### 8 Ways Restaurant Owners Can Protect their On-Site Sewage System

1. **Inspect your sewage system at least annually.** Keep records of this activity as your food inspector may request to see them during inspections. If you have an operations and maintenance manual for your sewage system, follow the steps outlined in the manual.

2. **Check and pump your grease trap and septic tank as needed.** Grease traps may require pumping quarterly. Leave most of the liquid in the grease trap, removing only the grease layer. The remaining liquid acts as a reservoir so that new grease entering the trap can cool rapidly. In many instances, septic tanks require annual pumping. If septic tanks aren’t pumped out in time, solid food waste may be carried over into the drainfield causing damage.

3. **Train dishwashing staff to thoroughly scrape plates and cookware before rinsing.** Try to remove all food waste, especially cooking oils and sauces which are high in grease. This will prevent the majority of the grease in your waste stream from entering the sewage system. Grease traps are only capable of removing 50% of the grease. Get rid of it before it even reaches the drain.

4. **Practice water conservation, using low flow fixtures, repairing leaks, and use effective cleaning methods.**

5. **A low temp dishwasher may assist oil and grease to separate out.** High temp dishwashers cause grease to dissolve where it does not easily separate out and it may be carried over into the drainfield. Check with the manufacture to see if your machine can be used as a low temp dishwasher.

6. **Use special dishwashing and cleaning detergents that promote rapid oil/water separation.** These detergents are formulated to release oil rapidly so that it can rise to the water surface instead of remaining dissolved in the wastewater.

7. **Use proper concentrations of solvents, cleaners, and disinfectants.** Excessive use of solvents and cleaners causes grease to become emulsified and carried out into the drainfield. Excessive use of disinfectants can harm the overall function of the system. Use just what you need, no more.

8. **Consider installation of a grease recover system, such as grease skimmers or effluent filter in your grease trap.** Skimmers are small grease traps located in the kitchen designed to allow the grease to rise and be continually skimmed off. Effluent filters installed in grease trap help prevent grease and food products from leaving the trap. If used, they must be cleaned regularly.
Food Establishments with On-Site Sewage Systems

In many rural areas of Northeastern Washington, food establishments rely on individual on-site sewage systems, commonly referred to as septic systems, for disposal of wastewater.

Just as no two food establishments are alike, no two on-site sewage systems are alike. Often, a septic tank and drainfield are the only components. Many times grease traps are installed prior to the septic tank. Some newer systems provide complex treatment for large volumes of wastewater.

Whatever the type, these systems provide a vital role for food establishments. However, since these systems are below ground, thought is given to these systems only when something’s wrong. Don’t wait until then! If your sewage system fails or is damaged, you cannot operate until it is repaired.

These systems must be properly operated and maintained if you are going to avoid costly repairs because of a failing system.

On-Site Sewage Systems at Risk

Wastewater flow from food establishments can greatly increase the risk of sewage systems failure because of:

Higher Flows: Septic tanks and drainfields are sized based on estimations of wastewater flow. For many systems serving food establishments, the actual flow is much greater due to changes in operation over time and during peak periods of operation. Excessive amounts of wastewater can prevent proper separation of solids and greases in the septic tank. If this happens, these solids and greases can be carried into the drainfield and cause clogging. Excessive flow can also saturate the drainfield, greatly reducing its ability to treat wastewater.

Higher Strength: Wastewater from most food establishments differs significantly from residential wastewater. This is due to higher levels of oil, grease, and foods in the wastewater. Problems occur when grease and oil solidify in sewage lines or in soils surrounding the drainfield. When grease and oil reach the drainfield, clogging of the soil pores occur and will result in the eventual failure of the drainfield. At this point, sewage either ponds on the ground surface or backs up into the establishment.

Higher Temperatures: Sanitizing requirements for dishwashing often results in higher temperature wastewater. The higher temperature can cause greases that are normally retained in the grease trap or septic tank to liquefy and be carried over into the drainfield where they can cause clogging.

Harsh Chemicals: Excessive use of cleaning compounds and disinfectants in food establishments can have a harmful effect upon the biological treatment activity of the septic tank and drainfield.

Questions...

If you have questions, contact Northeast Tri County Health District environmental health staff. If you are considering upgrading, repairing, or replacing your existing system, prior approval is necessary to ensure the system is properly designed and constructed.