Onsite Septic System Risks and Safety Precautions

Inspecting or maintaining a septic system can be dangerous. If you choose to inspect or maintain your septic system, you do so at your own risk and are personally responsible for your own safety. You may be exposed to health hazards including, but not limited to, infectious diseases, hazardous gases, and electrical shock. Sewage carries harmful bacteria, viruses, and parasites that can cause infection and illness, especially in people with weakened immune systems, pregnant women, children, and the elderly. *Safe work practices, proper hygiene, protective clothing, and proper clean-up* can help minimize exposure risks. The cautions and tips listed below are not meant to be all inclusive. It is up to you to use whatever techniques you feel necessary to adequately protect yourself from exposure to open or raw sewage, and to seek medical assistance if you are exposed.

If at any time you are concerned about your ability to safely inspect or maintain your septic system, you should stop what you are doing and hire a licensed professional to perform the work. Contact your local health jurisdiction for a list of licensed professionals working in your area.

Safe Work Practices

- Always assume sewage is hazardous and can spread infectious disease. Even exposure to sewage residues on clothing and equipment can result in illness.
- Don't work alone. Use the buddy system.
- Keep children, spectators, and pets away from the septic system when the tank is open or the system is being inspected or maintained. Never leave open septic tanks unattended. Make sure lids to the tank and access ports are back on and secure when work is finished.
- Never enter or stick your head into a septic tank. In addition to harboring infectious
 agents, decomposing wastes in the septic tank produce hazardous gases that can
 displace oxygen, creating a dangerous atmosphere with very little oxygen to
 breathe. Methane gas produced in the septic tank is also explosive. Make sure the
 work area is ventilated, use caution when operating electrical devices, and never
 smoke or light a flame near a septic tank. Reduce your contact with sewage by
 using tools to reach components, lift up floats or screens, and take measurements.
- Watch for buried electrical lines and cables, telephone lines, satellite television or internet cables and water lines. Call for a locate. Buried power lines can resemble tree roots. Use caution when digging.
- Pump chambers contain electrical wiring. Use caution around electrical systems.
- If using a vehicle to transport inspection supplies to the area of the septic tank, be careful not to drive or park on top of the tank.
- Older septic tanks may have rusty, rotten or broken lids. Such tanks could be in danger of breaking and/or collapsing. Use caution when locating and digging.

Proper Hygiene

- Cover or tie hair back to keep it away from sewage.
- Do not eat, drink, or smoke while inspecting the septic system. After the inspection is finished, be sure to wash your hands thoroughly with soap before eating, drinking, or smoking.
- Avoid hand to face contact. Don't touch your eyes, nose, or mouth. Keep your hands below your shoulders so sewage doesn't drip on your head.
- Cover open cuts or other wounds. Bacteria and viruses can enter the body through these openings and cause illness.
- Don't scratch exposed skin with dirty gloves or hands.
- Maintain current immunizations

Protective Clothing

- At all times, wear protective clothing and equipment that cover the hands, face, and as much skin as possible, including:
 - ✓ Safety goggles or glasses with side splash protection
 - ✓ Dust mask that fits over the nose and mouth (to protect from aerosols like hose spray)
 - ✓ Disposable rubber gloves
 - ✓ Dedicated work clothes, such as coveralls or rain gear, or old clothing that can be discarded afterwards
 - ✓ Work boots

Clean-up (Decontamination and Sanitization)

- Use hoses properly to avoid cross-contamination. Don't submerge the hose outlet in sewage; in certain situations, wastewater could backflow into the drinking water system through the hose. Install a hose bib vacuum breaker to prevent backflows. Try to minimize splashing, spraying, and aerosolization of sewage.
- Tools and equipment that come into contact with liquids or solids from the septic system must be cleaned and sanitized in a designated decontamination zone, preferably within the work area to minimize off-site contamination. If tools and equipment must be decontaminated off-site, transport them in an appropriate container used only for this purpose. Infectious disease can be contracted and spread through the handling of contaminated tools and equipment.
- Clean electronic tools according to the manufacturer's instructions. To decontaminate other tools and equipment, follow a four-step process:
 - 1. Rinse off gross contamination with a dedicated garden hose using a stiff brush to remove dried material;
 - 2. Wash completely with soap and water, and let soak if needed;
 - 3. Rinse off the soap with a dedicated garden hose; and
 - 4. Sanitize all surfaces with a 20% bleach solution or other appropriate disinfectant (be sure to apply the sanitizer for a sufficient amount of time to kill pathogens).

- Remove protective equipment and clothing upon leaving the work area; you don't
 want to track sewage into your home or vehicle. Isolate contaminated equipment
 and clothing in a plastic bag or other appropriate container for storage, washing,
 decontamination, or disposal. Wash your hands immediately or as soon as possible
 after removing gloves or other protective equipment or clothing.
- When you've finished the septic system inspection or other work, take a shower or bath right away to clean off, even if you don't think you were exposed to sewage.
- Wash work clothes separately from regular laundry. Use hot water and a longer wash cycle, if possible. Add a small amount of bleach during the wash cycle as a sanitizer. If clothing is heavily soiled, rinse the clothes off first with a garden hose before laundering.