

FATS, OILS AND GREASE TRAPS!!!!

As I travel throughout the state to camera sewer lines, I see a constant problem, especially in smaller communities, with FATS, OILS and GREASES. So I figured it was about time to share some information that may help your city or village on this problem.

FATS, OILS and GREASES can cause havoc on sewers, lift stations and at your wastewater facility. They also can create sewer overflows and backups bringing about health hazards, damaging homes and threatening the environment. FATS, OILS and GREASES can enter the sewer from household drains as well as from poorly or NO grease traps in restaurants, schools, daycare centers, long term care facilities and other facilities.

The first thing I am asked: “Where is the grease coming from?”

Most grease is a byproduct of cooking. Grease is found in such things as:

- Meat fat
- Lard
- Cooking oil
- Shortening
- Food scraps
- Baking goods
- Butter/margarine
- Dairy products

Often grease is washed into the plumbing system unknowingly and sticks to the sewer pipes, both on your customers property and the city sewer mains. Over time, the grease can build up and possibly block the piping.

Garbage disposals do not keep grease out of the system. These units are designed to shred solid materials into smaller pieces. Commercial additives and detergents, that claim to dissolve grease, may pass grease down the line causing problems in other areas.

Community awareness is the key to making your job easier. The following check list are common mistakes made in commercial and home disposal of food and grease. I suggest you share this list in a local newspaper article or an information insert in the city water/sewer bill for help. It couldn't hurt!

- Put oil and grease in covered collection containers
 - Restaurants use commercial disposal
 - Private homes use empty coffee can (or something similar) and cover with plastic lid

- Scrape food scraps from dishes into trashcan lined with garbage bag and dispose of properly.
- Cover kitchen sink with catch basket and empty into garbage as needed. The misconception about garbage disposals is it can grind most anything. Which may be true, but the problem is, the ground food then must be transported through sewer lines allowing it to build up a few feet away from the drain.
- Remove oil and grease from dishes, pans, fryers and griddles. Cool first, then skim, scrap, or wipe off grease.
 - Rinsing off oil and grease with hot water again sends the grease down the sewer line to coagulate and cause sewer blockages.
- Pre-wash dishes and pans before putting them in the dishwasher.
 - This not only keeps the food from being ground and sent into the sewer pipes but also prolongs the life of your dishwasher.
- Cover floor drain with fine screen and empty into garbage as needed.

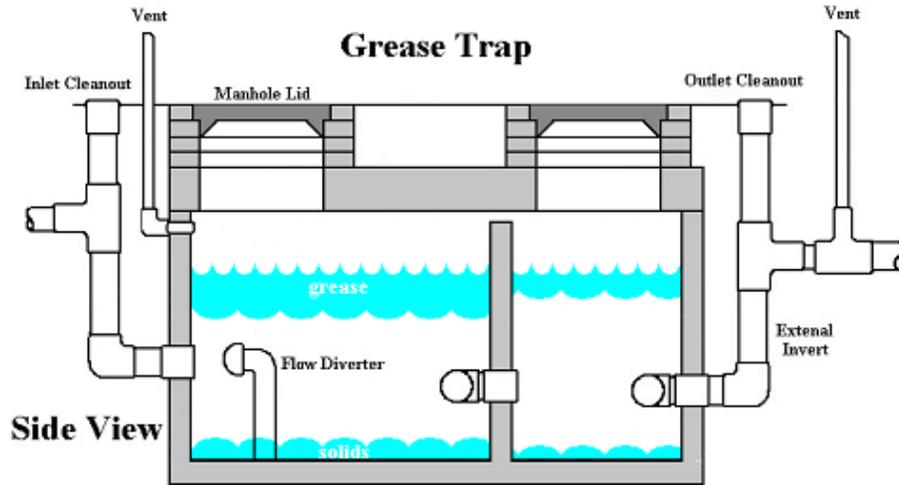
Some other things that may help are to:

- Use environmentally safe cleaning products instead of harsh detergents or cleaners that can damage sewer lines.
- If you generate large amounts of used cooking oil, reuse or recycle it. To find a recycler, check phone book under “recyclers” or “rendering companies”.
- If you generate small amounts of cooking oil, reuse it as often as possible and then pour it into a container you can throw away. Never pour it down the drain.

Grease traps, in my opinion, are critical in any establishment that is cooking food. Unfortunately, smaller communities do not think they serve the volume, which warrants a commercial grease trap. I feel any restaurant/school, which cooks with a substantial amount of fat (liquid or solid) needs a grease trap. Some larger cities have “grease trap” ordinances to help prevent grease getting into the sewer system. The critical items needed in a grease trap ordinance is:

- Proper sizing of the grease trap for the application (size to handle the amount that is expected)
- Proper installation (level, vented)
- Proper cleaning of the grease trap and a schedule of cleaning and serviced on a frequent basis

The illustration below shows a typical grease trap installation. In the diagram it shows that grease coagulates on the surface (as it normally does), which allows for easy pumping or disposal. A retaining wall and a pipe outlet are used to let water flow through and discharge to the sewer system. Carryover of grease should not occur and tells you it is time to clean the grease trap. A cleanout access pipe is provided for line cleaning. Make sure that the grease trap is properly sized for the application that is needed.



Many large cities have ordinances, which require grease traps to be outside, allowing for easier access.

A routine cleaning of the grease traps is based on how much grease is delivered to the grease trap. For example, a fast food restaurant may need more attention, because of the volume of grease it produces. The key is cleaning it often enough so carryover does not happen.

My wife, a Family & Consumer Science Teacher, reminded me, not everyone realizes where his/her disposed food and grease could end up. She also said a subtle reminder every once in a while may be warranted. Community awareness on all levels: businesses, schools and residential is the key! Share your knowledge!

If you have any question, as always give me a call.