

The City of Huntington Beach has developed the “Best Management Practices (BMPs) for Food Service Establishments” Training Manual to assist Food Service Establishments in developing simple, easy-to-follow steps and procedures to prevent Fats, Oils, and Grease (FOG) from entering the City’s sewer system. This manual covers all the basic elements to eliminate FOG and is a helpful tool to convey the message to your staff and achieve compliance with the FOG Control Program.

1. What is FOG?

FOG is a combination of fats, oils, and grease used in food preparation, and is generated by Food Service Establishments (FSEs). Products that contain and create FOG include cooking oil, fat, grease, butter, shortening, and cooking meat.

1.1 How Does FOG Affect You?

Food waste, as well as water that has been used to wash kitchen equipment, dishes, and floors, contains FOG. When FOG is washed or poured down the drain and into the sewer, it cools and solidifies causing sewer pipes to become clogged.

Over time, FOG builds up and eventually **blocks entire sewer pipes**, causing sewage backups and overflows. Property damage can result from sewage backing up into the building leading to expensive cleanup and plumbing repairs that you are responsible for. Sewage spills and backups can also result in Health Department code violations that can lead to the **closure of your business operations**.



FOG Blockage in Sewer Pipe

If a sewer spill occurs, immediately stop using water, call a plumber, and the City of Huntington Beach at (714) 536-5921 or (714) 960-8825 after hours. If sewage is released and enters a storm drain, the sewage will flow to the ocean causing an immediate public health hazard and possible beach closure.

1.2 The City of Huntington Beach FOG Control Program

To eliminate FOG related sewer spills and backups, the City has adopted an aggressive maintenance program to frequently inspect and clean the City’s sewer lines. However, the most effective way to minimize FOG accumulation in sewers is to prevent the introduction of FOG into the sewer system in the first place. To achieve this goal, the City adopted Municipal Code 14.56, Control and Regulation of Fats, Oils, and Grease, a FOG Control Program that regulates FSEs and provides a

mechanism to help control and minimize the introduction of FOG into the City's sewer system. The City's FOG Control Program implements a three-part approach:

- Public Outreach and Education

Public outreach programs educate commercial business operators/owners and residents on the problems associated with improper disposal of FOG and encourage the implementation of FOG BMPs.

- Food Service Establishment FOG Control Program

The FSE FOG Control program provides the City, through the FOG ordinance, with the authority to inspect and monitor the implementation of BMPs.

- Enhanced Sewer Maintenance and Cleaning

Enhanced sewer maintenance activities are scheduled as a result of the City's inspection of the sewer system using a closed circuit television (CCTV) inspection system.

2. How to Achieve Compliance with the Food Service Establishment FOG Control Program

Achieving compliance with the City's FSE FOG Control Program requires the implementation of all of the following BMPs by the owner/operator of the FSE through an Employee Training and Awareness Program.

- "Dry Wiping" Pots, Pans, Dishware, and Work Areas to Remove Grease
- Spill Prevention and Proper Clean Up Methods
- Drain Screening
- Proper Dish Washing and Equipment Cleaning
- Recycling FOG
- Maintenance of Kitchen Exhaust Filters
- Posting "No Grease" Signs
- Maintenance of Grease Control Devices (Grease Traps and Grease Interceptors)

The above BMPs are designed to reduce or eliminate FOG into the sewer system. Other BMPs not listed may be necessary to further reduce or eliminate FOG.

3. Employee Training and Awareness Program

The success of your establishment's BMP program to eliminate FOG from entering your sewer system is largely dependent upon your employees. The City requires the training of all employees **at least twice a calendar year** and all new hires within two calendar weeks of hire on the following subjects:

- “Dry wiping” pots, pans, dishware, and work areas to remove grease
- Spill prevention and proper cleanup methods
- Drain Screening
- Dishwashing and Equipment Cleaning
- Proper FOG Recycling/Disposal
- Maintenance of Kitchen Exhaust Filters
- Post “No Grease” Signs
- Employee training must be documented in the Employee Training Record (Attachment I) and include employee signatures indicating each employee’s attendance and understanding of the practices reviewed. **All training records must be kept on site at all times and made available for review by the City.**



The following sections cover training elements required by the City of Huntington Beach. The ***italic/bold texts*** are recommendations for restaurant managers/supervisors to train employees. These are only recommendations that may or may not work and should be used or modified accordingly.

3.1 “Dry Wiping” Pots, Pans, dishware, and Work Areas to Remove Grease

Remove food waste with paper towels or a spatula from dishes, pans, and work-areas by “dry wiping” before washing will prevent FOG from entering your sewer system. Washing food waste and FOG into the drains will eventually cause FOG to build up and create costly blockages in your sewer lines.

