



# **Fats, Oils, and Grease (FOG)**

## **PROGRAM MANUAL**

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227206  
**City of Lawrence, MA**  
March 2016  
Revision No. 1

## TABLE OF CONTENTS

SECTION	PAGE NO.
<b>1. INTRODUCTION.....</b>	<b>1-1</b>
1.1 Background .....	1-1
1.2 What is "FOG"? .....	1-1
1.3 Importance of Limiting FOG.....	1-1
1.4 Consent Decree.....	1-2
1.5 Purpose of this Program.....	1-2
<b>2. LEGAL AUTHORITY .....</b>	<b>2-1</b>
2.1 Fats, Oils, and Grease (FOG) Ordinance .....	2-1
2.2 Responsible Parties.....	2-1
<b>3. FOG CONTROL REQUIREMENTS FOR FOOD SERVICE ESTABLISHMENTS.....</b>	<b>3-1</b>
3.1 Installation of FOG Control Devices .....	3-1
3.1.1 Grease Traps .....	3-1
3.1.2 Grease Interceptors.....	3-2
3.2 Inspection and Maintenance of FOG Control Devices.....	3-2
3.2.1 General Requirements for Food Service Establishments.....	3-2
3.2.2 Grease Trap Cleaning Procedure .....	3-3
3.2.3 Recordkeeping .....	3-3
3.3 Best Management Practices.....	3-4
3.3.1 Kitchen Staff Training.....	3-4
3.3.2 "No Grease" Signs.....	3-4
3.3.3 Dry Wipe.....	3-4
3.3.4 Equipment Cleaning .....	3-5
3.3.5 Spill Prevention and Containment .....	3-5
3.3.6 Extend Oil Life in Fryers .....	3-5
3.3.7 Recycling.....	3-5
<b>4. FOG PERMITTING, INSPECTION, AND ENFORCEMENT.....</b>	<b>4-1</b>
4.1 Annual FOG Permit .....	4-1
4.2 Temporary Establishments and Events .....	4-1
4.3 Mandatory Inspections.....	4-1
4.4 Enforcement .....	4-2
<b>5. TRAINING AND PUBLIC EDUCATION PROGRAM.....</b>	<b>5-1</b>
5.1 Annual Employee Training.....	5-1
5.2 Public Education Program .....	5-1
5.2.1 FOG Outreach for Food Service Establishments .....	5-1
5.2.2 FOG Outreach for General Public .....	5-1
<b>6. PROGRAM TIMELINE AND MILESTONES.....</b>	<b>6-1</b>
<b>7. REFERENCES.....</b>	<b>7-1</b>

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## TABLES

Table 1-1:	Types of Food Service Establishments .....	1-3
Table 2-1:	Responsible Parties for Implementing FOG Program .....	2-1
Table 4-1:	Enforcement Procedures.....	4-2

## FIGURES

Figure 1-1:	FOG Buildup in a Lawrence Sewer Pipe .....	1-1
Figure 3-1:	Typical Interior Hydromechanical Grease Trap .....	3-1
Figure 3-2:	Typical Exterior Gravity Grease Interceptor.....	3-2
Figure 4-1:	FOG Workflow .....	4-3

## APPENDICES

Appendix A:	FOG Ordinance
Appendix B:	Recommended Grease Trap/Interceptor Sizing Procedures
Appendix C:	Example Inspection and Maintenance Forms
Appendix D:	Application for Grease Hauler Registration
Appendix E:	Annual FOG Permit Application and Supporting Documents
Appendix F:	FOG Management Plan Template for Temporary Establishments and Events
Appendix G:	Training Program
Appendix H:	Example FOG Outreach Material

## 1. INTRODUCTION

### 1.1 BACKGROUND

The U.S. Environmental Protection Agency (EPA) established the National Pollutant Discharge Elimination System (NPDES) permit program as part of the Clean Water Act (CWA) to regulate discharges to surface waters. One component of the NPDES permit program is the EPA's National Pretreatment Program, which was developed to prevent discharges that could interfere with operation of the Publicly Owned Treatment Works (POTW) or pass through the treatment facility untreated and pollute receiving waterways. EPA requires local POTWs to establish individual pretreatment programs to enforce national pretreatment standards and regulate discharges from industrial and commercial (i.e. non-residential) users.

The City of Lawrence, Massachusetts (City) operates a sewer collection system that flows to the Greater Lawrence Sanitary District (GLSD) wastewater treatment facility (WWTF) in North Andover, Massachusetts. The City is required under EPA's National Pretreatment Program and GLSD's Industrial Pretreatment Program (IPP) to regulate the discharge of fats, oils, and grease (FOG) from food service establishments (FSEs) that can cause obstructions in the sewer collection system and GLSD's treatment facility.

The FOG Program described herein is based on current regulatory requirements and applies to all FSEs within the City. This Manual includes or references legal authority, statement of responsibilities, FOG control equipment installation and maintenance, City inspections, public education, and training. The Lawrence Inspectional Services Department manages the City's FOG Program with primary support from the Water & Sewer and Health Departments.

### 1.2 WHAT IS "FOG"?

FOG refers collectively to the fats, oils, and grease found in most residential kitchens and commercial FSEs. Many foods that are processed and served contain FOG, including:

- Meat fats & lard
- Cooking oil
- Butter, cheese & other dairy products
- Baked goods
- Sauces

### 1.3 IMPORTANCE OF LIMITING FOG

National and local pretreatment regulations prohibit "solid or viscous substances which may cause obstruction to the flow in a sewer resulting in interference".<sup>1</sup> FOG that is released into sewers can coagulate and congeal into a hardened layer on the inside of pipes, as seen in Figure 1-1 – *FOG Buildup in a Lawrence Sewer Pipe*, and build up in wastewater pump stations or treatment facilities. The restriction of wastewater flow caused by FOG buildup can lead to sanitary sewer overflows (SSOs), which can flood commercial and residential properties, impact

Figure 1-1: FOG Buildup in a Lawrence Sewer Pipe



<sup>1</sup> 40 CFR 403.5(b)(3); p. 14 Greater Lawrence Sanitary District Rules and Regulations, rev. April 2, 2008

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streets and the surrounding environment, and result in public health hazards and property damage. FOG can also expedite the deterioration of wastewater equipment and encourage rodent colonization. These negative consequences often result in financial ramifications for the City by adding additional equipment maintenance and wastewater treatment costs.

Byproducts from food preparation activities at commercial FSEs represent a significant portion of FOG wastes entering sewer collection systems each year, with annual production ranging from 800 to 1,700 pounds per year per restaurant.<sup>2</sup> FOG management practices, such as installing grease interceptors to capture FOG prior to discharge into the collection system, help to mitigate negative consequences such as SSOs and equipment failure by limiting the amount of oil and grease entering the collection system and WWTF. Preventing FOG from entering the collection system is more economical than managing FOG after it enters the collection system.

#### **1.4 CONSENT DECREE**

The City entered into a Consent Decree with the U.S. Department of Justice in April 2015, and one of the requirements of the settlement is for the City to develop a formal program to ensure that FOG accumulations are not impacting the collection system capacity and contributing to SSOs. In addition to meeting the standards of national and local pretreatment programs, the City's FOG Program must also contain:

- Specific requirements for the installation or upgrade of FOG control equipment at all food preparation establishments;
- Provisions for periodic and random FOG equipment inspections by the City;
- Enforcement procedures for non-compliant facilities including the ability to assess fines for violations of the program;
- A public education program targeted at FOG facilities;
- All necessary modifications to local regulations, including the City's and GLSD's Sewer Use Ordinances, to allow full enforcement of the FOG Program including standard operating procedures for escalating enforcement from warnings through penalties;
- An explanation of which departments within the City have the authority and will be responsible for (i) managing, (ii) inspecting, and (iii) enforcing the FOG Programs;
- A list of all food preparation establishments that includes average daily discharge volume; and
- A proposed schedule for implementation of the FOG Program.

