

FATS' OILS, AND GREASE CONTROL PROGRAM MANUAL



Table of Contents

What is a FOG Program:

- FOG Program Key Definitions
- FOG Control Program Acronyms
- What is FOG?

How to:

- Train your employees
- BMP (Best Management Practices) poster
- Water temperature
- Using the 3-sink system
- Drain screens
- Dry wiping
- Properly disposed of food
- Cooking oil
- Absorbent pads
- Service and maintenance records
- Proper cleaning of your grease interceptor
- Clean under-sink grease traps
- The 25% rule
- Cleaning exhaust hoods
- Outdoor grease containers
- Location of dumpster and FOG containers

Do's and Do Not List

FOG Control Program Maintenance Records:

- Employee training log
- Grease trap/interceptor maintenance log
- Used cooking oil log

FOG Program Key Definitions

Best Management Practices, BMP - schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Brown Grease – Yellow grease that is mixed with wastewater. For example, waste from the grease interceptor is referred to as brown grease.

Compostable Food Waste - Fruits, vegetables, meat, poultry, seafood, shellfish, bones, rice, beans, pasta, bread, cheese and eggshells, food soiled weed cardboard, napkins, paper towels, paper plates, paper milk cartons, tea bags, coffee grounds/filters, wooden crates and sawdust.

Fats, Oils and Grease, FOG - shall mean any substance such as a vegetable or animal product that is used in, or is a by-product of, the cooking or food preparation process, and that turns or may turn viscous or solidifies with a change in temperature or other conditions.

Food Grinder - Any device whose purpose is to grind food waste or food preparation by-products for the purpose of disposing it in the sewer system.

Food Service Establishment, FSE - Any food preparation establishment, restaurant, cafeteria, or any other establishment preparing food for consumption. Residences are not considered food service establishments under this definition.

FOG Control Program – The FOG Control Program required and developed pursuant to Regional Water Quality Control Board (RWQCB) Order No. 2006-0003-DWQ and a requirement of CDO No. R4-2012-0077.

FOG Wastewater Discharge Permit – A permit issued by the City of Placentia subject to the requirements and conditions of the City's Municipal Code authorizes the permittee to discharge wastewater into the sanitary sewer system.

Gravity Grease Interceptor, GGI – A device that treats kitchen wastewater using only gravity separation. Incorporates two or more compartments (usually underground) in a series and is generally required to be located underground. With a larger storage volume than an HGI, it slows down the flow of water allowing the time to cause separation.

Grease Control Device, GCD - Any grease interceptor, grease trap or other mechanism, device, or process, which attaches to, or is applied to, wastewater plumbing fixtures and lines, the purpose of which is to trap or treat FOG prior to discharge into public sewer system.

Hydro-Mechanical Grease Interceptor, HGI (above ground and underground) – A device that treats

discharge to the sanitary sewer.

Limited Food Service Establishment, LFSE – A food preparation establishment engaged only in reheating, hot holding or assembly of ready to eat food products. A limited food preparation establishment does not include any operation that changes the form, flavor, or consistency of food. As a result, there is no wastewater discharge containing a significant amount of FOG.

Remodel - A physical change or operational change causing generation of the amount of FOG that exceed the current amount of FOG discharge to the sewer system by the food service establishment in an amount that alone or collectively causes or creates a potential for sanitary sewer overflows to occur or exceeding the cost of Fifty Thousand (\$50,000.00) Dollars to a food service establishment that requires a building permit, and involves any one or combination of the following: 1) under slab plumbing in food processing area; 2) a thirty (30%) percent increase in net public seating area; 3) a thirty (30%) percent increase in the size of the kitchen area; or 4) any changes in size or type of food preparation equipment.

Twenty-Five Percent (25%) Rule – Requirement for grease interceptors to be maintained such that the combined FOG and solids accumulation does not exceed 25% of the design hydraulic depth of the grease interceptor. This is to ensure that the minimum hydraulic retention time and required available hydraulic volume is maintained to effectively intercept and retain FOG discharged to the sewer system.

Yellow Grease – It is typically used frying oils from deep fryers and is also known as used cooking oil. It is FOG that has been used for cooking and is generally stored in FOG bins until it is collected by a licensed hauler or recycler.

