# Fats, Oils, and Grease (FOG) Best Management Practices (BMP) Manual

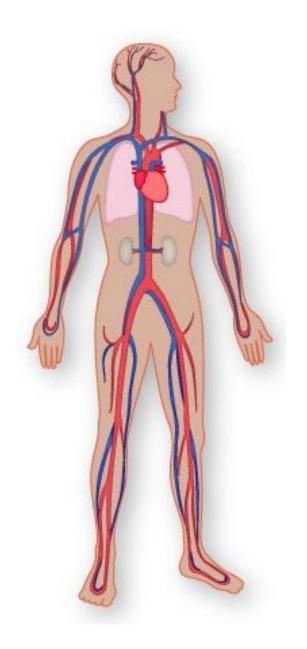


#### What is FOG?

FOG stands for fats, oils, and grease. FOG is composed of animal and vegetable fats and oils that are used to cook and prepare food. FOG should be recycled for use in other products, properly disposed of or land applied.

#### Why is FOG a problem?

A wastewater system is similar to the human body. Wastewater flows through pipes (arteries), is pumped at pump stations (heart), and is cleaned by the wastewater plant (kidneys).



FOG clogs the pipes in the sewer system just like cholesterol clogs arteries. This makes the pumps work harder and can cause them to fail, just like having a heart attack.



FOG can cause backups in your sewer lines that can send sewage into your home or restaurant. This creates the risk of disease and illness in addition to potential closure and fines.

#### **Train Your People**

Train and educate your kitchen staff and other employees about how they can help follow best management practices (BMPs) once implemented.



BMPs are most effective when all employees are trained properly and are more likely to be implemented when staff understand why they are needed.

## Post 'No Grease' Signs In Visible Locations

Signs should be easily viewable by staff, especially those working in a kitchen or food preparation area.



Signs serve as a constant reminder for staff working with FOG.

Post signs in restrooms, over sinks, near all floor drains, dishwashers and anywhere else where water may enter a drain to the sewer.

#### Use the Most Appropriate Water Temperature



Use a water temperature of less than 140° F in all sinks, especially the pre-rinse sink before using a mechanical dishwasher.

Temperatures in excess of 140° F will dissolve grease, but it can solidify in the sewer system as the water cools.

Water from mechanical dishwashers should not be discharged through a grease trap or interceptor.

#### **Use the 3-Sink System**

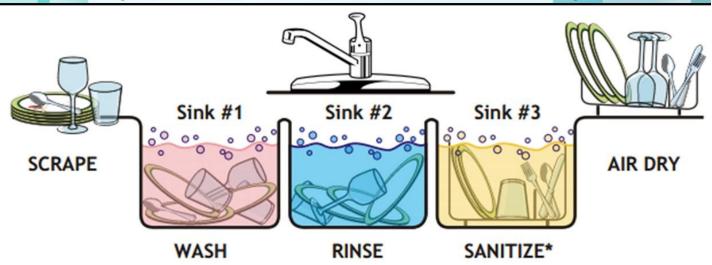
This system will save energy and costs by reducing the need for grease device maintenance:

Sink 1: Use to wash

Sink 2: Use to rinse

Sink 3: Use to sanitize

#### Scrape, Wash, Rinse, Sanitize and Air Dry



Remember, all sinks should be using water temperatures less than 140° F.

#### **Install Drain Screens**

Drain screens act as physical barriers, preventing food waste from entering the drain. This will help reduce cleaning costs and prolong the life of grease control devices.



**All** kitchen sinks should have drain screens installed.



## Dry Wipe All Pots, Pans, and Plates

Use a paper towel or scraper to dry wipe pots, pans, dishware, and food preparation surfaces **before** washing.



Wiping the FOG and food items that remain in pots, pans, and dishware before washing will keep FOG out of grease traps and interceptors.

This will result in less frequent cleaning of grease control devices and lower maintenance costs.

## Properly Dispose of Food Waste



Food waste should **never** be poured down a drain or into a toilet.

Recycle food waste whenever possible and dispose of food waste that cannot be recycled.

Recycling food waste is the best option for a food service establishment because it reduces solid waste disposal costs as well as the costs and maintenance related to grease traps and interceptors.



#### Recycle Waste Cooking Oil

There are many companies that specialize in taking waste cooking oil from fryers and other types of equipment and using it to make animal feed or fuels, such as biodiesel.



Recycling cooking oil reduces the amount of waste that has to be disposed of as solid waste in addition to helping prolong the life of grease control devices.

Recycling also helps to keep FOG out of the sewer system.

## **Ensure Proper Cleaning of Your Grease Interceptor**

You are ultimately responsible for the FOG control at your place of business. Witnessing the cleaning of your grease trap or interceptor will ensure the complete removal of all grease and solids.



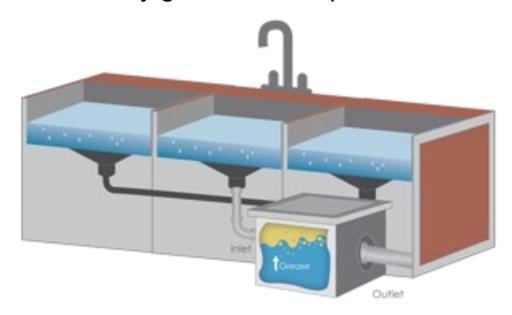
- Make sure you are using a licensed grease hauler
- Request copies of all receipts from the cleaning company.
- Be sure that your grease hauler is doing a complete pumpout of the unit and checking for repairs during every service.\*

\*It is important to scrape and clean the walls and baffles during pump-out to maximize the removal of FOG from the interceptor. The materials removed should be thoroughly vacuumed to prevent biological breakdown and the unwanted release of gas.

