

FOG - Fats, Oils and Grease

What is FOG?

FOG refers to Fat, Oils and Grease (FOG) from food preparation, food service and kitchen clean-up. It's important to know how to properly dispose of FOG to avoid potential environmental problems that may result in violations and possibly, costly fines. Grease is found in most discarded foods, including:

- Meat fats (bacon, sausage, beef, pork, chicken, lamb)
- Food scraps, pastries, baked goods
- Lard, butter, margarine, cooking oil
- Salad dressing, mayonnaise
- Dairy (milk, ice cream, yogurt, sour cream, cream sauces, cheese)

Why is FOG Management Important?

Grease hardens when cooled, and along with fats and oils, forms globs that stick to walls inside sewer pipes. This restricts wastewater flow and can clog the pipes leading to sewer overflows into parking lots and streets. Restaurants and other food service establishments are a significant source of FOG because of the large amount of grease used in cooking and other food preparation work.

This document is intended to educate FOG generators on the devices used to control FOG and to provide information on implementing best management practices. The installation and proper maintenance of grease traps and training of employees are key parts of these practices.

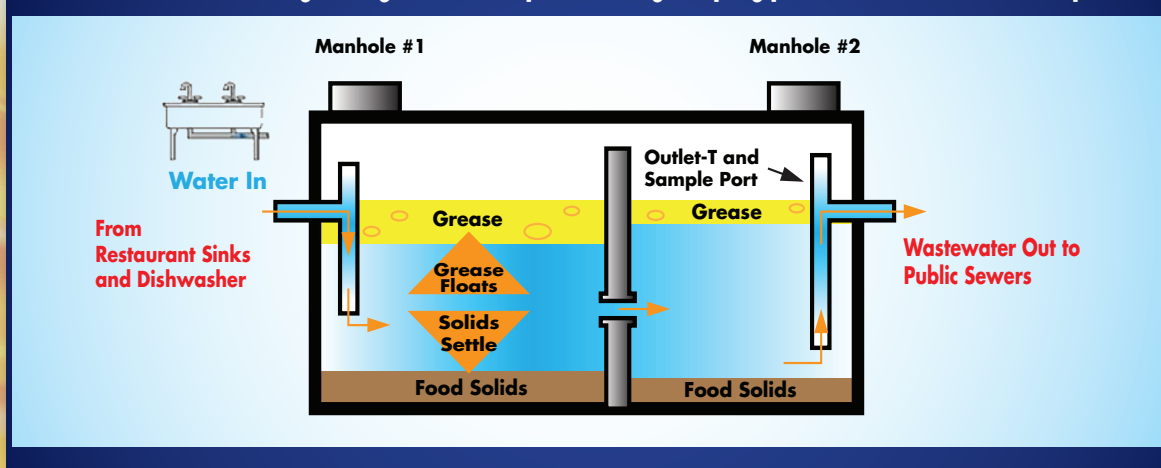
What is a Grease Trap?

A grease trap is a concrete or metal tank that receives wastewater and FOG from kitchen pipes and the FOG is held until it is removed by a certified liquid waste hauler. Inside the grease trap, the FOG separates from the water and floats to the surface of the tank, which greatly reduces the concentration of grease in the wastewater that continues to flow through the system. Grease traps are an essential component of a building's plumbing and drainage system in many food service establishments so FOG generators become familiar with their operation and purpose.

Installation

It is important for grease removal devices to be properly sized, installed, and maintained regularly. Retrofitting an improperly-sized device can be expensive. The trap must be inspected and cleaned regularly to ensure that it functions properly, minimizing the amount of grease that ends up in the wastewater. The manufacturer's recommended maintenance and clean-out schedule should be followed.

Basic schematic of an in-ground grease interceptor showing sampling ports (manholes) and access ports.



