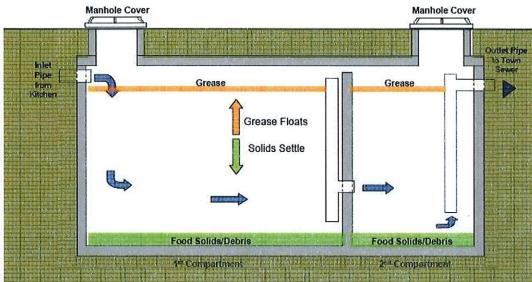
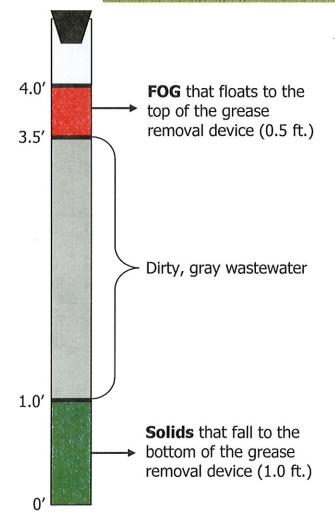


Understanding grease removal and the 25% rule



Per City Ordinance, all food service establishments must have grease removal devices maintained by a certified grease hauler when they reach 25% of the design capacity OR a minimum of quarterly. Please contact City of Waterloo Waste Management with any questions.





Does this example meet the 25% rule?

- \triangleright Total FOG at top of interceptor = 0.5 ft.
- \triangleright Total solids at bottom of interceptor = 1.0 ft.
- > Total depth of interceptor contents = 4.0 ft.
- Percentage of FOG + solids:

$$\frac{\text{Depth of interceptor contents}}{\frac{1.5'}{=\frac{4.0'}{}}} = \frac{(0.5' + 1.0')}{\frac{4.0'}{}} = \frac{1.5'}{\frac{4.0'}{}}$$

- Answer: No, the 25% rule is not met and the FSE needs to increase pumping frequency.
- The certified grease hauler you employ has been trained by the WRA to assist you with an appropriate cleaning schedule.

Waste Management Services 3505 Easton Ave Waterloo, IA 50702 (319)291-4553 cityofwaterlooiowa.com



City of Waterloo Waste Management Services

Reminds you to follow Best Management Practices and keep fats, oil and grease out of your drains.

Do dispose of food waste directly into the trash.

Do <u>not</u> dispose of food waste into the garbage disposal.





Do wipe pots, pans and work areas prior to washing.

Do <u>not</u> pour cooking residue directly into the drain.

Do collect waste oil and store for recycling.

Do <u>not</u> pour waste oil directly into the drain.





Do clean traps / interceptors regularly and keep a maintenance log.

Do <u>not</u> let grease accumulate, as the device will work poorly.



Contact City of Waterloo Waste Management Services for more information regarding the FOG program:



Waste Management Services 3505 Easton Ave Waterloo, IA 50702



FOG Best Management Practices



Protecting the public health and environment is the goal of the FOG Program. In accordance with this, we must continue to reduce the frequency of sanitary sewer overflows in our community. Fats, oil and grease accumulation is one of the two most significant contributors to sewer overflows, and studies have shown the most cost-effective way of protecting the sewer system from the effects of FOG is to change kitchen practices in order to catch FOG at the source.

FOG is a by-product that FSEs must constantly be aware of and manage. Best Management Practices (BMPs) are utilized to minimize FOG discharge into the sewer system and remain in compliance with the city ordinance.

The single most important thing you can do to help extend the length of time between maintenance and save your facility in maintenance expense is to use diligence in dry clean-up prior to wet clean-up. Scrape food debris in the garbage and dry-wipe the dishes prior to immersion in hot water (sink or dishwasher).

Listed are BMPs that should be implemented at your Food Service Establishment:

- ✓ Provide regular training to employees
- ✓ Limit or discontinue use of the garbage disposal—dispose of food waste in the trash
- ✓ Scrape food waste into the trash and dry-wipe cookware and utensils prior to washing
- ✓ Do not pour fryer oil/grease down the drain
- ✓ Use fine-mesh drain screens
- ✓ Place "No FOG" signs near all sinks
- ✓ Place BMP posters near sinks or on employee bulletin boards
- ✓ Inspect & clean grease traps / interceptors frequently
- ✓ Keep records of FOG pick-up by Waterloo certified waste haulers on site for a minimum of 3 years
- ✓ Store recyclable fryer oil in leak-proof containers with lids
- ✓ Clean all vent hoods regularly
- ✓ Do NOT introduce enzymes, emulsifying agents or bacteria to grease traps, grease interceptors or drains unless approved by the Waste Management Services Department



Figure: The effects of FOG accumulation in the sanitary sewer system.

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Frequent Questions Regarding FOG



What is FOG and why should I care?

FOG refers to fats, oil and grease that are generated from normal business operations of food service establishments (FSEs). Grease is commonly washed into the plumbing system during clean-up through the kitchen sink. As it cools, it congeals and decreases pipe capacity both inside the FSE and in the main sewer system. FOG can block your drain, your neighbors' drain and main collection lines, potentially becoming an environmental and public health risk.

Eliminating FOG-related sanitary sewer overflows is the goal of the new City of Waterloo FOG program. FOG Inspectors will routinely inspect kitchens and FSEs to ensure compliance with regulations. It is the responsibility of each business to develop an effective FOG waste management plan and properly dispose of FOG waste on a consistent basis.

What types of facilities are required to meet the directives of the new ordinance?

All commercial and institutional cooking establishments as well as some non-cooking FSEs will be required to meet the regulations set forth in the ordinance. This includes, but is not limited to, restaurants, bars, schools, daycares, churches, nursing homes, bakeries, grocery stores, caterers and other food preparation operations.

