

Why the FUSS about FOGS?

In a nutshell, the FOGS (fats+oils+grease+solids) washing down the restaurant and FSE (food service establishment) drains will solidify and stick to the insides of the downstream drains and sewer pipes and make them smaller and smaller inside. At some point, nothing will pass through the sewer pipe and raw untreated sewage (yikes) will back up through the manholes to the surface of the street near the restaurant. This is called an SSO (sanitary sewer overflow).

LOS ANGELES - DECEMBER 3, 2013. Think of the health hazard of this happening in the streets! And if the sewage makes it to a storm drain, it can flow untreated all the way out to our ocean. SSO's are a major cause of beach closures here in SoCA.

So, what to do? The solution is to somehow capture or remove the FOGS from the restaurant before they go into the sewer system. The first grease interceptors (or grease traps) were invented and patented back in the 1800's. Good old Newton's gravity makes them work. The FOG is lighter than water and immiscible with water. Immiscible means it will not mix with water to form a homogeneous mixture.

The interceptor is basically a box where foggy kitchen water flows in and cleaner water flows out to the sewer. Heavier than water food solids fall to the bottom of the box and lighter than water FOG separates and floats to the top. Periodically the box must be opened and completely pumped out. The pumped FOGS are treated and then become a commodity for sale.

The difference between grease trap and grease interceptor is just small vs big. Think greasetrap equals small, inside and above or below the floor. Think grease interceptor equals big, outside and in the ground. There's another class of device known as an AGRD - automatic grease removal device. I'll talk about those another day.

Up until the 1990's in the City of LA, only the largest restaurants had grease interceptors, and then mostly voluntarily. The City only had 400 restaurants inspected and only 100 restaurants had interceptors. Today, the City is said to have over 10,000 restaurants!

The big push toward strong FOGS control programs started with the lawsuits of the late 1990's. The EPA and environmental groups demanded the City stop its frequent sewer spills. Audits blamed FOGS clogs for 41% of the City sewer spills between 1997 and 1999. There were as many as 300 SSO's per year at that time!

In 2004 the City settled the lawsuits by agreeing to spend 2 billion dollars in the next ten years on system repairs and improvements. System capacity would increase by adding 500+ miles of new lines plus cleaning all lines yearly. They would also improve their programs to control how much pollutants like FOGS enter the sewer systems. Of course the City had to add employees.

The improved FOGS program started by requiring some kind of GRD (grease removal device) at City restaurant hotspots for FOGS clogs. Then new restaurants and then restaurants who did major upgrades. Also restaurants that changed ownership. The restaurant industry first objected, though they knew something had to be done.

I've heard no talk of requiring private residences to have some kind of GRD. The cities and counties handle residences by various "outreach" programs that educate the general public about kitchen best practices and minimizing how much FOGS go down their sink.

The good news is all the effort and money spent has improved the SSO situation markedly! Those 300 yearly SSO's a decade ago are down 90% to about 30 now! The vast majority of City restaurants have a GRD now. Most restaurants also recycle their WVO (waste vegetable oil) from frying. Every year there are fewer and fewer "grandfathered" restaurants that have no GRD. All CA cities are supposed to have FOGS control programs in place this year.

Thanks to LA Times and NY Times for some info used here.

Next time I'll talk more about grease traps, grease interceptors and automatic grease removal devices. Pluses, minuses and relative costs. Comments are welcomed and encouraged!

About DohertyTech, Inc.

Based in Los Angeles since 2010, DohertyTech Inc. is in the business of helping restaurants and food service establishments get into FOGS compliance for their kitchen wastewater. DohertyTech is the exclusive distributor for the GOSLYN™ AGRD automatic grease removal device in the ten counties of Southern California. We pride ourselves on delivering a high degree of pre-sale and post-install technical support. We want to be a small part of the restaurant's overall success.