Importance of Preventing Grease Overflows

Typical triggers for pump-outs or for initiating manual cleaning operations –

FOG-related overflows can be costly to clean up. Here's what to look for when determining if the device needs a pump-out/or grease removal:

- Grease overflowing outside of the grease trap and into a vault or surrounding areas
- Can't see any pipes (for certain kinds of grease traps only)
- Grease layer in trap has turned almost solid and it is either grey or black
- Drains leading to grease trap are backing up
- It's been several months since the trap has been pumped out or grease removed

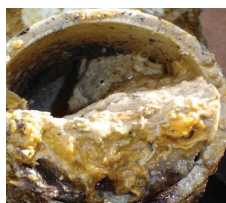
Best Management Practices for Keeping Fog Out of Your Drain

- Keep FOG out of all drains
- Don't dump grease in drains, but collect for proper disposal or reuse
- Collect extra grease from cookware and plates
- Use absorbents such as cat litter or paper towels to pick up oil and grease spills before mopping
- Dry wipe pots, pans and kitchen equipment before cleaning
- Use floor drain and sink drain screens to prevent food waste and large pieces of FOG and food from entering interceptor
- Use absorbent paper under fryer baskets
- Post "NO GREASE" signs above sinks and on the front of dishwashers
- Maintain a routine grease trap cleaning schedule
- Train all staff on these practices

How to Keep Your Grease Trap/Interceptor from Overflowing

- Inspect the grease trap frequently, become familiar with maintenance schedules and understand how often you need to pump out your grease trap
- Supervise pump-outs and service on your grease trap by contractors to ensure that you are getting the service you pay for
- Use permitted haulers only and take the time to talk to others to find haulers that provide consistently good service. Consider establishing a maintenance contract with a hauler and inquire about pressure cleaning the tank after each pump out. Email DERMPRED@Miamiidade.gov or call 305-372-6820 to request a current list of waste haulers for grease traps
- Keep all receipts of grease trap pump-outs and maintenance activities
- Educate all staff on proper grease trap operation and maintenance
- Do not use degreasers or solvents to dissolve grease in sink drains or grease traps – grease traps are meant to catch the grease you produce!
- Hot water does not get rid of FOG
- Clear all grease trap access panels/manholes so staff and DERM inspectors can access grease trap to check it

Avoid Fines, Health Risks, and Loss of Customers from Grease Overflows



Grease-related overflows are costly to clean up and may expose restaurant customers, employees, food service workers, and others to health risks. Overflows may also threaten surface water quality by draining into our waterways.

Food establishment operators will save money by avoiding backups inside their property. Proper maintenance will prevent damage to the grease trap and will likely avoid fines from Miami-Dade County and other government agencies.

Lack of maintenance on grease traps will produce odors within the property and lead to backups in sewer lines on streets as well as potential fines for causing damage to sewer lines. Sewer overflows can cause property damage and legal issues. Finally, customers/patrons may not return to the establishment if there are overflows or odors.

Miami-Dade County Grease Discharge Permit Issued by DERM

A grease trap permit is required for all non-residential facilities and businesses discharging FOG to public or privately-owned sanitary sewer systems. A completed application is necessary in order to complete the approval process of the plans for the business.

- Know your permit conditions and follow them to avoid fines – it is your responsibility!
- Educate all staff on permit conditions and, along with your best practices, post in a conspicuous location
- Pay your permit renewal fees on time
- Ask for help from a Division of Environmental Resources Management (DERM) inspector at the time of inspection or contact us. We're here to help!

For additional information visit

<http://www.miamidade.gov/permits/grease-discharge.asp> or call 305-372-6600.

Helpful links:

EPA Office of Water Fact Sheet EPA-833-F-12-003, Sept. 2012 (National Pretreatment Program/ Controlling Fats, Oils and Grease Discharges from Food Service Establishments). Found at www.epa.gov/npdes/pubs/pretreatment_foodservice_fs.pdf

FDEP Regulatory Programs Recommendations for Regulating Fat, Oil and Grease Processing and Biofuel Production Facilities in Florida, March 2013. Found at http://www.dep.state.fl.us/waste/quick_topics/publications/shw/solid_waste/Guidance_FOG_Biofuel_15Mar13.pdf