## How the Food Service Industry can Affect Sanitary Sewer Systems

It's in everyone's best interest to reduce the amount of fats, oils and grease (FOG) that flow into the sewer system. It's good for our earth, it's good for our pocketbooks, and it's good for our community.

lorida's waterways are fragile environmental systems that need our care and protection. Over the last 30 years, local governments and businesses have made tremendous investments in wastewater treatment to keep pollution out of lakes, streams, and rivers. But just because the facilities are in place doesn't mean we can ignore our responsibilities toward our waterways. It's critical that in homes and businesses we pay attention to the impact of our actions on water quality.

very commercial cooking operation produces waste products of FOG. On a small scale, we all know what can happen when heated grease congeals in kitchen pipes—the pipes plug up, blocking passage of liquid and creating unsanitary backups into the kitchen.



Grease buildup on the interior of sewer line.

n a larger scale, the same thing can happen to wastewater collection and transmission systems. Most blockages in wastewater systems can be traced to FOG. The result can have damaging effects throughout the system creating sewage

spills, manhole overflows, or backups into homes or businesses. Too much grease and oil can also create the need for increased maintenance of sanitary sewer lines, increasing costs to all customers. (Continue)

cenes such as the one pictured here are completely avoidable by putting into place practices that will reduce the amount of fats, oils, and grease entering the sewer system from food service establishments.



Excessive grease from overflowing manhole

ollowing simple guidelines along with having a correctly sized and properly functioning grease interceptor will reduce the amount of FOG discharged to the sewer system and will allow your facility to meet the City's compliance limit of 100 mg/L.

inimizing the amount of food being discharged down all drains, including those attached to two or three compartment sinks and automatic dishwashers can lower high oil and grease concentrations. The least expensive alternative that can be used in reducing grease in the sewer is improved kitchen management practices.

If you are not sure about a practice or if additional information is needed please contact the Industrial Pretreatment Program for the City of Tarpon Springs at the telephone number noted below.



#### City of Tarpon Springs Industrial Pretreatment Program

201 East Pine Street Tarpon Springs, Florida 34689

Phone: 727-942-5616 Fax: 727-942-5624 Email: rjonatzke@ctsfl.us

# Best Management Practices for the Control of



# City of Tarpon Springs Industrial Pretreatment Program

201 East Pine Street Tarpon Springs, Florida 34689

Telephone 727-942-5616

# Best Management Practices to Control Fats, Oils, and Grease (FOG)



Residual fats, oils and grease (FOG) are by-products that food service establishments (FSEs) must constantly manage. Typically, FOG enter a facility's plumbing system from ware washing, floor cleaning, and equipment sanitation. Sanitary sewer systems are neither designed nor equipped to handle

the FOG that accumulates on the interior of a municipal sewer collection system pipes. A large percentage of Florida's sanitary sewer overflows are the result of pipe blockages attributed to FOG accumulation from residential, institutional, and commercial sources. The best way to manage FOG is to keep the material out of the plumbing systems. The following are suggestions for proper FOG management.

#### Train Staff

Train kitchen staff and other employees about how they can help ensure these Best Management Practices (BMPs) are implemented. People are more willing to support an effort when they understand the basis for it.

#### Conspicuously Post "No Grease" Signs

Frequent reminders can educate employees about the importance of keeping FOG out of sinks and drains. Post "No Grease" signs over sinks, near all floor drains, near all dishwashers, and anywhere else where water may enter a drain to the sewer. Signs serve as a constant reminder for staff working with FOG.

#### Dry wipe pots, pans & dishes

Wiping the FOG and food that remain in pots, pans, and dishware before washing will keep the FOG out of the grease traps or interceptors. This will result in less frequent cleaning of the grease traps and interceptors and lower maintenance costs.

#### Use the 3-Sink System

Use the first sink to wash plates; the second to rinse plates and the third to sanitize with a 50—100 ppm bleach solution. Water temperatures should be less than 140°F. The system will save energy and costs as a result.

#### Recycle waste cooking oil and food wastes

There are many companies who specialize in taking waste cooking oil from fryers and other types of equipment and making animal feed or fuels from it. Recycling reduces the amount of wastes that have to be disposed as a solid waste and helps to prolong the life of any grease trap or interceptor. It keeps FOG out of the sewer system.

#### Properly Dispose of Food Waste

Food should never be poured down a drain or into a toilet. Recycling of food wastes is the best option for a food service establishment, reducing solid waste disposal costs and the need to more frequently clean grease traps and interceptors. There are non-profit organization that will take food wastes to feed those that are hungry.

#### Clean In-ground Grease Interceptors Monthly

In-ground grease interceptors must be cleaned routinely to ensure that grease accumulation does not interfere with operation. The monthly cleaning frequency is a requirement of ALL food service establishments located in Tarpon Springs. Routine cleaning will prevent plugging of the sewer line between the establishment and the City's sanitary sewer system. A backup will require someone to unplug the line and could pose a serious health risk to workers and patrons.

#### Clean Undersink Grease Traps at Least Weekly

Undersink grease traps have less volume than in-ground grease interceptors. Weekly cleaning by the establishment's staff will reduce the cost of cleaning the grease interceptor. Place recovered grease in a proper disposal container. It can go in a dumpster if it is in an enclosed container. Do not pour it down any drains or into any toilets.

#### Witness Grease Interceptor Cleaning

Grease trap/interceptor haulers may take shortcuts. They may not completely clean the unit or only partially remove accumulated materials. Witnessing the cleaning of the grease interceptor or trap will ensure that the food service establishment is getting the full value for the cost of the cleaning.

#### Keep a Maintenance Log & all Service Records

The log serves as a record of the frequency and volume of cleaning of the grease interceptor, helps to ensure that the food service establishment is in compliance with the City of Tarpon Springs' Grease Management Ordinance and affords any inspector the opportunity to verify compliance. Service records verify the accuracy of the

log. The log can optimize the cleaning frequency in order to reduce costs.

#### Cover Grease Containers Stored Outside

Uncovered FOG containers can collect rainwater. Since FOG floats, the rainwater can overflow the container and flow onto the ground where it can reach the stormwater system. Any discharge to the stormwater may result in adding biological or chemical demand to local receiving waters. The discharge might also result in legal penalties being imposed on the food service establishment.

## Locate Dumpsters & FOG Containers away from Storm Drains

A release of FOG can degrade water quality in receiving streams in the area by adding biological and chemical demand to the stream. Discharging FOG into storm drains can also result in fines and other legal actions. The farther away from a storm drain the FOG is stored, the more time someone has to clean up any spills. Be aware of FOG dripping out of containers or dumpsters and clean up quickly.

#### Use Absorbents Around All Storm Drains

Use absorbent pads around all storm drains where dumpsters or containers are nearby. This can present an effective barrier to prevent FOG from entering the storm drain system.

#### Use Absorbent Pads for all Spills

Absorbent pads can help to clean up grease and oil that is spilled on the ground near outdoor equipment, containers, or dumpsters. They prevent the spills from entering the storm drain system when it rains. DO NOT use absorbent material such as "kitty litter" or saw dust since they can flow into the storm drains when it rains.

#### Routinely Clean Exhaust Hoods

If FOG escapes through the kitchen exhaust system, it can accumulate on the roof of the establishment and eventually start a fire or enter the storm drain when it rains.



City of Tarpon Springs Industrial Pretreatment Program

> Phone: 727-942-5616 Fax: 727-942-5624 Email: rjonatzke@ctsfl.us