FOG Control Program

Acronyms

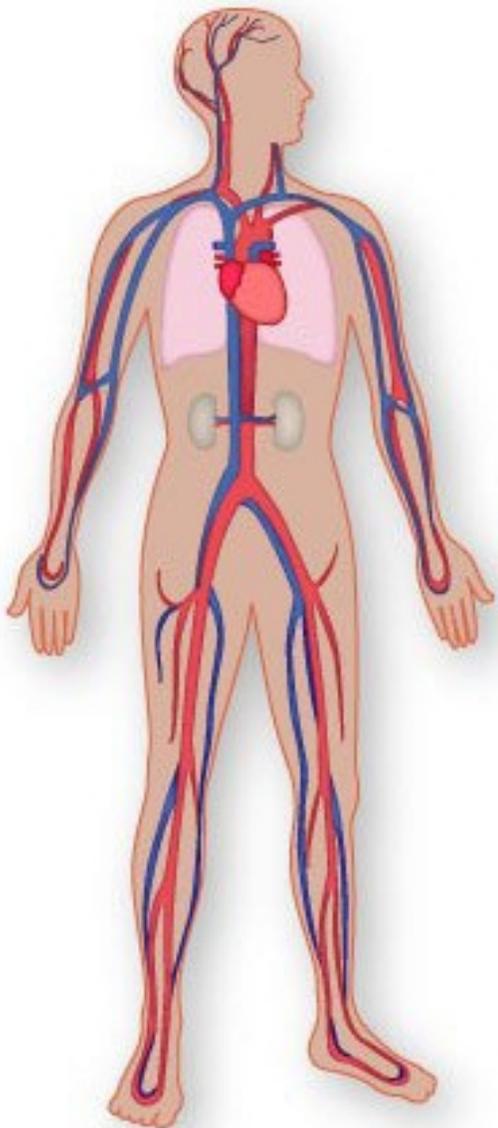
FOG	Fats Oils and Grease
BMP	Best Management Practice
FSE	Food Service Establishment
LFSE	Limited Food Service Establishment
GRD	Grease Removal Device
GI	Grease Interceptor (aka GRD)
SSO	Sanitary Sewer Overflow (Spill)
CPC	California Plumbing Code

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 Employees

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



You are responsible to ensure your staff watch the City provided training by accessing the City's video link using the QR code here. This must be completed twice a year and recoded using the employee training log sheet. This will be found later in the binder.



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

BMP Poster in Visible Locations

BMP Poster should be posted in easily viewable locations for staff, especially those working in a kitchen or food preparation area.

YOU ARE THE SOLUTION TO
RUNOFF POLLUTION

H₂OCC
STORMWATER PROGRAM

Usted es la solución a la contaminación de la escorrentía

DO'S/Hacer	DON'TS/No Hacer
 <p>Keep dumpster area clean and lid closed. <i>Maneje el área del contenedor de basura limpia y la tapa cerrada.</i></p>	 <p>Do not overfill dumpsters, pour liquid in them, or rinse the dumpster area. <i>No llene en exceso los contenedores de basura, no vacíe los líquidos en ellos ni enjuague el área del contenedor de basura.</i></p>
 <p>Clean all mats in a designated area such as an indoor mop sink or floor drain. <i>Limpie todas las alfombrillas en un área designada, como un fregadero de trapeador interior o un desagüe del piso.</i></p>	 <p>Never allow floor or floor mat wash water to flow to the alley, parking lot, street, gutter, or storm drain. <i>Nunca permita que el agua de lavado de pisos o de los tapetes fluya hacia el callejón, el estacionamiento, la calle, la cuneta o el desagüe pluvial.</i></p>
 <p>Use dry cleanup methods to keep parking lots and outdoor areas clean. <i>Utilice métodos de limpieza en seco para mantener limpios los estacionamientos y las áreas al aire libre.</i></p>	 <p>Do not rinse or hose down parking lots or outdoor eating areas. <i>No enjuague ni lave con manguera los estacionamientos o las áreas para comer al aire libre.</i></p>
 <p>Dispose of used grease and oil in a covered, secure grease storage container. <i>Desheche la grasa y el aceite usados en un contenedor de almacenamiento de grasa seguro y cubierto.</i></p>	 <p>Never put grease, oil, or food scraps down the drain. They can clog sewer pipes and result in sewage backups and overflows. <i>Nunca eche grasa, aceite o restos de comida por el desagüe. Pueden obstruir las tuberías de alcantarillado y provocar atascos y desbordos de aguas residuales.</i></p>

Water in storm drains is **not** treated before it is released into our creeks, rivers, and ocean and must never contain washwater, trash, grease, or other pollutants!
El agua de los desagües pluviales no se trata antes de que se libere en nuestros arroyos, ríos y océanos y nunca debe contener agua de lavado, basura, grasa u otros contaminantes.

24-hour Pollution Reporting Hotline:
Línea directa de denuncia de contaminación las 24 horas
1-877-89-SPILL (1-877-897-7455)

24-hour Reporting Website:
Línea web de informes las 24 horas
myOCeServices.ocgov.com

For emergencies, dial 911.
Para emergencias, marque 911

The BMP Poster will serve as a constant reminder for staff working with FOG.