#### **1.5 PURPOSE OF THIS PROGRAM**

The purpose of this FOG Program Manual is to establish formal procedures for managing FOG wastes from FSEs in the City, and ensure that FOG accumulations are not impacting the collection system or contributing to SSOs. FSEs are defined as facilities that prepare and/or serve food for commercial use or sale; examples of FSEs covered by this FOG Program are listed in Table 1-1 – *Types of Food Service Establishments*.

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<sup>2</sup> p. 2 U.S. EPA Office of Water "Controlling Fats, Oils, and Grease Discharges from Food Service Establishments"

**Table 1-1: Types of Food Service Establishments**

- Restaurants	- Factory or school kitchens
- Cafes	- Catering kitchens
- Lunch counters	- Bakeries
- Cafeterias	- Grocery stores with food preparation and packaging
- Hotels	- Meat cutting and preparation (excluding grocery stores with only food warming operations)
- Hospitals	- Meat packing facilities
- Convalescent homes	- Other food handling facilities where FOG may be introduced into the sewer system
- Food trucks	

The FOG Program contained herein meets the requirements of the federal Consent Decree between the City and the U.S. Department of Justice. The following key components of the settlement are included in this Manual:

- Responsible parties for implementing the FOG Program (see Section 2);
- Requirements for FOG control equipment at all FSEs (see Section 3);
- City inspection timelines (see Section 4);
- Enforcement procedures for non-compliance FSEs (see Section 4); and
- Public education program targeted at FOG facilities (see Section 5).

This Manual provides guidance to City staff as well as FSE Owners for implementing the FOG Program procedures in a strategic fashion, and can be used as a training tool for City staff and FSE employees.

## 2. LEGAL AUTHORITY

### 2.1 FATS, OILS, AND GREASE (FOG) ORDINANCE

The City's FOG Program is primarily implemented through Chapter 8.32 (Fats, Oils, and Grease Regulations) of the City of Lawrence Revised Ordinances. This "FOG Ordinance" was amended on March 17, 2015, in compliance with the federal Consent Decree requirements. The previous version of the City's FOG Ordinance included many of the FOG-related regulations already covered within GLSD's IPP. The FOG Ordinance was revised to remove redundancy to GLSD's IPP requirements, improve upon the organization, and expand the content of the document to include standard operating procedures and allow full enforcement of the FOG Program. The new Ordinance requires all FSEs in the City that use, generate, or store FOG to hold an annual FOG Permit.

### 2.2 RESPONSIBLE PARTIES

The City's Board of Health (or its assigns) is designated to administer the FOG Ordinance. Additional responsible parties are listed in Table 2-1 – *Responsible Parties for Implementing FOG Program*. The current FOG Ordinance can be found in **Appendix A**.

**Table 2-1: Responsible Parties for Implementing FOG Program**

Primary Responsible Party	Responsibilities
Board of Health	<ul style="list-style-type: none"> <li>- Administers FOG Ordinance</li> </ul>
Water & Sewer Commissioner	<ul style="list-style-type: none"> <li>- Manages FOG Program, conducts technical review of FOG Permit applications, and issues FOG Permits to FSEs</li> <li>- Schedules and conducts training</li> <li>- Manages maintenance of sewer infrastructure</li> <li>- Manages enforcement actions</li> <li>- Conducts abatement activities</li> </ul>
Inspectional Services Director	<ul style="list-style-type: none"> <li>- Coordinates with the Board of Health and Department of Public Works</li> <li>- Manages building inspections and code enforcement</li> </ul>
Food Inspector	<ul style="list-style-type: none"> <li>- Conducts periodic and random inspections of FSEs</li> <li>- Notifies FSEs of local and federal pretreatment requirements</li> </ul>

### 3. FOG CONTROL REQUIREMENTS FOR FOOD SERVICE ESTABLISHMENTS

The City's FOG Ordinance requires all new, renovated, and existing FSEs having the potential to discharge FOG to install and maintain either a grease trap or interceptor, depending on discharge flow rates. Plans and documentation of FOG control devices are submitted to the City with the FOG Permit application at the time of annual application for a food service permit.

Grease traps and interceptors are plumbing devices that intercept the majority of greases and solids before they are introduced into the sewer system. Grease traps, described in Section 3.1.1, are hydromechanical units designed for handling flows up to 50 gallons per minute (gpm) that are installed indoors. Grease interceptors, described in Section 3.1.2, are larger units installed outdoors under the ground surface and designed for flow greater than 50 gpm. Both types of devices must be inspected and cleaned on a regular basis to be in continuously effective operation.

An existing FSE will be required to verify that the establishment's FOG control device meets current regulations and standards. If an existing FOG control device is determined to be under-sized, substandard, or inadequately maintained to prevent FOG from entering the sewer system, the FSE will be required to upgrade their device to meet the City's new FOG Ordinance and FOG Program requirements.

#### 3.1 INSTALLATION OF FOG CONTROL DEVICES

##### 3.1.1 Grease Traps

A grease trap is an interior single compartment hydromechanical device, typically constructed from stainless steel that is designed to retain grease from one or more fixtures. As shown in Figure 3-1 – *Typical Interior Hydromechanical Grease Trap*, these traps use air entrapment, grease's buoyancy in water, and hydromechanical separation to continuously separate FOG from water. Grease traps are installed indoors as near as possible to the source of wastewater, and have a maximum rated flow of 50 gpm. Up to four fixtures may be attached to a single grease trap.

The design, sizing, and testing of grease traps are regulated by 248 CMR 10.09 of the State Uniform Plumbing Code based on the flow rate expressed in gpm; refer to **Appendix B** for an excerpt of the Code with recommended grease trap sizing procedures. Additional performance standards for hydromechanical grease traps include the Plumbing and Drainage Institute (PDI) Standard PDI-G101 and American Society of Mechanical Engineers (ASME) Standard A112.14.3.

**Figure 3-1: Typical Interior Hydromechanical Grease Trap**

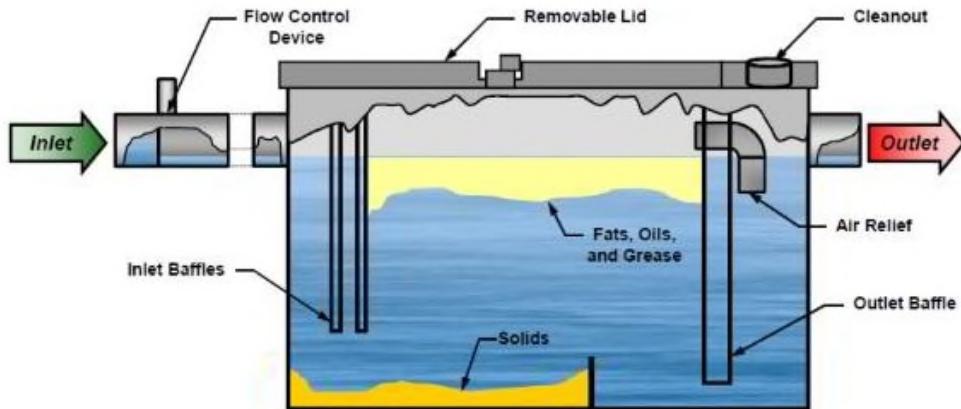


Image from [www.inspectapedia.com](http://www.inspectapedia.com)

### 3.1.2 Grease Interceptors

A grease interceptor is an outdoor multi-compartment device, typically constructed of concrete or stainless steel, which relies solely on gravity to retain grease from one or more fixtures. Grease interceptors are installed below grade outside the building and are significantly larger than interior grease traps to allow for flow rates exceeding 50 gpm. As shown in Figure 3-2 – *Typical Exterior Gravity Grease Interceptor*, the larger volume of these units increases the retention time of influent water, giving the buoyancy of the FOG in wastewater enough time to achieve separation from the flow stream.

