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Guidance for the Use of Water Softening and Onsite Wastewater Treatment Equipment at the Same Site

by

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This guidance document is a collaboration between the **Water Quality Association** (WQA) and the **National Onsite Wastewater Recycling Association** (NOWRA)

The use of water softening and water conditioning equipment in the United States is necessary in many homes. The use of onsite and decentralized wastewater treatment technologies, commonly called septic systems, is also necessary. Both water softening/conditioning and onsite wastewater treatment systems are commonly used together; in the majority of these cases, no problems are indicated. However, there have been sporadic, mostly anecdotal reports of issues related to the use of both kinds of equipment at some sites. Experts in both fields are working together to better understand the interactions involved between water softeners and onsite wastewater systems. In the meantime, the WQA and NOWRA have collaborated to offer the following advice based on available knowledge:

1. When installing new onsite wastewater equipment, some onsite system manufacturers require that water softener regeneration water not be discharged in their wastewater treatment systems. In those cases, request them to provide an alternative for routing the water softener regeneration water around the waste treatment device that meets your local regulations or requirements as well as your site conditions. The local wastewater system installer should be able to accommodate the manufacturer's instruction.

2. If an issue arises where a water softener/onsite wastewater system interaction problem is suspected, inspect and assess the onsite wastewater system with a local expert on onsite wastewater systems and the water softener with a local expert on water softening/water conditioning systems. Generally, very few have skills in both areas. The local experts should consider using the screening tool that has been developed by this collaborative group as a guide, and they should return the information to either the WQA or NOWRA for tracking and evaluation purposes. The Water Quality Association provides a service to find qualified experts in home water treatment, including water softeners through its "Find a Water Professional" link on the WQA web site at www.wqa.org. NOWRA provides a similar service called "Septic Locator" at www.septiclocator.com.

3. Be sure to inspect your home for possible sources of excess water consumption such as leaking toilet flappers and valves. Excess water flow to onsite wastewater systems is one of the largest issues related to onsite wastewater treatment system failures. Leaking household water can also

create an extra and unnecessary load on your water treatment system. Be sure that sump pumps, floor drains, and roof drains do not discharge to the wastewater system.

4. Maintain your water softener system on a regular basis. Ensure that your water softener is installed correctly and is functioning properly. Ensure that your softener has been set to reflect the water hardness and iron level in your water supply. If the unit is a timer-operated softener, ask for help from your local water treatment dealer in setting the regeneration frequency to the optimum level, and not more frequently than needed. When the system is not being used, such as during a vacation, temporarily turn it off or bypass it. Replace equipment as needed.

5. The use of strong disinfectants, "every-flush" toilet disinfection chemicals should be avoided. Bleaches and detergents should be used as directed on the product labels and according to water softener manufacturer recommendations. Drain cleaner use should be minimized. Never put expired drugs, other pharmaceuticals, motor oil, brake fluid, paints and thinners, solvents, herbicides, pesticides, anti-freeze, gasoline, chemical wastes, or excess grease into your onsite wastewater treatment system. The items listed should be excluded from ANY waste plumbing system, as they can create significant problems and even ruin onsite wastewater treatment systems.

6. All onsite wastewater systems require maintenance on a regular basis to ensure proper function. The nature and frequency of maintenance depends on the type of system installed. Seek guidance from state or local regulatory agencies, operation and maintenance manuals, or from a qualified local service provider. Be sure your onsite wastewater system has adequate access points for maintenance and that they are watertight, secure and tamper-resistant. Access points should be brought to grade for easy servicing. Potential maintenance points include septic tanks and effluent screens, pumps and controls, treatment devices, and effluent distribution components. Service, repair, and replace equipment as recommended by the manufacturer, regulatory authority, or installer.

If you have questions and/or need more information please contact:

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