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

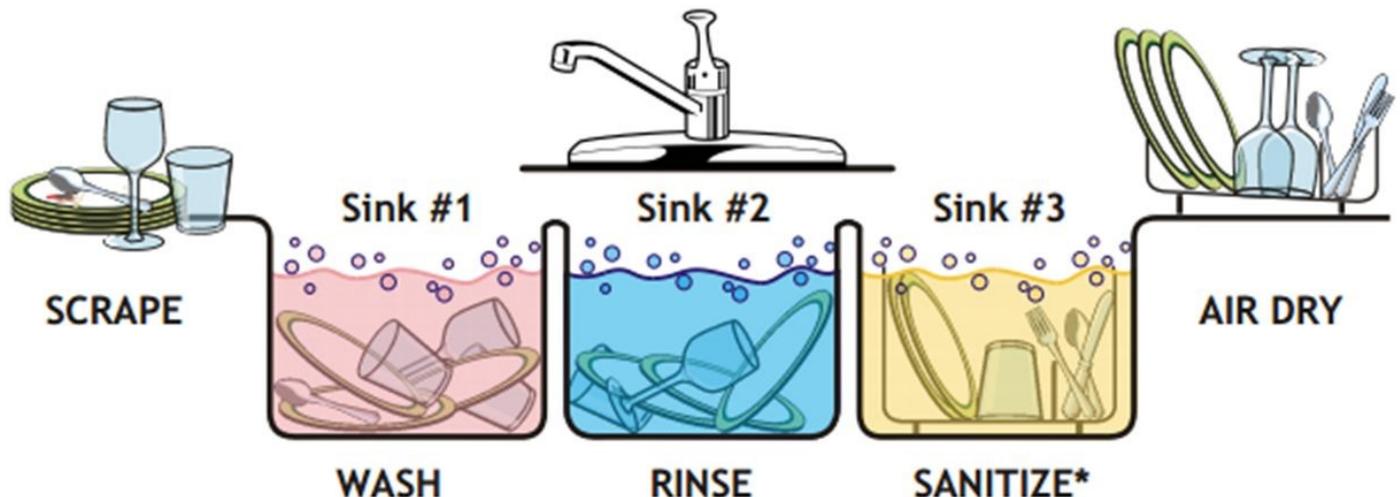
This system will save energy and costs by reducing the need for grease device maintenance:

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.

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.

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.



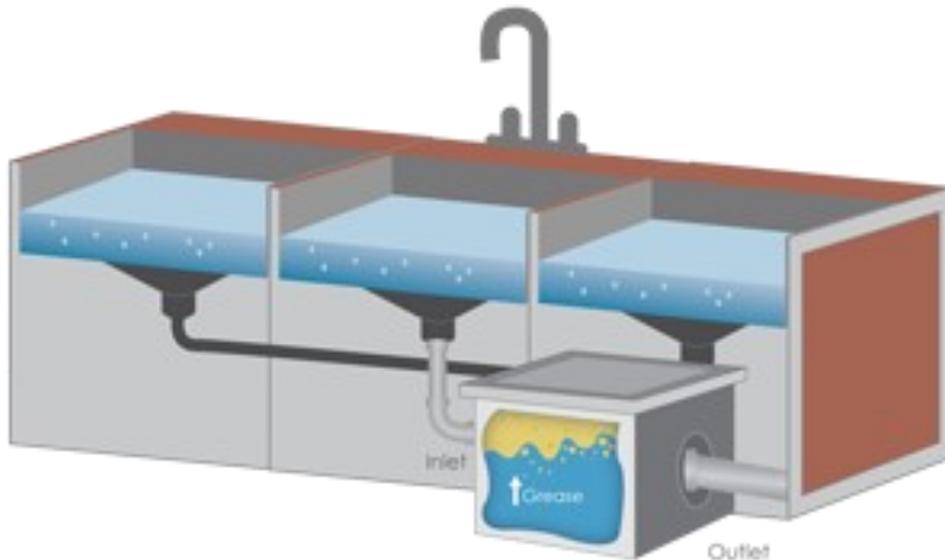
- Make sure you are using a licensed grease hauler
- Request copies of all receipts from the cleaning company.
- Be sure that your grease hauler is doing a complete pump-out of the unit and checking for repairs during every service.*

*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.