The design, sizing, and testing of grease interceptors are regulated by 248 CMR 10.09 of the State Uniform Plumbing Code based on effective capacity expressed in gallons; refer to **Appendix B** for an excerpt of the Code with recommended grease interceptor sizing procedures. Additional design standards for gravity grease interceptors include the American Society for Testing and Materials (ASTM) International F2649 Standard Specification for Corrugated High Density Polyethylene (HDPE) Grease Interceptor Tanks and the International Association of Plumbing and Mechanical Officials (IAPMO) Standard Z1001.

**Figure 3-2: Typical Exterior Gravity Grease Interceptor**

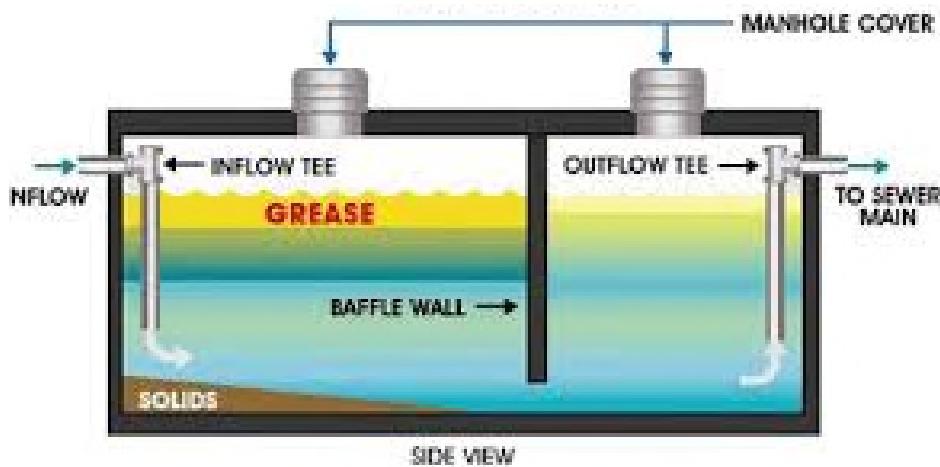


Image from [www.eastonutilities.com](http://www.eastonutilities.com)

## 3.2 INSPECTION AND MAINTENANCE OF FOG CONTROL DEVICES

### 3.2.1 General Requirements for Food Service Establishments

Grease traps and interceptors must be inspected and cleaned regularly in order to maintain their effectiveness and prevent discharge of FOG into the collection system. Inspections must be completed on a routine basis (either annually for grease traps or monthly for grease interceptors) by properly trained FSE employees. In addition to routine inspections, a qualified professional must inspect all grease traps/interceptors at least once per year. See **Appendix C** for example inspection and maintenance forms.

Properly trained FSE employees are permitted to conduct routine cleaning and maintenance of grease traps, but only licensed haulers approved by the Health Department may conduct cleaning and maintenance of interceptors. FSEs are required to clean out grease traps and interceptors when FOG and solids accumulate to 25% of the device volume (i.e. the “25% Rule”), or every three months for interceptors, whichever is sooner. FSE Owners must document the recommended cleaning frequency of each grease trap/interceptor installed at the establishment.

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All waste oils and collected grease must be either recycled or picked up for disposal by a registered hauler approved by the City. A list of approved haulers will be available on the Water & Sewer Department's website. An example Application for Grease Hauler Registration is included in **Appendix D**.

It is recommended that the FSE Owner witness all grease trap/interceptor cleaning and maintenance activities to verify their FOG control device is operating properly. Grease trap maintenance and cleaning personnel may take shortcuts or not perform the job appropriately, and witnessing maintenance activities helps ensure the necessary procedures are followed. If the FSE Owner chooses not to witness the grease trap/interceptor cleaning, another trained FSE employee should be present to witness the cleaning and sign the Grease Trap/Interceptor Cleaning & Disposal Log.

### **3.2.2 Grease Trap Cleaning Procedure**

Grease trap maintenance involves removing the entire volume (both liquids and solids) from the device and properly disposing of the material in accordance with all local, state, and federal laws. When performed at the appropriate frequency, grease trap maintenance can greatly reduce the discharge of FOG into the public sewer system. Pump out schedules should be established and strictly followed to prevent excessive oil and grease loading to wastewater.

Although grease trap maintenance is typically performed by grease haulers or recyclers, indoor grease traps may be maintained by properly trained FSE employees as allowed by the FOG Ordinance. For reference, a typical cleaning procedure for grease traps installed indoors is outlined below. Follow the manufacturer's recommended instructions for the specific device being maintained.

1. To facilitate cleaning, pump out water that has been separated from accumulated grease and solids in the trap. Discharge water to the sanitary sewer system.
2. Remove baffles if possible.
3. Dip the accumulated grease out of the trap and deposit in a watertight container.
4. Scrape or hose down the sides, the lid, and the baffles with a putty knife or scraper to remove as much of the grease as possible. Deposit the grease into a watertight container.
5. Contact an approved hauler or recycler for grease pick up (if one is not already performing the cleaning).
6. Refill the trap with water.
7. Replace the baffle and the lid.
8. Record the volume of grease removed in a Grease Trap/Interceptor Cleaning & Disposal Log.

**WARNING:** Do not use hot water, acids, caustics, solvents, or emulsifying agents when cleaning grease traps.

### **3.2.3 Recordkeeping**

The City's FOG Ordinance requires FSEs to keep records of all employee training, cleaning and inspection activities, and retain these records for inspection by the Health Department for at least three years.

Cleaning and disposal logs should include the following information at a minimum:

- Recommended cleaning frequency
- Date of maintenance
- Name of cleaning service (for interceptors) or FSE employee (for traps) who performed maintenance
- Effective volume taken up by FOG and solids before cleaning

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- Gallons pumped
- Signature of cleaner
- Signature of trained FSE employee

Keeping a cleaning log ensures that grease traps/interceptors are inspected and cleaned on a regular basis, and documents the frequency and volume of cleaning activities. The cleaning log can also serve as a tool for the FSE Owner to optimize cleaning frequencies and reduce operating costs.

### **3.3 BEST MANAGEMENT PRACTICES**

Best management practices (BMPs) are activities, prohibitions of practices, and maintenance procedures that prevent or reduce the pollution of waters. For the purposes of this Manual, BMPs include procedures and practices that reduce the discharge of FOG to the building drain and ultimately to the public sewer system. This section provides municipal inspectors, along with restaurant, fast food, and other food establishment owners, information about animal- and vegetable-based oil and grease pollution prevention techniques focused on food handling businesses.

It is strongly recommended that all FSE Owners implement BMPs to improve the performance of installed FOG control devices. BMPs in food preparation and clean up address a wide range of activities beyond routine inspection and maintenance of grease traps/interceptors, and following these will be effective in both reducing maintenance costs for business owners as well as preventing FOG discharges into the sewer system.

#### **3.3.1 Kitchen Staff Training**

It is important to train kitchen staff and other employees involved with food handling to follow BMPs to reduce FOG discharge to the building drain. Managers and owners will not always be present when FOG is encountered, so proper training for employees is necessary in order to fully achieve the benefits of the BMPs.

#### **3.3.2 “No Grease” Signs**

Post “No Grease” signs above sinks and on the front of dishwashers. These signs will serve as a constant reminder for staff working in kitchens to help minimize FOG discharge to grease traps/interceptors, as well as reduce the cost of cleaning and disposal for FSE Owners.