Train employees how to “dry wipe” food waste from pots, pans, and dishware by:

- ***Using rubber scrapers or paper towels to remove food waste, fats, oils and grease from cookware, utensils, pots, and pans before washing. Food waste should be disposed in a double bagged trash can.***
- ***Keep “dry wipe” tools by the dish washing area for easy access and use.***
- ***Using food grade paper to soak up oil and grease under fryer baskets prior to mopping floors.***

3.2 Spill Prevention and Proper Clean-Up Methods

All employees shall be trained on spill containment and proper spill cleanup methods. Preventing spills will help prevent slips and fall hazards as well as clogged drains.

For spill prevention:

- ***Empty containers before they are full to avoid spills.***
- ***Place lids on all containers when transporting liquids, particularly containers with liquid wastes containing FOG.***
- ***Provide employees with proper tools, e.g., carts with wheels, and ample containers to transport materials without spilling.***
- ***Practice effective spill containment and clean up. Sweep or vacuum spills of dry products.***

Establishments that use large amounts of cooking fats, such as deep fryers, should post their spill response procedures and have a spill kit in an easily accessible well known location. ***The spill kit shall contain absorbent material, like absorbent pads or kitty litter for liquid spills.***

To clean FOG spills employees should be trained to:

- ***Block off all sinks and floor drains near the spill.***
- ***Use absorbent material in the spill kit to completely surround the spill.***
- ***Sweep up used absorbent material and throw it away.***
- ***Mop with a degreaser only to remove trace residues.***

3.3 Drain Screening

Keeping food particles containing FOG out of the sewer system can prevent clogged drains and pipe blockages. To implement this, install screens that have 1/8-inch or 3/16-inch screen openings in each floor, mop and hand sink.

Train employees on the following:

- ***How to clean drain screens frequently and dispose of the collected material in a trash can.***
- ***How to replace damaged or missing screens.***



3.4 Dishwashing and Equipment Cleaning

Proper dishwashing and cleaning methods will prevent food solids and FOG from clogging drains and causing backups.

Train employees to:

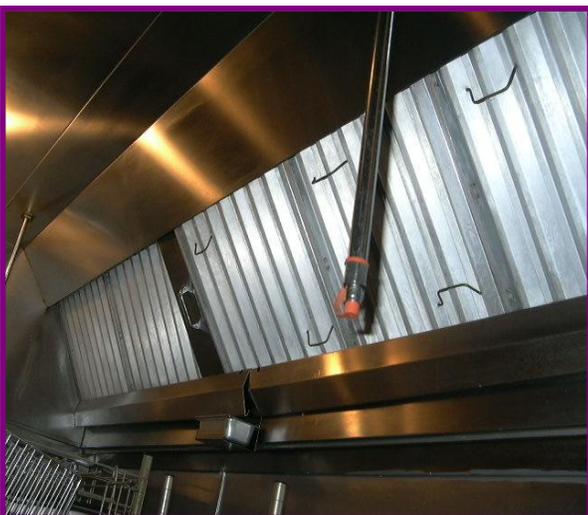
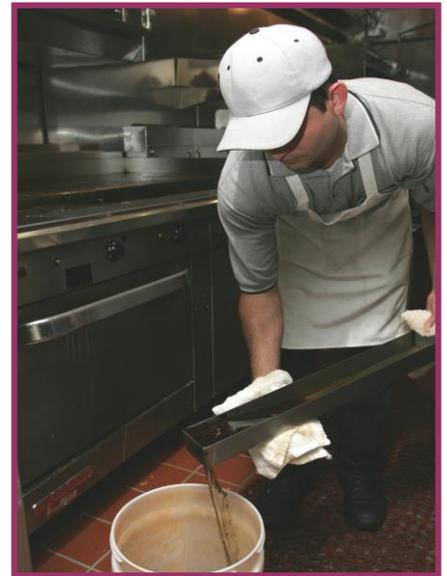
- **Use a rubber spatula to scrape the sides of deep fryers and large pots then wipe with paper towels before washing. All excess grease and oil should be placed into a waste grease container and throw paper towels in the trash.**
- **Empty grill and broiler drip pans into a waste grease container and then wipe down with paper towels prior to washing. Dispose of the paper towels in trash.**

3.5 Recycling FOG

All waste fryer oil and cooking grease must be disposed into designated waste FOG containers. A list of suggested recycling companies is provided in Attachment III.

