

# WHY BE CONCERNED ABOUT FOG?

When Food Service Establishments (FSEs) and other businesses improperly dispose of Fats, Oils & Grease (FOG), by-products may end up in wastewater treatment plants and stormwater systems. Grease buildup in sanitary sewer lines can become as hard as concrete and may completely block pipes and result in back-ups of raw sewerage into the street, buildings and waterways. FOG-induced wastewater treatment plant overflows cost millions of dollars annually to correct.

The needlessly expended tax dollars required to address this problem nationwide is estimated at \$25 billion a year.

Over 75% of older sanitary sewer systems are working at 50% capacity due to FOG clogs. In addition to clean-up costs, illegal dumping can result in expensive fines and criminal charges.

FOG finds its way into storm drains from illegal dumping or leaking exterior storage containers. Introduction of FOG into stormwater systems causes overflows and water quality impacts since stormwater is untreated and flows directly into local streams and rivers.

**FOG generated by FSEs that use on-site sewerage disposal systems (septic tanks) is also a concern. There are over 1 million commercial food service systems in the U.S. that require proper maintenance and disposal methods to prevent system failure and groundwater quality impacts.**



## Why is so much grease generated?

As a greater number of households opt to save time by dining out or purchasing prepared foods, the rapidly growing food service industry is generating ever-greater volumes of FOG along with the significant increase in sales.

Since FSEs are a very large generator of FOG, they are responsible for selecting and implementing the best handling and disposal/

recycling methods for it. Therefore, FSEs and other businesses are encouraged to develop a Best Management Practices Plan for FOG at their establishments.

Food Service Establishments (FSEs) and other commercial enterprises are also responsible for the maintenance of grease traps and grease interceptors on their sites.

# What is FOG?

**FOG stands for "Fats, Oils and Grease" found in kitchens and Food Service Establishments (FSEs).** The main contribution of FOG is from discharge of used grease from cooking processes. Also, many foods we eat contain FOG. Generally, food scraps washed down the drain contribute to FOG in sewers. Grease accumulation in the sewer system causes obstruction by constricting flow of the sewer pipes, and interfering with the normal operation of the wastewater treatment system. **Typical grease accumulation in pipes when fats, oils, and grease are not disposed of properly.**

## ADDITIONAL RESOURCES

Pittsfield Charter Township  
Department of Utilities and Municipal Services  
(734) 822-3105 ~ [www.pittsfield-mi.gov](http://www.pittsfield-mi.gov)

Community Partners for Clean Streams  
Washtenaw County Water Resources Commissioner's Office  
(734) 222-6860 (WCWRC) ~ (734) 222-6833 (Clean Streams)  
[www.ewashtenaw.org/government/drain\\_commissioner](http://www.ewashtenaw.org/government/drain_commissioner)

Washtenaw County Environmental Health  
(734) 222-3800 ~ [www.ewashtenaw.org/government/departments/environmental\\_health/food\\_safety/eh\\_fatsoilsgrease.html](http://www.ewashtenaw.org/government/departments/environmental_health/food_safety/eh_fatsoilsgrease.html)

Emergency Spill Response/Environmental Incidents  
(734) 971-3954

Huron River Watershed Council  
(734) 769-5123 ~ [www.hrwc.org](http://www.hrwc.org)

Michigan Department of Environmental Quality (MDEQ)  
1-800-662-9278 ~ [www.michigan.gov/deq](http://www.michigan.gov/deq)

Michigan Water Environment Association  
(517) 641-7377 ~ [www.mi-wea.org](http://www.mi-wea.org)

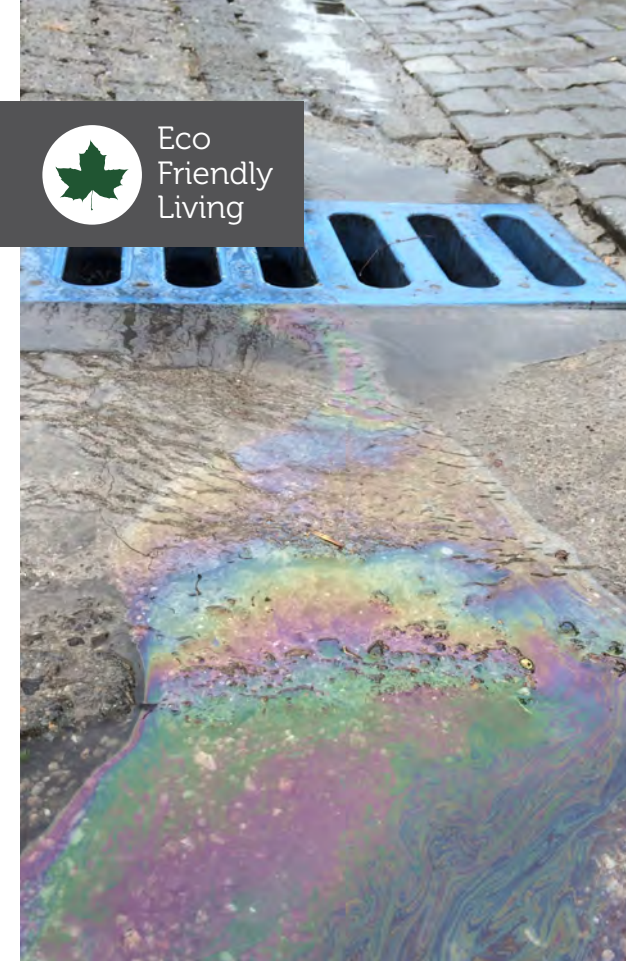
U.S. Environmental Protection Agency, National Pollutant Discharge Elimination System  
(202) 272-0167 ~ [www.epa.gov/npdes](http://www.epa.gov/npdes)

