and/or sump which would allow them to take in groundwater.
3. Leaking plumbing fixtures.

General Condition of System - Please include anything you may have done to the system here.

Recommended Maintenance and Reminders

1. Many systems constructed since the mid-

1990's have filters located at the outlet tee of the septic tank. These are designed to keep scum and solids out of the sump tank. If not cleaned, the outlet hole can clog causing a backup into the house or out of the riser. The simplest way to clean the filters is to remove them by pulling straight up (check manual if you have one or call contractor who installed system for advice), placing over first compartment of tank, and washing residue into tank with hose. A more complete way is by following #3.

2. It is highly recommended that a C42 or Engineering Contractor, familiar with these systems, purge and adjust the system annually. If you are a commercial facility, it is recommended that this be done 2 times per year.

3. They should check float settings and clean the filter as well. Having this done annually should allow the system to last much longer than it would have otherwise, forestalling expensive repairs.

4. Many systems have diversion valves and owners do not know it. A diversion valve switches sewage flow between two equally sized systems. Not to switch the valve is to use only half of a system that is already constructed and paid for. Refer to the approved septic plans to determine if the system has a diversion valve, or ask the contractor who installed the system.

5. Interceptor drains have been installed above many systems, usually 15 feet above the highest line or sandbed. Their purpose is to keep upslope water out of the septic system. Check the outfall for any obstructions and to make sure water is flowing. If obstructed, try running water through cleanouts or contact a C42 or Engineering Contractor.

6. Many septic systems employ a pretreatment device such as an Advantex Filter or FAST system. For many of these systems, there is a requirement to sample the pretreatment unit annually. This requirement is stated in Condition #7 of the "Supplement to Application for Nonstandard Sewage Disposal System Permit".

The sample must be tested for Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), Dissolved Oxygen (DO), nitrate, total and fecal coliform with the results submitted to this office. These systems are considered experimental and the field data is used to verify performance claims made by their manufacturer. If this requirement is not stated in your supplement, you are not required to comply.

For those who must comply, there are two laboratories that will run these tests: Brelje and Race Laboratories Inc., located at 425 South E Street, Santa Rosa (707) 544-8807 and Sequoia Analytical, located at 1455 N. McDowell, Petaluma (707) 792-1865. Contact the labs for sample bottles and protocols. If you know of other labs, please let us know.

Samples may be taken from a sample port if one exists, the Recirculating Splitter Valve on Advantex systems, or the sump. The systems with Advantex units are required by Orenco to be maintained for at least three years after installation by a qualified technician/contractor. Other pretreatment manufacturers may have similar requirements. It is recommended that this technician take the sample as well as maintain the system. Please include any work performed by the technician, including name, on the monitoring form, in the *General Condition of System* area.

6. Every septic permit is required to have an expansion area. This area is where a replacement system can be constructed once the existing system fails. Eventually, all systems fail, hopefully not for many decades. The expansion areas of the septic system shall be left undisturbed. Buildings, swimming pools, etc. (planter boxes are ok), pavement driveways or parking areas shall not be constructed within the required setbacks of expansion areas. In addition, large animals should not be kept on the leach field or the expansion areas as they can destroy the soil structure at the surface and compact the soil below. Refer to your septic plans to determine where the expansion area is for the septic system.

Information Resources:

For questions regarding your septic system or monitoring requirements, contact:

- Wiles Edison, Monitoring Program Coordinator (707) 565-1691
- Pam Benyak, Monitoring Program Specialist (707) 565-2308

For billing questions, address, name or ownership changes, contact:

- Carrie Muller, Monitoring Program Administrator (707) 565-2658

Bulletins: We currently have six Bulletins we can send to you upon request. Four are not on our web site yet, but hopefully will be before July. The bulletins are:

- WLS-012 Maintenance for mounds and PD systems
- WLS-013 Water reduction - on web site
- WLS-014 Self monitoring
- WLS-015 Purging and balancing
- WLS-016 Reduced Fee Permits
- WLS-017 Plant selection - on web site

If you need these Bulletins or have questions, contact Carrie Muller at (707) 565-2658.

Informational web sites:

- www.nawt.org
- www.nowra.org
- www.cowa.org
- www.nesc.wvu.edu/nsfc_septicnews.htm

System Maintenance Contractors: We have a preliminary list of contractors that perform maintenance on nonstandard systems. For the list, contact Carrie Muller at (707) 565-2658

Homeowners Class

The annual Homeowner's Class on the Maintenance and Operation of Nonstandard Septic Systems will be held on:

SATURDAY, APRIL 21, 2007

1 P.M. to 4 P.M.

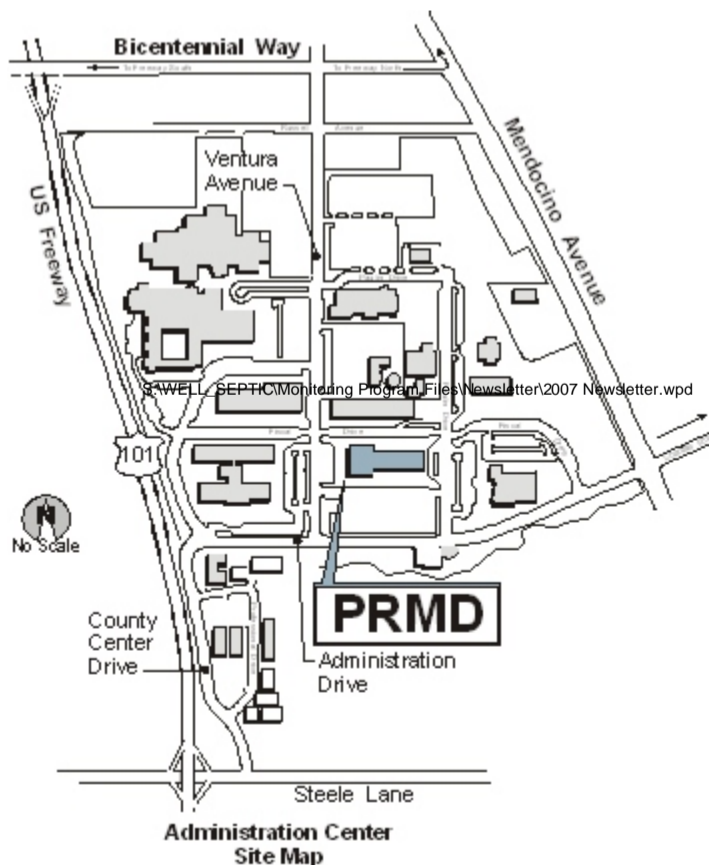
Permit & Resource Management Dept.
Conference Room
2550 Ventura Avenue, Santa Rosa CA

Speakers from the Permit & Resource Management Department and the private sector will discuss landscaping suggestions, monitoring techniques and routine maintenance of your septic system. There will also be a question and answer period. Handouts will be available.

Make your reservations early as space is limited!! Please contact Carrie Muller at (707) 565-2658 between the hours of 9 a.m. and 5 p.m. Monday through Thursday to make your reservation. You may also leave a voice mail message at this number.

REFRESHMENTS & DOOR PRIZES!!!

PARKING IS AVAILABLE
IN WEST AND SOUTH LOTS.



Did you know? A fixture leak of 1/32"(drip) wastes 18,500 gallons of water (to your septic system) every 3 months.