To recycle FOG, train your employees to:

- **Never throw waste oil down any drain.**
- **Collect and store deep fryer waste oil in a designated recycling container. Please see Attachment III of this manual for a suggested list of vendors that may provide this service.**
- **Keep FOG waste containers covered at all times and promptly clean all spills and residue.**
- **If FOG waste containers are stored outside, lock and secure lids to prevent theft and/or vandalism, and rain from getting into the container.**
- **Keep containers in good working order and free of leaks.**
- **If possible store waste FOG containers indoors. This will minimize the risk of theft and spills.**



3.6 Maintenance of Kitchen Exhaust Filters

Routinely clean kitchen exhaust system filters. If filters are not cleaned on a regular basis, grease and oils escape through the kitchen exhaust system and can accumulate on the roof of your establishment and eventually enter the storm drain system when it rains. Hood filters can be cleaned by a company or employees.

If employees clean hood filters train your employees to:

- ***Place the hood filters over a double bagged trash can. Spray degreaser on the dirty hood filters to loosen the grease and allow the excess degreaser to drip into the trash can.***
- ***Use a paper towel to wipe down the hood filters once the degreaser has been applied.***
- ***Dispose of the paper towel in the trash can.***
- ***Wash the hood filters with soap and hot water once all the excess grease has been removed.***

Spraying filters with hot water using little or no detergent over a mop sink connected to a grease trap or interceptor can also effectively clean hood filters. After a hot water rinse (drain must be connected to a grease trap or interceptor), filter panels can be placed into the dishwasher.

3.7 Post “No Grease” Signs

Post “No Grease” signs near three compartment sinks and mop sinks to remind your staff that FOG should never be poured down the drain. This will serve as a constant reminder to your employees to properly recycle FOG and to dispose of food waste in the garbage, not down the drain.

The City will provide your facility with “No Grease” signs and other FOG related information that you can use to educate your staff.



4. Grease Control Devices; Grease Trap vs. Grease Interceptor

Grease Trap vs. Grease Interceptor

Grease traps and grease interceptors are both considered grease control devices. Grease traps are smaller devices, usually 25-100 gallon capacity, that are typically located inside a food service facility. A grease interceptor is a larger device, usually 750 to 2,000 gallon capacity, which is located underground and outside of a food service establishment.



Typical Grease Traps

Grease control devices are designed to collect, contain and remove food solids and grease from wash water while allowing the remaining liquid waste to discharge to the sewer system.



Grease Interceptor Manholes

Maintenance of Grease Control Devices

For grease control devices to be effective, the units must be properly sized and maintained to allow adequate time for food solids and FOG to settle and accumulate. Inspecting and cleaning a grease control device is critical to ensure that it is functioning properly. **Grease Control Devices are required to be cleaned at minimum on a quarterly basis. Proof of maintenance shall be retained in the training manual.**

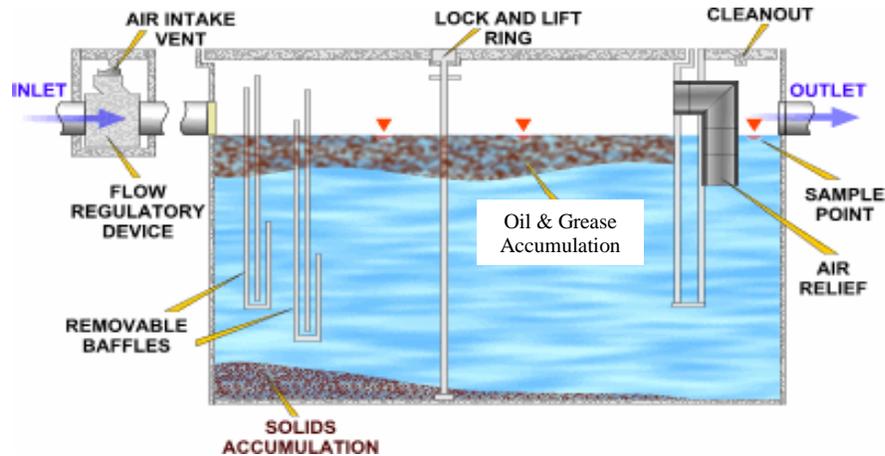
The maintenance frequency for your grease control device depends on the volume of FOG your facility generates. **Your FSE will save grease control device maintenance costs by implementing the BMPs detailed in this manual.**

Here are some basic maintenance requirements for grease control devices:
The total FOG and solids in the grease control device should never be over 25% of the capacity of the tank. Always review the maintenance record to see that it is less than 25%. If the grease control devices is greater than 25 percent of the holding capacity you are required to perform a full cleaning of the device.