The following must be included near all grease traps installed indoors per the Uniform State Plumbing Code (248 CMR 10.09.2.m.3):

**“A laminated sign shall be stenciled on or in the immediate area of the grease trap or interceptor in letters one-inch high. The sign shall state the following in exact language: **IMPORTANT This grease trap/interceptor shall be inspected and thoroughly cleaned on a regular and frequent basis. Failure to do so could result in damage to the piping system, and the municipal or private drainage system(s).**”**

#### **3.3.3 Dry Wipe**

“Dry wipe” pots, pans, and dishware prior to dishwashing and dispose of excess grease and other food materials in the trash. This will reduce the amount of material sent to the grease trap/interceptor, and therefore reduce the frequency of cleaning and associated maintenance costs.

Some tips for “dry wipe” clean up include:

- Use rubber scrapers to remove fats, oils and grease from cookware, utensils, dishes, and serve ware.
- Use food grade paper to soak up oil and grease under fryer baskets.

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- Use paper towels to wipe down work areas. Cloth towels will accumulate grease that will eventually end up in your drain from towel washing.

### **3.3.4 Equipment Cleaning**

Prior to washing deep fryers, use a rubber spatula to squeegee down the sides while the grease is still warm, and then wipe the fryer with paper towels. Dispose of the paper towels in the trash.

Before washing grill and roaster/broiler drip pans, empty contents into a waste grease container, and then wipe the pan with paper towels. Dispose of the paper towels in the trash.

Capture waste grease and oily waters resulting from cleaning of stoves and ventilation/exhaust hoods for proper disposal. (Note that commercial hood cleaners must be approved and certified by the State Fire Marshal's Office in accordance with Massachusetts Board of Fire Prevention Regulations 527 CMR 11.)

### **3.3.5 Spill Prevention and Containment**

Preventing spills reduces the amount of waste on food preparation and serving areas that will require clean up. In addition, a dry workplace is safer for employees in avoiding slips, trips, and falls. For prevention of FOG spills:

- Empty containers, before they are full, to avoid spills.
- Use a cover when transporting "spillable" materials, particularly liquid wastes containing FOG.
- Provide employees with proper tools (ladles, ample containers, etc.) to transport materials without spilling.

Practice effective spill containment and clean up. Spills of dry ingredients should be swept or vacuumed to prevent them from being washed into sinks or floor drains. For containment of FOG spills:

- Block off all sinks and floor drains near the spill.
- Cover the spill with absorbent material (e.g., sand, sawdust, cat litter, paper towels).
- Remove spilled material and place it in the garbage.
- Use wet clean-up methods only to remove trace residues.

FSEs that use large amounts of cooking fats (such as in deep fat fryers) should develop and post their spill response procedures and maintain spill containment and absorbent supplies onsite.

### **3.3.6 Extend Oil Life in Fryers**

Skim or filter fryer grease daily and change oil when necessary. Use a test kit provided by a grocery distributor rather than simply "guess" to determine when to change the oil. This extends the life of both the fryer and the oil. Buildup of carbon deposits on the bottom of the fryer act as an insulator that forces the fryer to heat longer, thus causing the oil to break down sooner.

If multiple fryers are in use, develop a rotation system. Designate a single fryer for products that are particularly high in deposits, and change the oil of that one more often.

### **3.3.7 Recycling**

Think of oil and grease as a valuable commodity. When using deep fryers or any process that requires or produces large amounts of plant or animal byproducts, collect the oils and fats. Recycle the oils and fats through a local recycling company if feasible. To practice recycling:

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- Never dispose of fryer-vat, waste oils and fats down the drain, as this material is usually clean enough to be recycled.
- Collect and store fryer-vat waste in a rendering tank. Most recycling companies will provide outside receptacles for storage until pickup. Some companies will offer services free-of-charge, and others will give a rebate on the materials collected.

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## 4. FOG PERMITTING, INSPECTION, AND ENFORCEMENT

As described in Section 2, the City's FOG Program is managed by the Water & Sewer Department, with assistance from the Inspectional Services Department for inspecting FSEs and overseeing enforcement actions as an agent to the Board of Health. The workflow diagram shown in Figure 4-1 – FOG Workflow illustrates each department's role within the FOG Program. This section describes the procedures that will be implemented by the City to ensure that FSEs comply with the FOG Program requirements.

### 4.1 ANNUAL FOG PERMIT

Per the City's FOG Ordinance, all FSEs that use, generate, or store FOG are required to file an annual FOG Permit Application at the time of application for a Food Service Permit. Documentation relating to FOG control devices installed at the FSE must be submitted with the FOG Permit Application for review by the Water & Sewer Commissioner before the FOG Permit will be issued. See **Appendix E** for a copy of the City's FOG Permit Application.

The Food Inspector shall not issue a Food Service Permit until the applicant has obtained a completed FOG Permit Application signed by the Water & Sewer Commissioner. The City's annual Food Service Permit renewal notice and Procedures for Food Services/Retail Food Establishment checklist have been updated to ensure that FSE Owners are aware of FOG Permit requirements. Revised City documents are included in **Appendix E**.

For FSEs that are not required to apply for a local Food Service Permit (e.g. wholesale food businesses permitted through the State), the Water & Sewer Department will mail out separate FOG Permit renewal notices. Applications will be filed on an annual basis.

### 4.2 TEMPORARY ESTABLISHMENTS AND EVENTS

All temporary FSEs and events that use, generate, or store FOG are required to submit a written FOG Management Plan for review by the Water & Sewer Commission before the Food Inspector will issue a Temporary Food Service Permit. A FOG Management Plan template for temporary FSEs is included in **Appendix F**.

### 4.3 MANDATORY INSPECTIONS

The FOG Ordinance provides the legal authority for the City to enter and inspect the facilities of every establishment connected to the sewer collection system. The Food Inspector is responsible for conducting random inspections at FSEs to ascertain whether the requirements of the FOG Ordinance are being met. The FOG Ordinance requires that FSE Owners allow City personnel access to the FOG-related equipment at all reasonable times and to all parts of the premises for the purposes of inspection. The City has the right to set up on the user's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations. Denial or unreasonable delay of the City's access to the user's premises is considered a violation of the FOG Ordinance.

Mandatory inspections at FSEs may be required in the event that the Water & Sewer Department field crews identify excessive FOG during inspection or maintenance of the sewer collection system. The City's field crews will remove FOG from the sewer collection system using the City's jetter trailer, which has a specialized flusher head designed to remove grease from pipes. Once the blockage or buildup is cleared, follow-up closed-circuit television (CCTV) inspection of the sewer line may be conducted to identify the source(s). The Water & Sewer Commissioner will notify the Inspectional Services Department to inspect upstream FSEs for suspected noncompliance.

In addition to random mandatory inspections, the Food Inspector will conduct at least one inspection per year at each permitted FSE to verify compliance with FOG control and other food service requirements.

## 4.4 ENFORCEMENT

Noncompliance with the City's FOG Program is considered a violation of the national and local pretreatment regulations, and may result in escalating enforcement action by the City. The preferred approach to address compliance problems is to pursue voluntary compliance from the FSE Owner. Often, Owners are not aware of problems on their properties that may constitute a violation. In these cases, providing the Owner with information on the problems, reference to any relevant code sections, potential environmental consequences, and suggestions on how to implement corrective actions may be enough to secure voluntary compliance. FSEs found to have improper FOG control will be notified in writing of the deficiencies and required improvements, and given a compliance deadline not to exceed six months from the date of notification in accordance with the FOG Ordinance.

