

Fats, Oils, & Grease (FOG)

**ECOS, Inc.
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FOG Control Program

The **FOG** Control Program was developed to assist the ECOS, Inc. and its customers in complying with all applicable federal, state, and local regulations.

This presentation has been developed as a training tool, intended to educate managers and employees of food service establishments about **FOG** and the importance of keeping it out of the sewers.

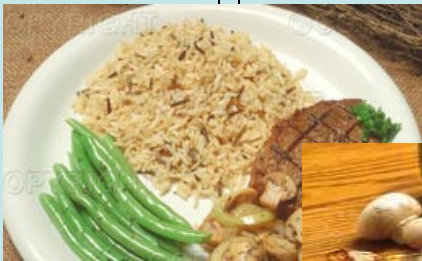

VIOLATIONS

What Is FOG?

- **FOG** is a common term for fats, oils, and grease.
- **FOG** molecules that are liquid at room temperature are referred to as an oil.
- **FOG** molecules that are solid at room temperature are referred to as fat or grease.

Where Does FOG Come From?

FOG comes from a wide range of commercial, residential and industrial generators. **FOG** occurs naturally in many foods such as meats, dairy products, cooking oils, butter or margarine, and is also an ingredient in many recipes, condiments, and sauces. Food service establishments (restaurants, cafeterias, confectionaries, etc.) have an elevated potential to discharge **FOG**.



Can FOG Really Be a Problem?

YES! FOG can clog sewer lines, just as fats and oils clog arteries in people.

When sewer lines become clogged, water can no longer flow through them, leading to back-ups and sanitary sewer overflows (SSOs).



Repairs

Backups and overflows are more than just a nuisance, they are also expensive!

The manpower and equipment needed to isolate, contain, and repair a clogged sewer is costly.

User Liability

Establishments that have caused or contributed to a blockage or any other associated problem may be held liable for damages to both private and public property, in addition to any fines or costs associated with cleanup efforts.

Don't Throw Profits Down the Drain!



Avoid unnecessary costs by reducing the amount of **FOG** in your waste stream.

How Can FOG Discharges be Minimized?

- Install and maintain a properly sized **FOG** separation device.
- Develop and implement best management practices (BMPs).
- **FOG** Separator + BMPs =



What is a **FOG** Separation Device?

A **FOG** separation device is an apparatus used to remove **FOG** from a waste stream.

Wastewater flows through the device, allowing free or emulsified **FOG** to be separated and retained in the device while allowing the clarified wastewater to continue flowing into the sewer system.



How Does This Device Work?

FOG separation devices work on the principal of gravity.

FOG is lighter than water. Therefore, **FOG** will separate from the waste stream and float to the surface.

Materials that are heavier than water will also separate from the waste stream and sink to the bottom.

Separation Devices

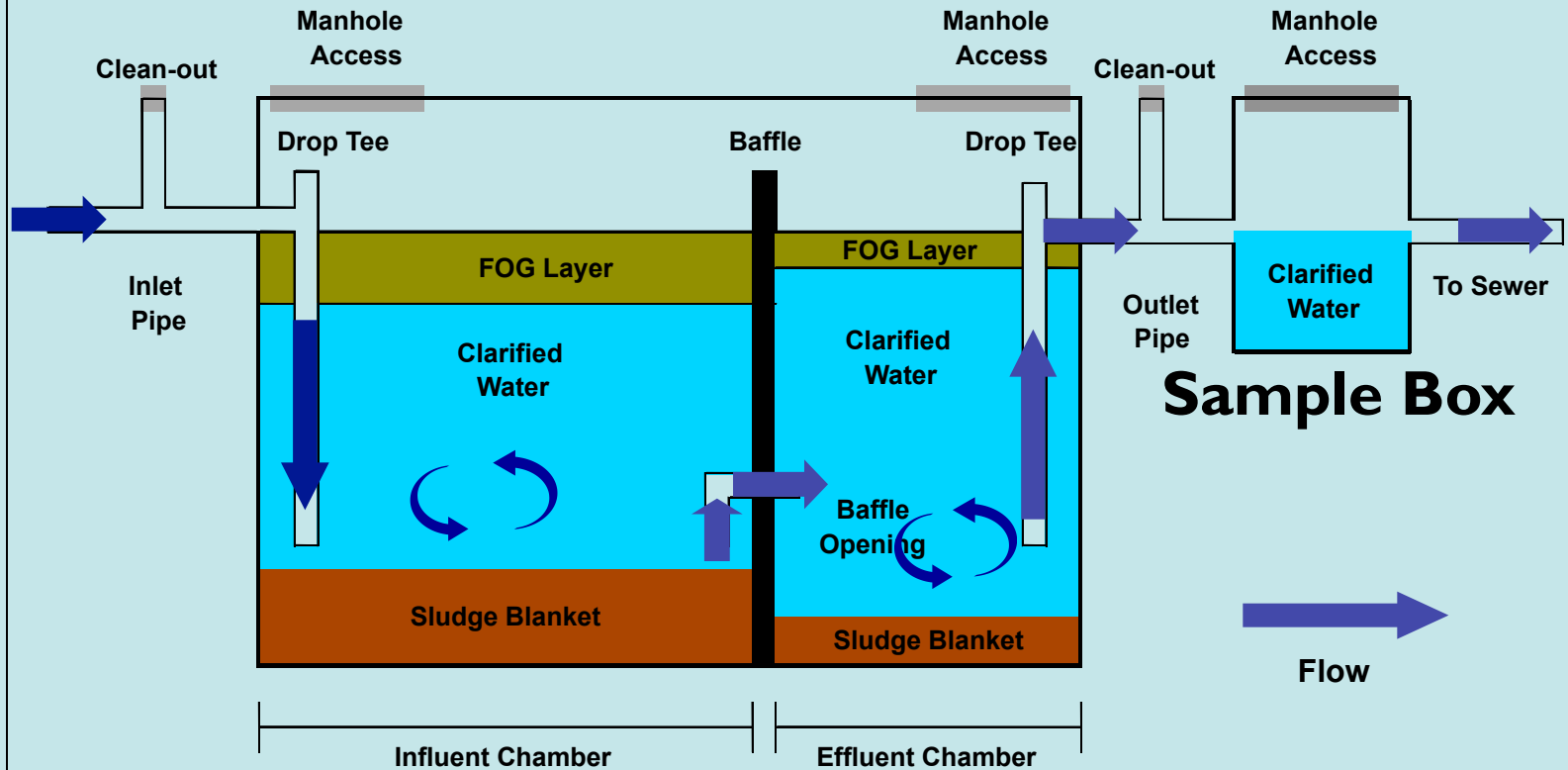
For the purposes of this presentation, **FOG** separation devices have been separated into two classifications:

Gravity Grease Interceptor

Larger, passive device, typically installed outside a facility in the ground.



Interceptor's Key Components



Grease Interceptor

Mechanical Grease Interceptor

Smaller, mechanical unit, which may be installed inside or outside a facility.



What are BMPs?

Best Management Practices...

are operational practices and procedures, developed and implemented by a food service establishment, as a means of reducing the amount of **FOG** discharged to the sewer.

Benefits of Implementing BMPs

- Assistance in preventing accidental slips and falls.
- Improved business environment (less odor, fewer unsightly sewer overflows, etc.).
- Assistance in maintaining compliance with applicable regulations.
- Reduced operational costs (wasting money on ineffective and costly additives, emergency sewer cleaning, fines, etc.).

BMP Considerations

- General Prohibitions
- Employee Training and Awareness
- Kitchen Practices

General Prohibitions

- **Do Not** dump **FOG** into sinks or drains.
- **Do Not** use garbage grinders.
- **Do Not** discharge high temperature wastewater ($> 140^{\circ}$ F) into a grease trap.
- **Do Not** use additives (bacteria, enzymes, etc.) to treat a **FOG** separation device, without first obtaining written permission from the ECOS, Inc..

Employee Training & Awareness

- Provide initial and ongoing training to employees about the importance of minimizing **FOG** discharges.
- Post “No Grease” signs near sinks and drains.
- Frequently review BMP’ s and amend as necessary.
- Reward employees who take active measures to reduce **FOG** discharges.

Kitchen Practices

Utilize renderable grease containers for waste fryer oil and grease:

- Containers should be labeled and placed in areas easily accessible to employees and easily serviced by a transport service provider.
- Provide secondary containment to protect against accidental discharges.
- Ensure that container is serviced regularly.

Kitchen Practices (continued)

Utilize fine mesh screens in all sinks and drains:

- Install screens in a manner that does not enable the screen to be removed easily, forcing employees to clear off debris rather than simply removing the screens.
- Discard removed debris into a solid waste container.
- Periodically inspect sinks and drains to confirm screens are still in place.

Kitchen Practices (continued)

Incorporate “dry” cleaning methods:

- Prior to washing dishware with water, scrape large debris off with a spatula and then wipe residual debris off with a paper towel. Discard removed debris into a solid waste container.
- Clean floors with a broom and mop rather than hosing down. Discard debris into a solid waste container.
- Use soaps and other detergents sparingly.
- Use disposable dishware rather than dishware that must be washed. Recycle materials whenever possible.

Kitchen Practices (continued)

Develop and implement a plan to prevent and contain accidental spills:

- Cover container when transporting materials.
- Provide secondary containment for stored materials.
- Store materials away from sinks and drains.
- Use absorbent (i.e. kitty litter, sawdust, etc.) to soak up spills and dispose of material in a solid waste container.
- Empty storage containers before they are completely full.

Conclusion

- Excessive discharges of **FOG** from food service establishments can lead to serious problems that affect the entire community.
- **FOG** is an issue that needs to be addressed at nearly every food service establishment.
- The good news is that your actions can have a positive effect on reducing the amount of **FOG** discharge from your establishment.

Be Part Of The Solution...

FOG

Not The Problem!

For Additional Information

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Thank You!