FSEs that choose to service the grease traps on their own are required to maintain a record that documents the cleaning activities in the FOG Training Manual. Records should include the name of the employee who performed the cleaning, date/time of cleaning, amount of grease removed and the disposal location for the grease. A sample maintenance log (see Attachment II – Maintenance Log) has been provided for your use and should be utilized to document the inspection and cleaning of your grease trap. Grease interceptors should be serviced, at a minimum, quarterly by a licensed service provider and service records must be kept onsite for review by City staff. A suggested list of service providers is in Attachment III - Grease Recycling and Grease Control Device Service Providers.

4.1 Grease Trap Maintenance

When inspecting and/or cleaning your grease trap, confirm that the grease traps contain their internal baffles and inlet piping flow restrictors/air relief during every inspection and cleaning. These components aid in grease removal by reducing turbulence and increasing holding time within the trap.

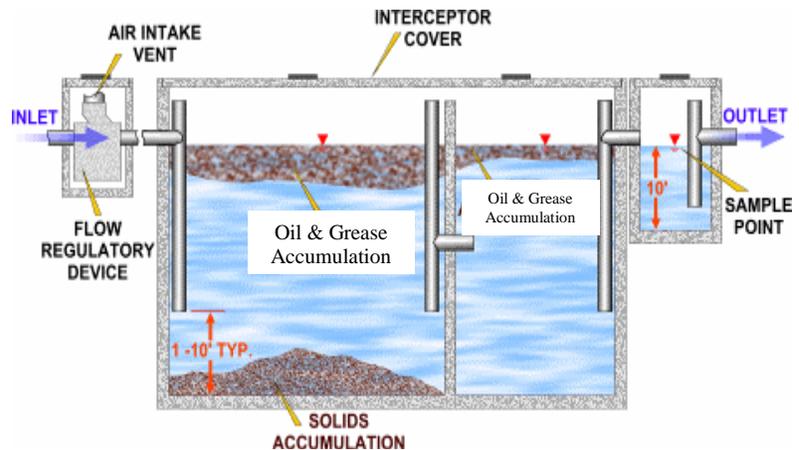


The proper maintenance procedure for a grease trap is outlined below:

Steps	Actions
1	Remove water in the trap to facilitate cleaning. The water should be disposed of in the sewer system.
2	Remove baffles, if possible.
3	Remove the accumulated grease out of the interceptor and deposit in a FOG container.
4	Scrape the sides, lid, and baffles to remove as much of the grease as possible, and deposit the grease into a FOG container.
5	Replace the baffle and lid.
6	Record the volume of grease removed on the maintenance log (see Attachment II).
7	Contact a hauler or recycler for grease pick-up.

4.2 Grease Interceptor Maintenance

Grease interceptors, due to their size, will usually be cleaned by licensed grease haulers.



The proper maintenance procedures for a grease interceptor are outlined below:

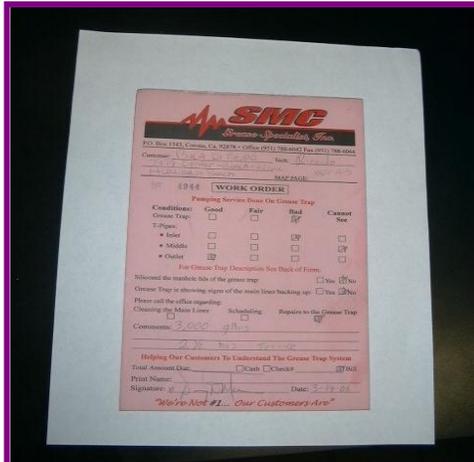
Steps	Actions
1	Contact a licensed grease hauler for cleaning (Attachment III).
2	Ensure that all flow is stopped to the interceptor by shutting the isolation valve in the inlet piping to the interceptor.
The Following Steps Should Be Performed By a Licensed Grease Hauler	
3	Remove the lid and bail out any water in the interceptor to facilitate cleaning. The water should be discharged to the sanitary sewer system.
4	Remove baffles, if possible.
5	Remove the accumulated grease out of the interceptor and deposit in a watertight container.
6	Pump out the settled solids and then the remaining liquids.
7	Scrape and wash the walls, lid, and baffles to remove as much of the grease as possible, and deposit the grease into a watertight container.
8	Replace the lids.
9	Record the volume of grease removed on the maintenance log.

5. Recordkeeping

Recordkeeping and documentation is an important element to successfully implementing a FOG elimination program. The City requires that each FSE retain the following records and documents on-site for at least three (3) years, and be available for review during normal operating hours:

- Employee Training Records (Attachment I)
- Grease Trap Cleaning and Maintenance Log (Attachment II)
- Grease Interceptor Cleaning and Maintenance Invoices and manifests

Management should inform all supervisory staff where FOG related documents are located so they can be reviewed upon request by City inspectors.



Grease Interceptor Service Record