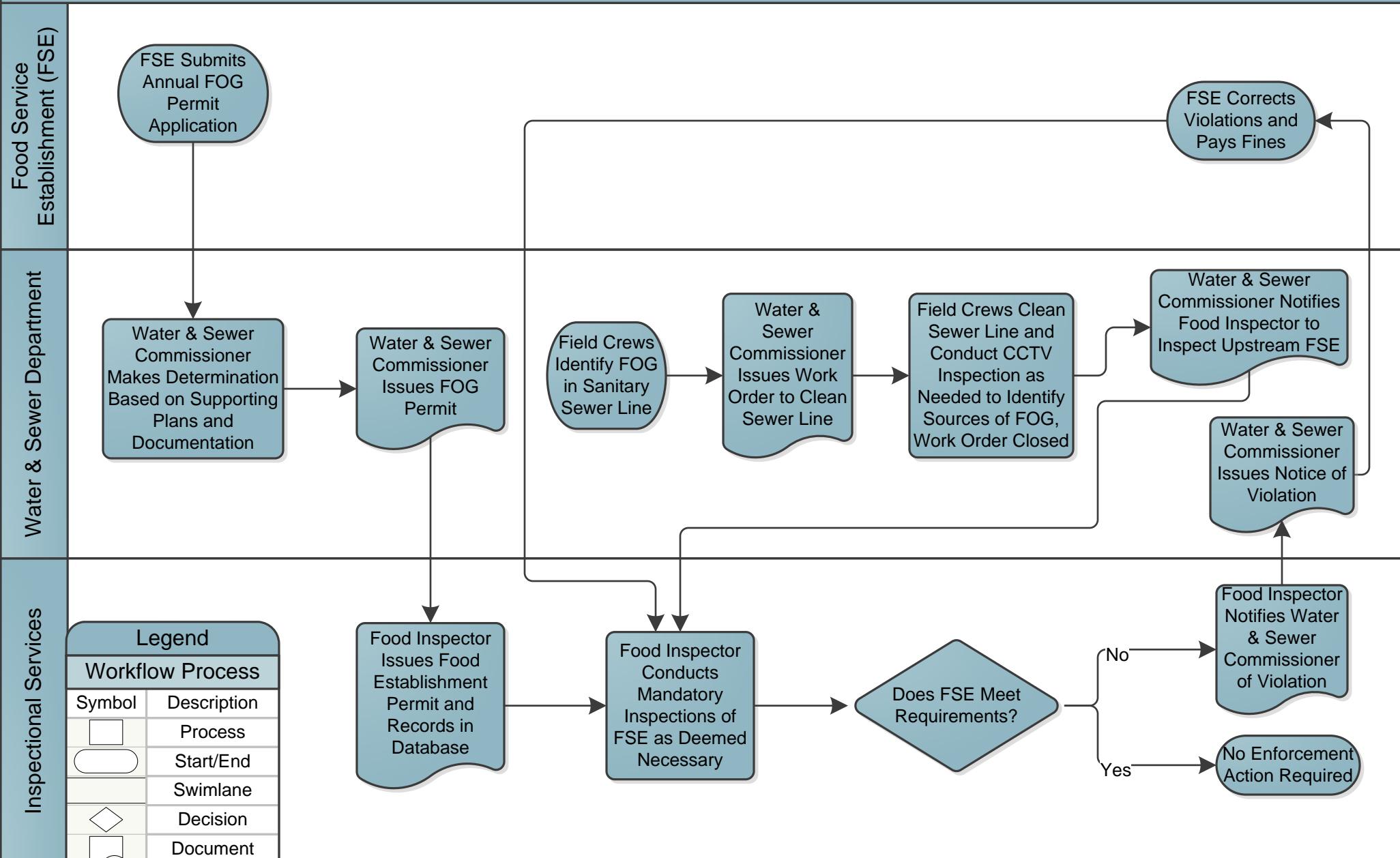
When voluntary compliance cannot be obtained with the allowed timeframe or does not produce the desired result, the City will pursue follow-up enforcement action authorized under its regulatory authority. Enforcement actions will be the responsibility of the Board of Health and the Water & Sewer Commissioner. Violations that are more serious or continued non-compliance may warrant a more aggressive enforcement approach, such as suspending water service, if an "imminent and substantial danger" exists. Table 4-1 – *Enforcement Procedures* outlines detailed enforcement steps.

**Table 4-1: Enforcement Procedures**

Enforcement Step	Responsibilities
Step 1 – Initial Actions	<ul style="list-style-type: none"> <li>- Conduct onsite compliance meeting with FSE Owner to document and discuss violations</li> <li>- Set compliance date (determined on an individual basis)</li> <li>- Educate FSE Owner</li> <li>- Encourage voluntary compliance</li> </ul>
Step 2 – Follow-up Actions	<ul style="list-style-type: none"> <li>- Conduct site visit as needed to verify compliance and completion of work</li> <li>- Send "notice of violation" letter<sup>1</sup>, as specified in the FOG Ordinance, indicating unresolved issues will be referred to prosecutor</li> <li>- Request evidence of corrected problem</li> </ul>
Step 3 – Final Actions	<ul style="list-style-type: none"> <li>- Send second "notice of violation" letter<sup>1</sup></li> <li>- Prosecutor to commence fines in accordance with the FOG Ordinance</li> </ul>

<sup>1</sup> Document copies of all written notifications.

Figure 4-1: FOG Workflow



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## 5. TRAINING AND PUBLIC EDUCATION PROGRAM

### 5.1 ANNUAL EMPLOYEE TRAINING

Employee training is an important component of the City's FOG Program. City staff responsible for implementing the FOG Program, including those that review grease trap/interceptor plans and documentation, notify FOG Permit applicants, spend time doing site inspections or maintain tracking database, will be trained to conduct these activities, perform thorough site inspections, identify FOG control problems, recognize violations, and document findings.

Training will be conducted annually and as needed for staff turnover. Topics may vary each year based on staffing education needs. See **Appendix G** for an example of the staff training presentation.

### 5.2 PUBLIC EDUCATION PROGRAM

A Public Education Program will be implemented to educate FSE Owners and residents on the impacts of FOG, and assist them with implementing BMPs to improve the public sewer system and maintain compliance with the City's FOG Ordinance. Messaging revolves around the elimination of SSOs that can pose a threat to public health. Educational materials will be available at no charge at the Water & Sewer Department office in City Hall, as well as electronically on the Water & Sewer Department website at [www.cityoflawrence.com/water](http://www.cityoflawrence.com/water). For convenience, materials will be available in both English and Spanish.

#### 5.2.1 FOG Outreach for Food Service Establishments

The City will inform FSEs of their obligations under the City's FOG Ordinance via an informational brochure that includes Frequently Asked Questions (FAQs) about FOG control devices and local regulations. The City will also provide "No Grease" signs and BMP poster templates for FSEs to use and post in the establishments to educate employees of BMPs for FOG control. See **Appendix H** for example outreach materials. FSEs targeted under this Program will include retail food establishments, schools, day care centers, food banks and pantries, and other businesses with the potential to discharge FOG into the public sewer system. The City maintains a current list of FSEs in the Inspectional Services Department, which will be used to target materials distribution. A list of FSEs with estimated average daily discharge volumes was previously submitted to EPA.

#### 5.2.2 FOG Outreach for General Public

The City provides a general awareness of BMPs relating to FOG control on the Water & Sewer Department website and in the City's Annual Drinking Water Quality Report. The City also plans to develop targeted educational brochures for the public that will be inserted into residential water and sewer bills to improve awareness of FOG-related issues.

Additionally, the City recently partnered with Groundwork Lawrence (GWL) to submit an application for the EPA's 2015 Healthy Communities grant program in support of GWL's "Climate Change Mitigation & Storm Water Education in Lawrence" project. This grant will help expand the scope of outreach messaging to Lawrence residents regarding the City's susceptibility to climate change impacts and environmental damage caused by improper FOG disposal.