#### Clean Under Sink Grease Traps At Least Weekly

Under sink traps have less volume than grease interceptors and need to be cleaned more frequently.

Weekly cleaning by staff will reduce the cost of cleaning any grease interceptors.



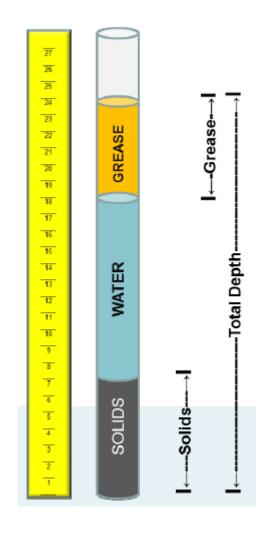
- Make sure to empty trap completely and wipe down all surfaces.
- Water may run through the trap again once finished.
- Dispose of recovered grease in closed containers.
   (Okay to go in dumpster if in closed container)
- Do not pour grease down drains or into toilets.

**Please Note**: New food service establishments are not permitted to install grease traps unless given specific authorization.

## Clean Grease Interceptors At A Regular Frequency

It is the responsibility of each food service establishment to set and maintain an appropriate cleaning interval for their grease interceptor.

Grease interceptors require cleaning once FOG and solids have reached 25% of the total liquid depth.



Your establishment's ideal cleaning frequency will depend on the size of your grease interceptor and the level of kitchen activity.

If you would like help determining your ideal cleaning frequency, please contact the City's Water Quality Manager at (714) 229-6752.

## Keep All Service Records and Maintenance Logs Current

The logs serve as a record of the frequency and volume of cleaning of your grease interceptor(s).



This helps the City inspector ensure that your establishment is compliant with the FOG permit.



The logs can also help optimize cleaning frequencies and reduce costs.

## Clean Exhaust Hoods on a Routine Basis



If FOG escapes through the kitchen exhaust system, it can accumulate on the roof of your restaurant.



This creates a fire hazard and can also result in FOG runoff entering the storm drain during rain events.

## Cover Grease Containers Stored Outdoors

Uncovered FOG containers can collect rainwater. This can lead to FOG overflowing onto the ground and entering the storm drain system.



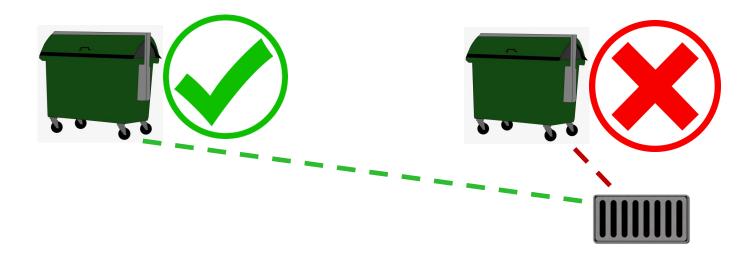
To avoid this risk, keep all grease containers covered and use secondary containment for storage containers.

Any discharge to the storm drain system can adversely affect local receiving waters and may also result in legal penalties.

## Locate Dumpsters and FOG Containers Away From Storm Drains

The release of FOG into storm drains can degrade water quality in receiving streams and local waterbodies.

Discharging FOG into storm drains can also result in fines and other legal actions.



The farther away FOG is stored from a storm drain, the more time someone has to clean up any spills.

BE AWARE of FOG dripping out of containers or dumpsters and clean immediately.

## Use Absorbent Pads for All Spills

Absorbent pads can help to clean up grease and oil that have spilled on the ground near outdoor equipment, containers or dumpsters. The pads can prevent a spill from entering the storm drain system when it rains.





Spill kits should be properly equipped and available for staff.



Do NOT use "kitty litter" or saw dust.

Make sure to properly dispose of absorbent materials in the trash once the spill has been cleaned.



- Scrape excess grease into a sealed container and dispose of it in the trash (or containers specifically designated for grease).
- Place food scraps in waste containers or garbage bags for disposal with solid wastes, or start a compost pile.
- Promote the practice of scraping dishware prior to washing.
- Place a wastebasket in the bathroom to dispose of wastes.
- Regularly check the FOG levels within grease control devices and maintain updated logs.
- Promote the use of the 3 "R's": Reduce, Reuse and Recycle.





- Discharge fats, oils, or grease in concentrations that can cause an obstruction to the sewer flow.
- Place FOG in any sinks or toilets.
- Discharge butchering wastes (animal tissues, bones, hides, hair, entrails, etc.) of any kind within the sewer system.
- Discharge wastewater with temperatures in excess of 140° to any grease control device.
- Discharge waste from a food waste disposal unit to any grease traps.
- Discharge caustics, acids, solvents, soaps, enzymes or other emulsifying agents into sinks that feed grease traps and/or interceptors.
- Discharge fats, wax, grease or oils containing substances that will become viscous between 32° F (0° C) and 150° F (65° C).
- Utilize biological agents, chemicals, or enzymes for grease remediation without permission from the sanitary agency receiving the waste.
- Clean equipment outdoors in an area where water can flow to the gutter, storm drain or street.
- Use the toilet as a wastebasket