

Environmental Information Bulletin Restaurant and Food Processing Industry Helpful Information from the Collier County Wastewater Department

FATS, OIL AND GREASE

What is FOG?

FOG refers to Fats, Oil and Grease found in most kitchens and food service establishments. About 30 percent of the foods we eat contain FOG; including meats, sauces, gravies, salad dressings, deep-fried dishes, cookies, pastries, cheeses, butter and others. FOG refers to any solid or viscous substance, including grease, which may obstruct the flow in a wastewater collection system, or otherwise interfere with the normal operation of a wastewater treatment system.

Why is FOG a problem?

FOG is the main cause of most wastewater collection system blockages which often result in spills. These spills present a potential health hazard and clean-up is difficult, time consuming and costly. When sewer lines become blocked, untreated wastewater may back up onto streets, parking lots and into nearby businesses and residences. If the blockage originates on your property, your business is likely to be the first affected. Collier County Public Utilities maintains several video cameras capable of tracking problems visually within the sewer system. Sources of FOG problems can be identified this way and enforcement action initiated to insure compliance with the County's Pretreatment Program and Ordinances.

Why should I care about FOG?

Someone has to pay for sewer blockage cleanup, and if your business is found responsible, it could be you. According to Collier County Ordinance #2003-18, if grease accumulates in the wastewater collection lines, the owner or operator will be billed for cleaning collection lines and for any other expenses incurred by the County. Wastewater with large amounts of grease shall not be discharged into the wastewater system. All grease traps shall be maintained in efficient operation at all times by the owner at the owners expense. County staff routinely inspects restaurants and other food service establishments to ensure compliance with the County Pretreatment Program. It is important to have grease interceptors installed by licensed plumbers and to be cleaned regularly to maintain efficient performance.

How Do You Properly Dispose of FOG?

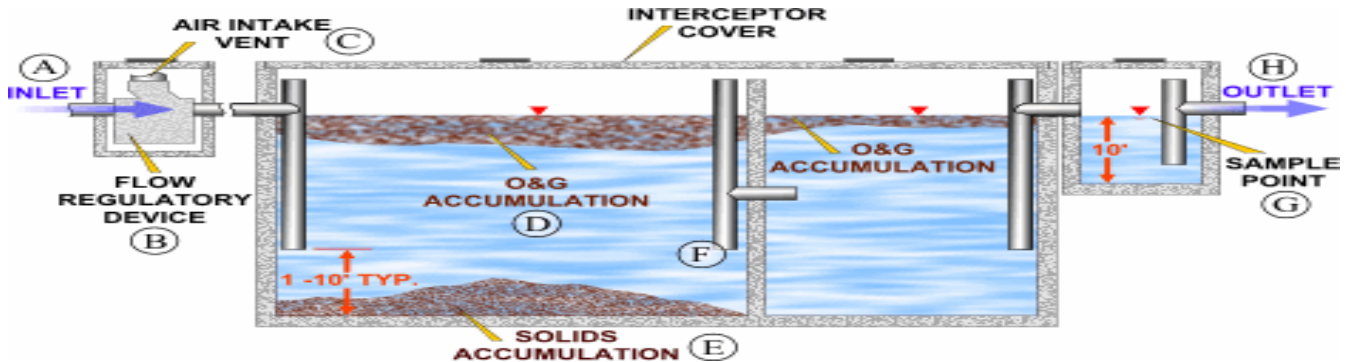
It is the responsibility of each business to develop an effective FOG management plan including properly disposing of FOG waste on a regular basis. Because of the wide variety of business generating FOG, no universal waste management plan can be prescribed. For example, large restaurants with the capacity to serve 500 at one sitting has different needs and abilities than a small deli or meat market. However, here are a few tips to get you started:

- 1) Identify FOG sources in your business.
- 2) Evaluate current FOG waste disposal methods.
- 3) Verify that current FOG disposal methods meet local regulations.
- 4) Minimize or eliminate FOG discharges by implementing FOG Best Management Practices which can be found by contacting the Collier County Industrial Pretreatment Office at 774-6886.
- 5) Train kitchen staff in proper FOG Best Management Practices.
- 6) Post "No Grease" signs as a reminder.
- 7) Post a maintenance log in close vicinity to the grease interceptor which shows frequency of maintenance and insure it is kept up to date.
- 8) Witness your private service contractor to insure your grease interceptor is being properly maintained.

If you have questions or would like additional information, please call the Collier County Water Reclamation Laboratory – Industrial Pretreatment Section at 239.774.6886.
5600 Warren Street, Naples, FL 34113

What is a grease interceptor (grease trap) and how does it work?

An interceptor – commonly known as a grease trap – is a part of your sanitary system that serves sinks and dishwashers in the kitchen, but not food grinders or bathrooms. The trap is usually a concrete tank buried outside the building with two manhole covers about five feet apart. The interceptor traps FOG by slowing down the flow of warm/hot greasy water and allowing it to cool. As the water cools, the FOG separate and float to the top of the trap. The cooler water continues to flow to the sewer. The FOG is trapped by baffles, which cover the inlet and outlet of the tank, preventing FOG from flowing out of the trap. If this layer of FOG is not periodically removed, it will accumulate and flow out of the tank into your service area and into the county main.



Do grease traps prevent blockages and stoppages?

Grease traps do help prevent stoppages after the trap but blockages can and do occur as a result of insufficient or infrequent grease trap maintenance. A grease trap or drain line which is not periodically maintained will eventually clog.

What can I do to prevent stoppages?

Keeping most of your FOG out of the drains will greatly reduce stoppages in your system and reduce loading on your grease trap. One way to do this is to obtain a separate cooking oil container. This is a metal container with no plumbing connections provided by a company that recycles used cooking oil. Also, you should establish a regular maintenance schedule for your grease trap. The frequency of cleaning will depend on the quantity, temperature, and type of waste you discharge, and the size of your trap. The rule of thumb is that traps should be cleaned at least once every six months. Check the sizing of your grease trap. If you find the trap must be cleaned more frequently than once a month in order to function properly, you should consider increasing your trap's capacity.

Who will clean the grease from my trap?

Most of the companies who install grease traps will also clean your trap. Also, most companies who clean residential and commercial septic tanks also clean restaurant grease traps. These companies will set up a scheduled maintenance program and will also respond to emergency calls.

Can industrial strength drain cleaners and enzyme additives substitute for trap cleaning?

NO. Typical cleaners contain lye and are extremely caustic. They react chemically to emulsify FOG, generating heat to melt the grease so it moves through the system. As the grease cools in your service or in the county main, it becomes a solid again and can cause a stoppage. Caustics are a very strong base (high pH) and can react violently with certain chemicals. Their use can endanger wastewater crews working downstream of your facility. It is a violation of the Collier County Industrial Pretreatment Ordinance #2003-18 to discharge a waste with a pH greater than 11.0. You may use an enzyme additive; however, you must still maintain and pump down the trap.

Are there any special considerations when a food grinder is used?

Food grinders have the potential to introduce large quantities of solids into the sanitary system. They are not plumbed to the trap because vegetable matter would be retained and would quickly overload the trap. It is important to avoid activities that will introduce FOG in any sink that has a food grinder.

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