## 6. PROGRAM TIMELINE AND MILESTONES

The City will implement the FOG Program outlined in this Manual on the schedule as follows:

FOG PROGRAM SCHEDULE (2015-2016)	2015				2016			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Update FOG Ordinance	■							
Draft FOG Program Manual for Regulatory Review		■						
Compile Educational Materials for FSEs & Public		■	■					
Finalize FOG Program Manual per Regulatory Comments			■					
Conduct Staff Training				■				■
Implement Targeted Public Education Program				■	■	■	■	
Begin Accepting FOG Permit Applications				■	■	■		
Conduct Food Service Establishment Inspections	■	■	■	■	■	■	■	■
Conduct Sewer System Inspection & Maintenance	■	■	■	■	■	■	■	■
Issue Annual FOG Permit Renewal Notification				■	■	■		

Program success is based on conducted trainings, public outreach, proper installation and maintenance of grease traps/interceptors, periodic inspections, and volume of FOG removed from the public sewer system. The City will evaluate overall effectiveness in required compliance reporting under the federal Consent Decree.

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## 7. REFERENCES

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## APPENDIX A: FOG ORDINANCE

**CITY OF LAWRENCE  
APPROVED ORDINANCE  
DOC. 238/2014**

Be it ordained by the City Council of the City of Lawrence that the Revised Ordinances of the City of Lawrence are hereby further amended by:

**DELETING** the current section **13.08.270 (Grease, oil, and sand interceptors)**, and by **ADDING** the following new **Chapter 8.32 (Fats, Oils, and Grease Regulations)**, to be inserted in proper order:

**TITLE 8: HEALTH AND SAFETY**

**CHAPTER 8.32. FATS, OILS, AND GREASE REGULATIONS**

**8.32.010 Purposes**

The purpose of this chapter is to protect public health and safety and water quality by regulating the discharge of fats, oils, and grease (FOG) from food service establishments into the public sewer system. This chapter establishes standards for managing FOG and maintaining the systems conveying, collecting, and storing FOG waste products. The goals of this chapter are to (1) protect the City's infrastructure from the damaging effects of FOG, and (2) prevent sanitary sewage overflows that subject the City of Lawrence to unsanitary wastewater exposure, which in turn increases the potential of disease transmission and increases the risk of water pollution.

**8.32.020 Definitions**

**Best Management Practices (BMP):** activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters. For purposes of this chapter, BMPs for FOG reduction shall be in accordance with Board of Health guidelines.

**FOG (Fats, Oils, Grease):** organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. These substances are detectable and measurable using analytical test procedures established in the United States Code of Federal Regulations 40 CFR 136, as may be amended from time to time.

**Food Service Establishment:** includes, but is not limited to, any facility preparing and/or serving food for commercial use or sale. This includes restaurants, cafes, lunch counters, cafeterias, hotels, hospitals, convalescent homes, factory or school kitchens, catering kitchens, bakeries, grocery stores with food preparation and packaging, meat cutting and preparation (excluding grocery stores with only food warming operations), meat packing facilities and other food handling facilities not listed above where fats, oil and grease may be introduced into the community sewer system and cause line blockages and sewer overflows.

**Grease:** The accumulation of oils (animal or vegetable), fats, cellulose, starch, proteins, wax, lipids, or grease, whether emulsified or not, in the sanitary sewer system. These are substances that may solidify or become viscous at temperatures between thirty-two (32) degrees Fahrenheit and one hundred fifty degrees (150) Fahrenheit. FOG

**Grease Trap:** means for the purposes of this chapter, an *interior* hydromechanical device which is designed to retain grease from one or more fixtures. These units are typically housed indoor and have a maximum rated flow of 50 gallons per minute (GPM). The units shall be designed and sized in compliance with all current State Building and Plumbing codes. Grease Traps will be the minimum requirement for all FSE's with a license to discharge wastewater.

**Grease interceptor (sometimes called separators):** means, for purposes of this chapter, an *exterior* multi-compartment device, which relies solely on gravity, and is designed to retain grease from one or more fixtures. Interceptors shall be required for FSE's with a flow greater than 50 GPM, and shall be of a size and design in compliance with all current State Building and Plumbing codes.

**Owner:** An individual, person, firm, company, association, society, corporation, or group upon whose property the building or structure containing the Food Service Establishment (FSE) is located or will be constructed. "Owner" shall also include the owner of the FSE who may lease the building, structure, or a portion thereof, containing the FSE.

**Plumbing Code:** The current edition of the Massachusetts Plumbing Code.

**POTW:** publicly operated treatment works owned by the Greater Lawrence Sanitary District. This definition includes any devices or system used in the collection, storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid or solid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to the POTW treatment plant. For the purposes of this resolution, "POTW" shall also include any sewers that convey wastewater to the POTW from persons outside the City who are, by contract or agreement with the City, or in any other way, users of the POTW.

**User:** Any person, establishment, or facility, whether inside or outside the City limits, who contributes, causes, or permits the contribution of wastewater into the POTW.

### **8.32.030 Administration**

The Board of Health shall administer, implement, and enforce this chapter. Any powers granted to or duties imposed upon the Board may be delegated by the Board to its employees or any other authorized agent of the Board of Health. For purposes of this chapter, any of the following shall be deemed an authorized agent: the building commissioner, the inspectional services director, the water and sewer commissioner, the plumbing inspector, the food inspector the city engineer, fire or police personnel, and the director of the department of public works.

### **8.32.040 Regulations**

The Board of Health may promulgate rules and regulations to implement the purposes of this chapter.

### **8.32.050 Prohibitions**

No person shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will pass through the POTW or interfere with the operation or performance of the POTW. A user may not use dilution to achieve compliance and may not contribute the following substances to the POTW:

A. Any water or waste containing fats, wax, grease or oils, whether emulsified or not, in excess of 100 milligrams per liter or containing substances which may solidify or become viscous at temperatures between 32 and 150 degrees Fahrenheit and zero and 65 degrees Celsius.

B. Solid or viscous substances in amounts which may cause obstruction to the flow in a sewer or other interference with the operation of the POTW.

C. Any substance which may cause the POTW's effluent or any other product of the POTW such as residuals, sludges, or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with sludge use or disposal regulation or permits issued under the Clean Water Act.

Biological and/or chemical treatments are prohibited in grease interceptors in the City of Lawrence unless specifically approved by the Board of Health. It will be the responsibility of the FSE owner to provide adequate supporting documentation for review by the Board of Health.

### **8.32.060 Basic Requirements**

A. All FSEs are required to install a grease trap or interceptor. Grease traps shall be installed at FSEs with flows less than or equal to fifty (50) gallons per minute (GPM). Grease interceptors shall be installed at FSEs with flows exceeding fifty (50) GPM or as determined by the Board of Health or agent therefor, for purposes not inconsistent with this chapter.

B. No more than four fixtures shall be attached to one grease trap as required by the Plumbing Code.

C. The level in the grease trap/interceptor shall be kept below twenty-five (25) percent of the total volume of the unit.

D. All waste oils and collected grease shall be recycled or picked up for disposal by a grease hauler approved by the City of Lawrence.

### **8.32.070 Installation and Maintenance of Grease Interceptors**

A. All grease traps or grease interceptors shall be installed by a Plumbing Contractor licensed by the Commonwealth of Massachusetts and maintained by the user at the user's expense so as to be in continuously effective operation. Maintenance shall include the complete removal of all contents, including floatable materials, wastewater, sludge, and solids. Separation, decanting, or back flushing of the grease trap or interceptor or its wastes is prohibited.

B. All grease traps located within the FSE must be inspected and cleaned by the owner as recommended by the manufacturer, the Plumbing Code, and to the satisfaction of the Board of Health. Routine inspection and maintenance of grease traps may be performed by properly trained employees of the FSE. Such training shall comply with Board of Health guidelines and shall be documented with employee signatures and training dates. However, all traps shall be inspected at least once per year by a qualified professional. The owner shall be responsible for keeping employee training records, maintenance logs, and records of cleaning and inspections for at least three (3) years. Such records shall be available for inspection by the City at the City's request.