Will my existing grease trap (indoor, under the sink unit) be sufficient to comply with the new ordinance? A grease trap that is properly sized and installed to remove the FOG at your FSE is important. Following the suggested best management practices (BMPs) and routine maintenance of the trap will increase the probability of meeting the discharge limits of the ordinance. Indoor grease traps are much smaller in design and therefore need more maintenance to prevent the FOG from reaching the sanitary sewers. Make sure baffles and deflector shields are installed properly. The City of Waterloo also recommends that dishwashers and garbage disposals by-pass small, indoor grease traps as the FOG is emulsified by the detergents, sending it on down the sanitary sewers. If the trap is not cleaned frequently or correctly it will not perform well and could put your FSE at risk of violating FOG discharge limits.

How often does my grease interceptor or grease trap need to be maintained?

There is a 25% rule that applies to both grease interceptors and grease traps that states the FOG (floats to the top) and solids (settles to the bottom) content of the device should not be in excess of 25% of the grease interceptor / trap depth. Typically, cleaning frequencies for grease traps may be in the range of daily to weekly. Cleaning frequencies for grease interceptors can be expected to be monthly to quarterly.

This 25% rule allows the wastewater enough residence time inside the device to effectively remove the FOG and solids from the wastewater before it reaches the sanitary sewer collection system. The single most important thing you can do to help extend the length of time between maintenance and save your facility in maintenance expense is to use diligence in dry clean-up prior to wet clean-up. Scrape food debris in the garbage and dry-wipe the dishes prior to immersion in hot water (sink or dishwasher).

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Frequent Questions Regarding FOG



May I use chemicals, enzymes or bacteria in my grease removal device or in my drains?

The FOG Ordinance prohibits the use of enzymes, emulsifying chemicals, hot water or other agents as a grease abatement method to grease removal devices or drains. These chemicals keep the FOG emulsified long enough to become a serious problem downstream as dilution of the chemical allows for the FOG to congeal and decrease pipe capacity, having the potential to cause a serious blockage and sanitary sewer overflow. You may contact the City of Waterloo FOG Inspector regarding products that have been approved or visit our website at www.cityofwaterlooiowa.com/wastemanagement / FOG Program.

What are the most important things for me, the business owner or operator, to know about the FOG Program?

The City of Waterloo FOG Inspector will be performing unscheduled compliance inspections. The important items the FOG Inspector will be checking are:

- 1. The grease removal device (interior grease trap or exterior grease interceptor) is under 25% full of FOG and solids. This will be done via physical inspection by the FOG Inspector.
- 2. Maintenance records, including accurate measurements, are on-site and available at the request of the inspector. Records must be kept for a period of 3 years.
- 3. Any additional requirements from the official inspection report.

What are the enforcement action(s) that could potentially occur if the regulations of the FOG Program are not met by my business?

Enforcement actions could include, but are not limited to, notice of violation without fine; notice of violation with fines; civil penalties; submission of a compliance plan; installation of a properly sized, exterior grease interceptor; and clean-up costs for sewer blockages.

Is there a FOG inspection fee?

The initial inspection is a courtesy inspection and an introductory to the program's purpose and requirements. After initial inspection, there may be fees for scheduled inspections and subsequent violations.

City of Waterloo Waste Management Services 3505 Easton Ave Waterloo, IA 50702 (319)291-4553



City of Waterloo Waste Management Services Food Service Establishment Inspection



General Information Facility Name:		
Business Address:		
Mailing Address:		
Contact and Title:		
Phone Number:		
Representative Present and Title:		
FOG Inspector:		
Date & Time of Inspection:;		
Type of Inspection Initial Inspection Follow-up Annual Compliance		
Type of Food Service Establishment		
Fast Food Full Service Restaurant Bar Coffee Shop / Deli Hospital / Residence Home Processing Supermarket Other (specify):		
Facility Operations Days / hours of operation:		
Type of food served:		
Average number of customers served per day:		
Seating capacity:		
Dishwasher in use:	☐ Yes	□ No
Garbage disposal in use:	☐ Yes	☐ No
Dishwasher / disposal attached to FOG device:	☐ Yes	□ No
Current FOG Control Device Grease Interceptor None Other (specify):		

Number of drains, sinks, etc. connected to device: _____

Grease Trap Maintenance Grease Hauler Used:			•
Last Maintenance Date:			
Maintenance Records:	☐ Yes	□ No	□ N/A
Maintenance occurring a minimum of quarterly: ()	☐ Yes	□ No	□ N/A
City of Waterloo approved hauler:	☐ Yes	i □ No	□ N/A
Disposal Location: City of Waterloo Waste Management Serv	vices		
Condition of Grease Trap Good Fair Poor – needs immediate attention (see comments) N/A			
Measurement of Device (Inlet side): Inspection			
Total Liquid Depth (inches):			
Total FOG (inches):			
Total Solids (inches):			
Meets the 25% rule: (% full)	☐ Yes	□ No	□ N/A
Free of Debris / Garbage:	☐ Yes	i □ No	□ N/A
Baffle Wall Secure:	☐ Yes	i □ No	□ N/A
Free of Cracks / Defects:	☐ Yes	i □ No	□ N/A
Outlet Tee Secure:	☐ Yes	i □ No	□ N/A
Miscellaneous BMPs currently implemented:		□ Some	☐ Few
Chemicals in use:		☐ Yes	□ No
<u>Sampling</u> Sample port present:		☐ Yes	□ No
Oil & Grease sample taken:		☐ Yes	⊠ No
Location description: N/A			

Results of O & G sample: N/A