

EPA Alert For RV, Boat and Mobile Home Owners and Park Operators about Safe Wastewater Disposal, July 1999

Mixing chemicals with waste in sewage holding tanks or septic systems may produce toxic fumes, corrode pipelines and tanks, and pollute soil and ground water when discharged.

If you spend any time in a recreational vehicle (RV) or boat, you probably know of the problem of odors from sewage holding tanks. There are a number of commercial products available to control those odors. Some of those products contain chemicals which may pollute water resources. If you use those chemicals and then empty your holding tank into a septic system (or other onsite wastewater treatment system) or dispose of holding tank waste illegally, you may be creating health and environmental hazards. These chemicals and their by-products may pass through onsite wastewater treatment systems, flowing to soil, ground water, and possibly nearby surface waters. They may also corrode treatment systems parts, creating a safety hazard.

How septic systems work. A typical septic system contains two major components: a septic tank and an absorption field, also known as a drainfield or leachfield. These systems use natural processes to treat wastewater onsite, as opposed to offsite at a municipal wastewater treatment plant. The purpose of the septic tank is to separate solids from the liquid waste, and to promote partial breakdown of contaminants by microorganisms (bacteria) naturally present in wastewater. The leachfield also treats the wastewater through physical, biological and chemical processes in the soil.

When chemicals, such as formaldehyde, are added to septic systems, they can cause bacteria in the system to die. When this happens, the septic system cannot treat waste adequately. Solids that are allowed to pass from the septic tank, due to inadequate or incomplete treatment, may clog the leachfield. Furthermore, clogged systems may send inadequately or incompletely treated sewage to the surface, threatening the health of people or pets who come into contact with it. Or it may percolate to ground water, where the chemicals and untreated wastewater could contaminate nearby drinking water wells, rivers and streams. Please read labels carefully to identify any hazardous ingredients.

The restoration of contaminated ground water is extremely costly and can take years. To prevent problems, RV and mobile home parks, as well as dump station operators, may take measures to control hazardous chemical disposal into their waste treatment systems. If they do not, and their system causes contamination, they may be forced to close the dump station or the park until the problem can be corrected.

Do not use chemicals which harm septic systems.

Para-dichlorobenzene: Known carcinogen and drinking water contaminant. Common ingredient in mothballs, urinal cakes and bowl fresheners.

Formaldehyde: active ingredient in some deodorizers, also called Formalin. Formaldehyde is an EPA recognized probable carcinogen (i.e. causes cancer)

Also heavy metals (such as Zinc), benzene, toluene, xylene, ethylene glycol (anti-freeze), methylene chloride, 1, 1, 1-trichloroethane (TCA), trichlorethylene (TCE) and perchloroethylene (PCE). Strong acids and bases, such as sulfuric acid or caustic soda.

You can help....Here's how:

*Minimize your use of holding tank deodorizers by using rest stop facilities.

*If you must use a holding tank deodorizer, read the label carefully. Biodegradable (enzyme and citrus-based) products are available. Whichever product you choose, follow label directions and add no more than recommended amounts.

*Ask questions of your park manager about drinking water and wastewater management. Sanitation costs can be minimal, but not free.

*Educate other RVers. Don't be shy about health.

Park operators: Chemical treatments do not remove sludge. Tanks should be checked routinely for solids and scum buildup. Sludge Removal (Pumpouts) may be needed more often for RV, Mobile Home and Boatwaste systems than for single-family septic systems, especially if your tanks are undersized and/or your residents are conservative with water.

Report sewage spills and other health hazards to the local health department. Keep children and pets away!