C. Grease interceptors must be inspected once per month on a set schedule and must be pumped if the FOG and sludge layers are twenty-five (25) percent of the effective depth of the interceptor or must be pumped every three (3) months, whichever is sooner. Routine inspection of grease interceptors may be performed by properly trained employees of the FSE. Pumping shall be performed only by a licensed hauler approved by the Board of Health. However, all traps shall be inspected at least once per year by a qualified professional. The owner shall be responsible for keeping employee training records, maintenance logs, and records of cleaning and inspections for at least three (3) years. Such records shall be available for inspection by the City at the City's request.

D. FSEs may petition the Board of Health to adjust the maintenance schedule for grease traps or interceptors. The petition must be in writing and include six months of maintenance reports and supporting documentation from a licensed hauler or plumber with a detailed explanation for the adjustment to the cleaning frequency.

Variances may be approved at the discretion of the Board of Health and reviewed on a yearly basis. The Board may specify additional FOG management requirements or implementation of Best Management Practices as a condition of the approval.

E. If an FSE does not comply with proper interceptor maintenance, the Board of Health may require the facility to install a grease interceptor monitoring system at the owner's expense. The data from such monitoring device shall be submitted to the Board of Health on a monthly basis on a schedule determined by the Board of Health.

### **8.32.080 Inspection and Sampling**

The City may conduct mandatory inspections of every FSE connected to the sewer collection system as the City deems necessary, in its discretion.

The City has the right to enter and inspect the facilities of any user to ascertain whether the purposes of this chapter are being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created, discharged or suspected to be discharged, shall allow City personnel ready access at all reasonable times to all parts of the premises for the purposes of inspection, sampling, records examination, and copying or the performance of any of their duties. The City shall have the right to set up on the user's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations. Denial of the City's access to the user's premises shall be a violation of this resolution. Unreasonable delays may constitute denial of access.

### **8.32.090 FOG Permit**

A. Application for a FOG Permit shall be filed by the FSE owner at the time of annual application for a food service permit. The FOG Permit application and supporting plans and documentation shall be in accordance with the rules and regulations of the Board of Health. Such documentation shall include, but may not be limited to, identification of Best Management Practices implemented by the FSE or to be instituted by the FSE during the effective period of the permit.

B. As of July 1, 2015, all food service establishments in the City of Lawrence that use, generate, or store FOG will be required to hold a FOG Permit.

C. All temporary food service establishments and events that use, generate, or store FOG shall have a written FOG management plan before the Board of Health will issue a temporary food service permit.

### **8.32.100 Substandard Grease Interceptors**

A. Any FSE without a grease trap or interceptor will be given a compliance deadline not to exceed six (6) months from date of notification to have approved and installed grease traps or interceptors.

B. In the event an existing FSE's grease traps or interceptors are either under-designed or substandard in accordance with this chapter, the owner(s) will be notified in writing of the deficiencies and required improvements, and given a compliance deadline not to exceed six (6) months to conform to the requirements of this standard.

C. The Board of Health or its agent must approve control devices and grease trap or interceptor design prior to installation.

### 8.32.110 Enforcement

A. The Board of Health or its authorized agent shall enforce this chapter or the regulations thereunder, any orders, violation notices, and enforcement orders, and may pursue any and all civil and criminal remedies for such violations. The procedures for enforcement of this chapter shall be in accordance with Title 20, Section 20.01.130 of the Lawrence Municipal Code.

B. In addition to the provisions of Subsection A above, FSEs committing one of the offenses listed herein shall be assessed the corresponding amounts on a calendar year basis. These fines will be billed no less than quarterly and are payable upon receipt. The fines provided for in this section are not exclusive and do not prohibit the Board of Health from using any other remedy provided by law. Each day, or part thereof, that a violation of this chapter occurs or continues shall constitute a separate offense.

	<b>First Offense</b>	<b>Second Offense</b>	<b>Third Offense and Up</b>
<b>Minor Violation,</b> such as failure to submit records; inspection hindrance (equipment related); failure to maintain on site; failure to pump grease and submit record	\$50	\$100	\$150
<b>Intermediate Violation,</b> such as failure to maintain necessary equipment (T's, grease trap not watertight, baffles, etc.)	\$100	\$250	\$500
<b>Major Violation,</b> such as source of sewer blockage (minimum); source of sanitary sewer overflow (minimum), or falsification of maintenance records	\$500	\$1,000	\$1,500

Attest: William J. Maloney, City Clerk

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**ORD NO: 2015-40**

**- APPR DATE: 3-17-15**

**-EFF DATE: 3-17-15**

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**DATE POSTED:**

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## APPENDIX B: RECOMMENDED GREASE TRAP/INTERCEPTOR SIZING PROCEDURES

Note: The grease trap/interceptor sizing procedures provided below are for **reference only** based on the Uniform State Plumbing Code regulations 248 CMR 10.00. For more information on sizing FOG control devices for your establishment, consult with a plumbing contractor licensed in the Commonwealth of Massachusetts.

## PROCEDURES FOR SIZING GREASE INTERCEPTORS

1. Grease traps and interceptors shall be sized in accordance with the following Recommended Procedures For Sizing Grease Interceptor and 248 CMR 10.22: Figure 22.
2. Recommended Procedures and Formulas for Installing Grease Traps and Interceptors. As a general rule it is recommended that traps and interceptors be sized in accordance with the formulas indicated in 248 CMR 10.09: Tables 1 through 3. It is favorable policy to size the interceptor so that its rated capacity is never less than 40% of the individual fixture capacity in gallons. In the example below the actual fixture capacity is 59.8 Gals. and 40% of this would be 23.9 Gals. It is understood that a drainage period other than one or two minutes can be used.

**Table 1: RECOMMENDED PROCEDURE FOR SIZING GREASE TRAPS AND INTERCEPTORS INSIDE BUILDINGS**

EXAMPLE (Single Compartment)

STEP 1. Determine the cubic content of the fixture by multiplying length x width x depth, (of each comp)	A sink 48" long by 24" width by 12" deep.  Cubic content $48" \times 24" \times 12" = 13,824 \text{ cu. in. or Cubic contents } 4' \times 2' \times 1' \times 7.5 \text{ Gals.} = 60 \text{ Gals.}$
STEP 2. Determine the total capacity in gallons.  1 gallon = 231 cubic inches	Contents in Gallons $13,824/231 = 59.8 \text{ Gals.}$
STEP 3. Determine actual drainage load. The fixture is usually filled to approximately 75% of the capacity with waste water. The items being washed displace about 25% of the fixture content. Actual drainage load = 75% of fixture capacity.	Actual Drainage Load $.75 \times 59.8 \text{ Gals.} = 44.9 \text{ Gals}$
STEP 4. Determine the flow rate and the drainage period. In general, good practices dictate a one minute drainage period, however where conditions permit, a two minute period is acceptable. Drainage period is the actual time required to completely empty the fixture.	Calculate flow rate for 1 minute period.  Flow rate $44.9 \text{ Gals.} / \text{min.} = 44.9 \text{ G.P.M.}$  For 2 minute period  Flow rate $44.9 \text{ Gals.} / 2 \text{ min.} = 22.5 \text{ G.P.M.}$
STEP 5. Select the interceptor which corresponds to the flow rate calculated  Note: Select larger size when flow rate falls between two sizes listed.	
NOTE: The example above is representative of acceptable method(s) when purchasing an interceptor based on the total fixture flow rate capacity in gallons. When purchasing an interceptor based on grease retention pounds only, multiply the total gallon flow rate capacity of the fixture by two.	