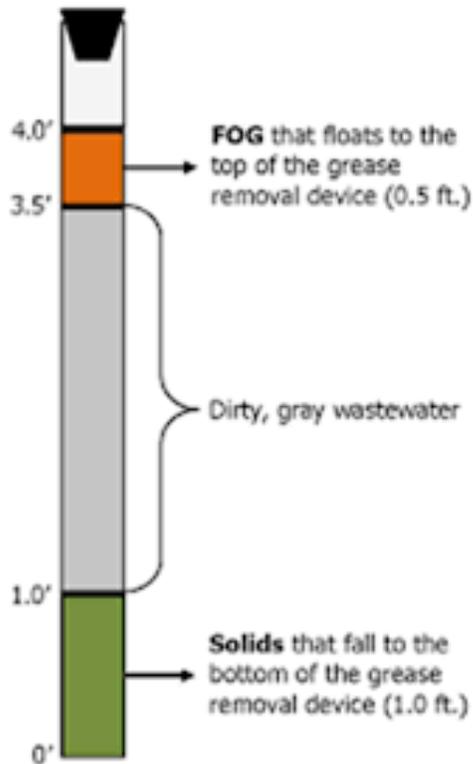


- Make sure to empty trap completely and wipe down all surfaces.
- Water may run through the trap again once finished.
- Dispose of recovered grease in closed containers.
(Okay to go in dumpster if in closed container)
- **Do not** pour grease down drains or into toilets.

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

The 25% Rule

Whether you have an in-ground interceptor or an under-sink trap, the rule is always the same. If the fat and oil on the surface, plus the food which has fallen to the bottom equal more than 25%, that means the device is above capacity and you will need to pump immediately and/or more frequently. Your FOG inspector looks for these numbers on your pumping records, all pumping companies should be recording this when they service you. If you constantly get higher than 25%, the recommendation is to pump more frequently.



Being aware of your Grease Removal Devices condition is also very important. Your FOG Inspector is there to help you check to ensure your device is working smoothly. If you are told that your device, whether in-ground or under-sink is not working, it may be time to get a new one. If this is the case, a visit to your City Building Department can help you with plans and permits.

All cleaning and maintenance records should always be always kept onsite and available for inspection, along with your used cooking oil collection logs.

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.

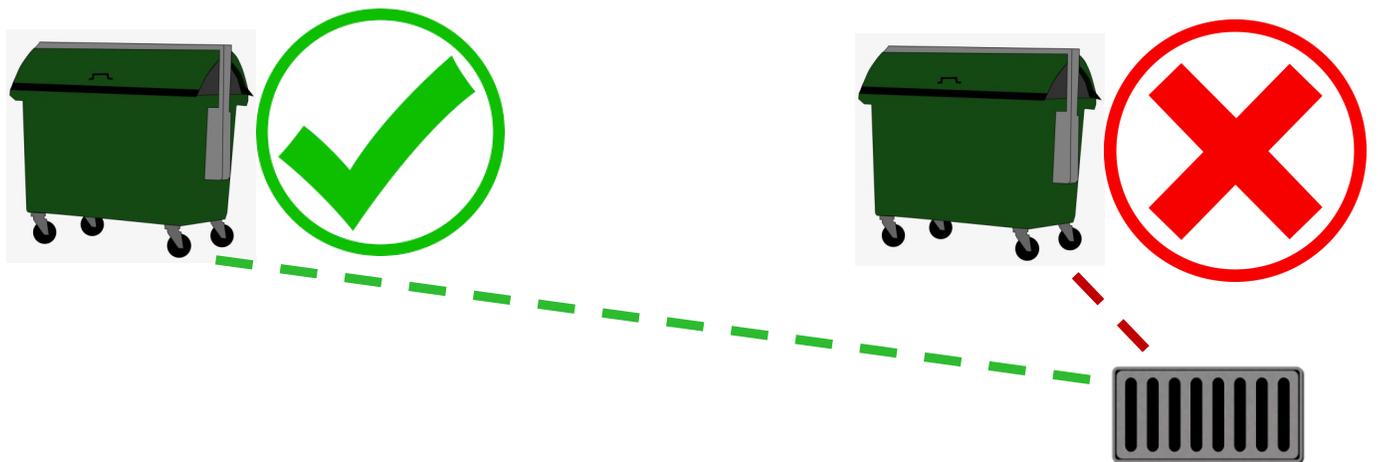


To avoid this risk, keep all grease containers covered and use secondary containment for storage containers.

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.

Do

- ◆ 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 waste.
- ◆ Regularly check the FOG levels within grease control devices and maintain updated logs.
- ◆ Promote the use of the 3 “R’s”: **R**educe, **R**euse and **R**ecycle.





Do Not

- ◆ 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

FOG Control Program Required Maintenance Records

- **Employee Training Log**
- **Grease Interceptor Log**
- **Used Cooking Oil Log**