Ypsilanti Community Utilities Authority (YCUA)  
(734) 484-4600 ~ [www.ycuva.org](http://www.ycuva.org)

FOR A DIRECTORY OF LOCAL GREASE HAULERS, call the WCWRC Office at (734) 222-6833 or (734) 994-2825, or visit ~ [www.ewashtenaw.org/government/departments/environmental\\_health/food\\_safety/eh\\_fatsoilsgrease.html](http://www.ewashtenaw.org/government/departments/environmental_health/food_safety/eh_fatsoilsgrease.html)



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# FOG SAFETY

What Every Business Owner Should Know About Fats, Oils & Grease

Pittsfield Charter Township

6201 W. Michigan Avenue | Ann Arbor, MI 48108  
[www.pittsfield-mi.gov](http://www.pittsfield-mi.gov) | [info@pittsfield-mi.gov](mailto:info@pittsfield-mi.gov)





# WHAT CAN YOUR BUSINESSES DO ABOUT FOG?

## Developing a Best Management Practices Plan

To help alleviate **Fats, Oils & Grease (FOG)**, Food Service Establishments (FSEs) and other businesses can adopt a **Best Management Practices (BMP)** plan to properly dispose of and/or recycle FOG. BMPs are a series of activities that can effectively reduce the amount of waste generated in a business. A good BMP can increase safety in your work environment, help avoid plumbing problems, assist in protecting local water quality, and can save your business money!

### Some BMP tips for FOG control include:

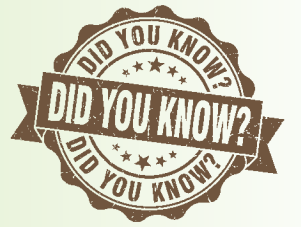
- Reduce fats, oils and grease usage whenever possible, such as using less oil and liquid oil instead of solid grease or lard.
- Use a **FOG** recycling/rendering service that provides watertight outdoor receptacles of adequate size to avoid spills and overflows.
- Provide adequate capacity of receptacles.
- Collect and dispose of used **FOG** through a licensed grease hauler.
- Install grease interceptors or traps for new and existing construction, and consistently and proactively maintain

them to ensure maximum effective operation; ensure that they are cleaned regularly. **No bacteria or enzyme products shall be used in the maintenance of the interceptor.**

- Implement **“Dry Clean-Up”** practices with employees to scrape, wipe or sweep **FOG** from utensils, equipment, and floors prior to using **“Wet Clean Up”** methods that wash **FOG** along with them. **Never “HOT FLUSH” FOG down sinks, floor drains, or storm drains!**
- Prevent and address **FOG** spills as soon as they occur by providing employees with proper tools and training.
- Be sure the following fixtures are connected to a trap or interceptor: (a) wall or floor-mounted sinks, (b) automatic dishwashers, (c) floor drains, (d) woks, (e) pulper, (f) can wash.
- Maintain records of all **FOG** cleanings, inspections, and removal. These records must be kept for a minimum of three years.
- Adhere to all local, state and federal regulations and ordinances on the proper handling and disposal of **FOG**.

## FOG FACTS

When FOG is released into the sewer lines in any amount, it can seriously degrade the collection system’s ability to remove waste from our community. It can be deposited directly on pipe walls, thus decreasing pipe capacity and, therefore, requiring an increased frequency of cleaning, maintenance and replacement.



## GREASE INTERCEPTORS & GREASE TRAPS

### The different types and how they function:

The terms grease trap and grease interceptor tend to be interchangeable. However, there are differences between the two.

A **grease trap** is a small receiver built into wastewater piping a short distance from the grease producing area. This is normally an under-sink, box-shaped fixture located in the kitchen, though it can be installed in the service area floor, but either way, not larger than 20-30 gallons.

Due to the nature of this system being so limited in size, constant monitoring and maintenance is an absolute must! The maintenance schedule is largely depended upon its usage.

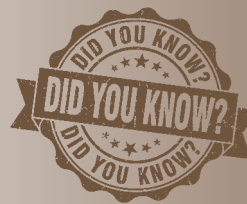
**If a grease trap or interceptor is not maintained regularly, it will not provide proper grease removal.**

A **grease interceptor** is an in-ground vault, roughly the size of a septic tank, with a minimum capacity of 500 gallons, but normally consisting of 1,000 gallons or more. It is located and installed on the exterior, private side of the building or property. Current **Michigan Plumbing Code (2009)**, to which both Pittsfield Charter Township and Washtenaw County Health Department adhere, requires a minimum of two compartments with flow between each compartment designed for FOG retention. With this size system, cleaning is usually extended to a weekly/monthly cycle, but must be done by a licensed septic service contractor.



## FOG FACTS

Running extremely hot water down the drain only moves the FOG further downstream, and once it reaches a cold water pipe, it solidifies and clogs (causing sewer back-ups). Catching FOG at its source is the most effective and economical means to reduce clogging problems and the costly expense to fix them.



## FOG Regulations

For local ordinances on FOG, visit the **Pittsfield Charter Township** website at [www.pittsfield-mi.gov](http://www.pittsfield-mi.gov), and select the Ordinances link to review Sections 36-226-241.

For state and federal FOG regulations, visit these websites:

**US Environmental Protection Agency**  
**National Pollutant Discharge Elimination System (NPDES)**  
[www.epa.gov/npdes/pubs/pretreatment\\_foodservice\\_fs.pdf](http://www.epa.gov/npdes/pubs/pretreatment_foodservice_fs.pdf)

**Michigan Department of Environmental Quality**  
[www.michigan.gov/deq/](http://www.michigan.gov/deq/)

