

SEWER SYSTEM

The worst thing you can put in your black or grey water tanks is formaldehyde. This can cause solids to build up, require constant cleaning of the tank and result in your being banned from using some dump stations. You need an active Bacteria-enzyme product that will decompose solids and paper to produce liquefied slurry that is easily dumped. One of the best products I have found is Eco-Save, which in the solid form, costs about 50 cents per treatment. This product also lubricates the valve seals and cleans the tank sensors. You cannot use any other chemicals with this product since it will kill the bacteria. You must completely clean both of your tanks if you have been using formaldehyde before you can use this product.

The first step is to clean both tanks to get rid of any chemicals or solids left over from the previous use. Put about two gallons of water into each tank, a ¼ cup of dishwasher fluid (Joy or Dawn) and a bunch of ice cubes. Drive to your next rally (at least an hour or more) with this in the tanks and they will be well scrubbed. Thoroughly rinse the tanks with fresh water and you should be ready for your first bacteria treatment. Put a quart of water in the tanks and the recommended amount of bacteria-enzyme and you should be ready to go. Put a small amount of enzyme in the gray tank to eliminate the rotten egg odor you will get when you cannot dump this tank for several days.

The only barrier to keeping odors out of your RV is water. Each sink and the shower have a trap that holds water and prevents odors from the grey water tank from coming into the RV. The only thing keeping black water odors out of the RV is the water in the toilet. On a recent rally, a fellow camper asked me how they could get rid of the terrible odor that seemed to permeate the trailer during the night. When I went to check, I found that the water had leaked out of the toilet bowl. You must keep several inches of water in the bowl at all times since this is your odor barrier. Of course, the toilet seal had a slow leak. Remember to put antifreeze in the bowl when you winterize. Sometimes, as the seal ages, it will get hard over the winter and then leak. One trick I have found that usually works is to let the water out after you have winterized and put about a ¼ inch of vegetable oil in the bowl. Press the valve several times to work the oil over the seal and then put another ¼ inch of oil in the bowl and let it stand until you are ready to use the RV for your first trip. This has worked for me for the last 16 years. However, I still carry a new spare seal just in case the oil treatment does not work. I do not want to be on a trip with a bad toilet seal and an upset wife.

Every Caravan I have been on has scheduled dumps when you leave the camping area. This is not always the best procedure. Sometimes you should dump after you have driven several hours so that your bacteria have had a chance to thoroughly decompose the contents of the black tank. Dump on your way into the new camp area and clean the tank before you use it again. If a hose is available, just stick it in the tank through the toilet valve and give it a good flush. If a hose is not available, after you dump, fill the toilet to the top and flush the tank. Do this twice. The proper procedure is to dump the black tank and then the grey tank. Your tanks should be about ¾ full for the best flush. You do not have to dump at every campsite. Let the tanks fill at least to the ½ level and plan your dumps based upon the Caravan manual. Always keep some grey water in the tank so you can rinse the dump hose.

On occasion, I have solved the mystery of RV odor when the toilet seal was OK, the tank was clean and a good product was used in the tank. The air vent tube had slipped down and was below the tank water level or in one case had actually pulled out of the tank. This tube should be in the tank and above the water level so that it can exhaust the gases at the top of the RV. If everything else is OK, be sure to check the exhaust tube.

To summarize the main spares for this system is a spare toilet seal, bacteria-enzyme product and of course hoses and fittings.

Many years ago, WSSC, our local sanitation commission, supported a number of dumpsites within several miles of my residence. Over time, they closed all of these leaving the only available dumpsite on route 95 between

Baltimore and Washington. This was located several miles from me, with terrible traffic and not easy to use. My solution was to create my own dumpsite using a Macerator Pump.

I set up a "T" connection into my home sewer system available through a basement window. This was about 40 feet from my motorhome parking spot. The Macerator attaches to my regular Valterra hose outlet and uses a flat 50 foot 1" hose to pump out the tanks. You can also attach a water hose to thoroughly rinse the tanks and hoses. Once hooked up it takes about 10 minutes to completely dump and clean all of the parts.

The hose, being flat, stores nicely with the pump kit. Now I have my own dump station. Since it is portable, I can handle virtually any sewer dump situation I might run into on a trip. At the 2006 International I was parked near a dump station but could not easily hook up to it without buying 40 more feet of the 4" dump hose. I hooked up my portable Macerator Pump System and easily dumped when my tanks got $\frac{3}{4}$ full. The 1" flat hose and suitable fittings were purchased from a Tractor Supply Store. These stores have the best quality and largest variety of water fittings, hoses and valves for use on farms.