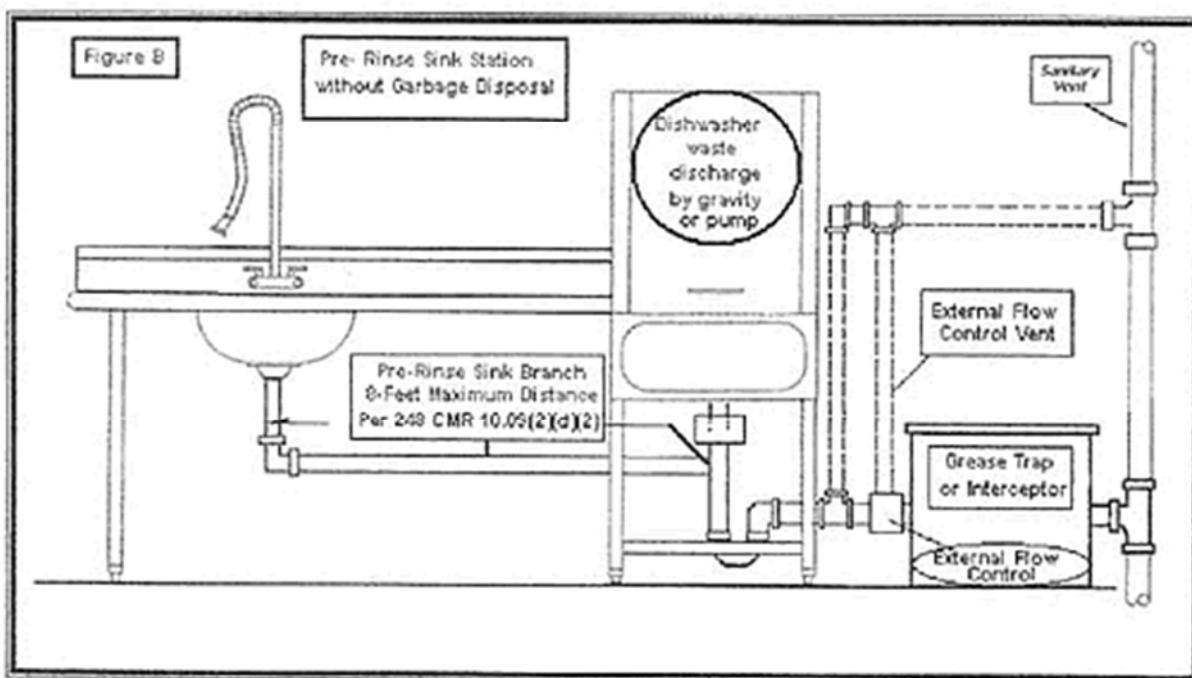
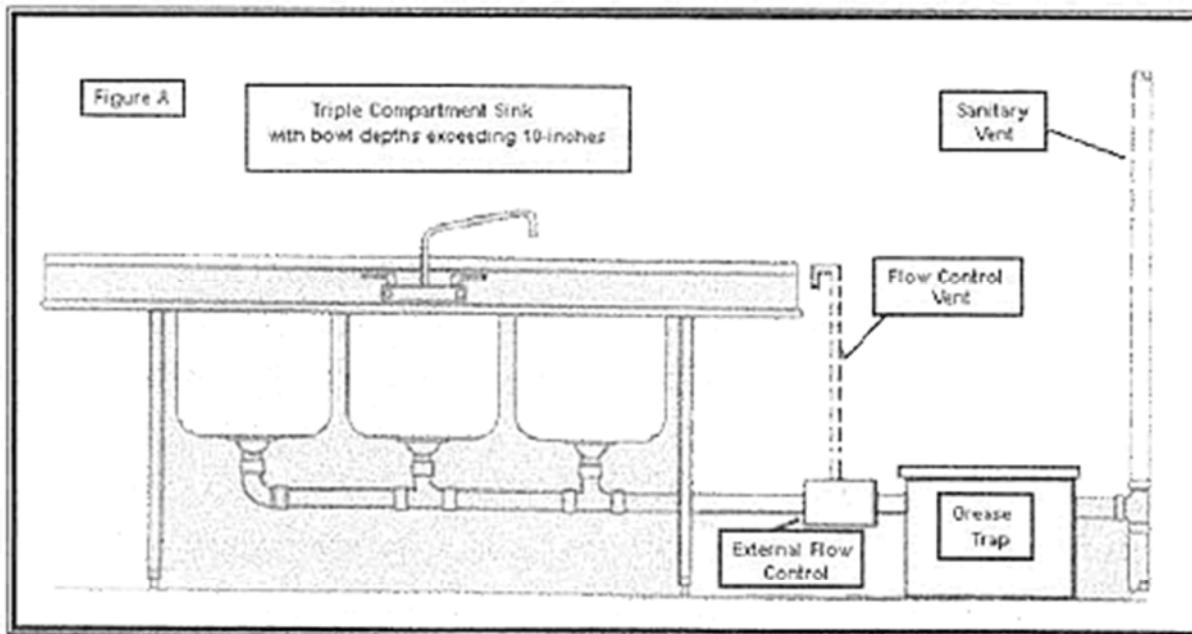
**Table 2: SIZING FORMULAS FOR LARGE CAPACITY GREASE INTERCEPTORS  
(INSIDE OR OUTSIDE BUILDINGS)**

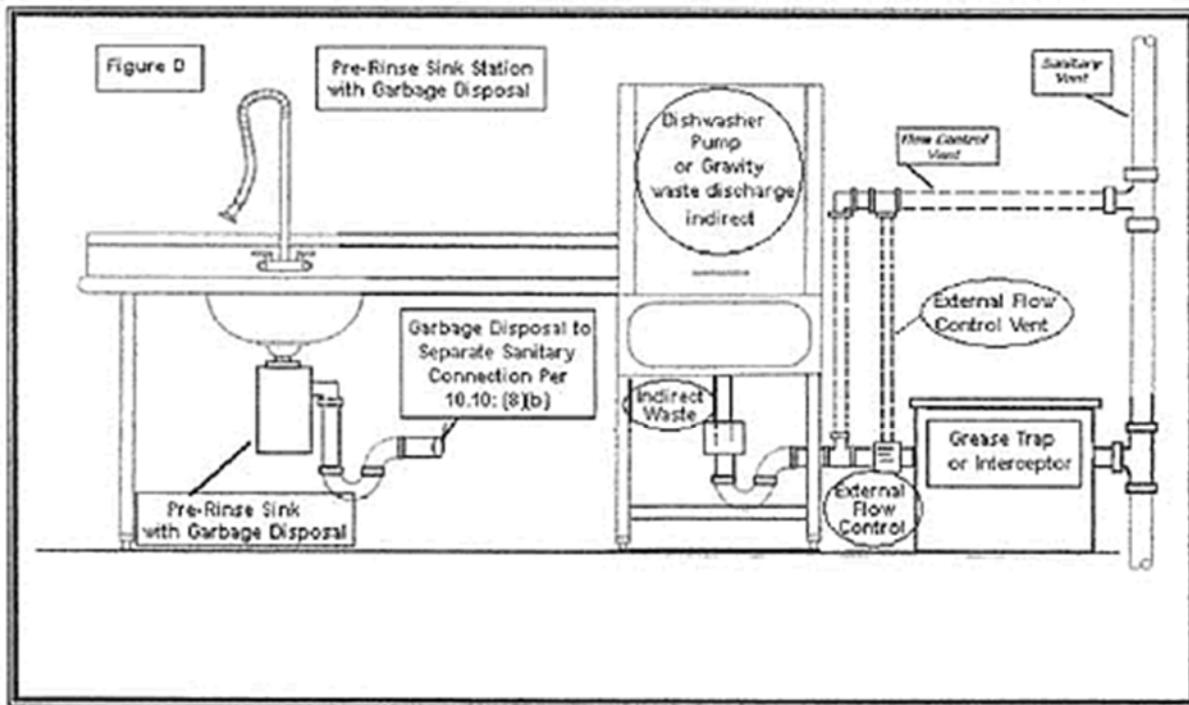
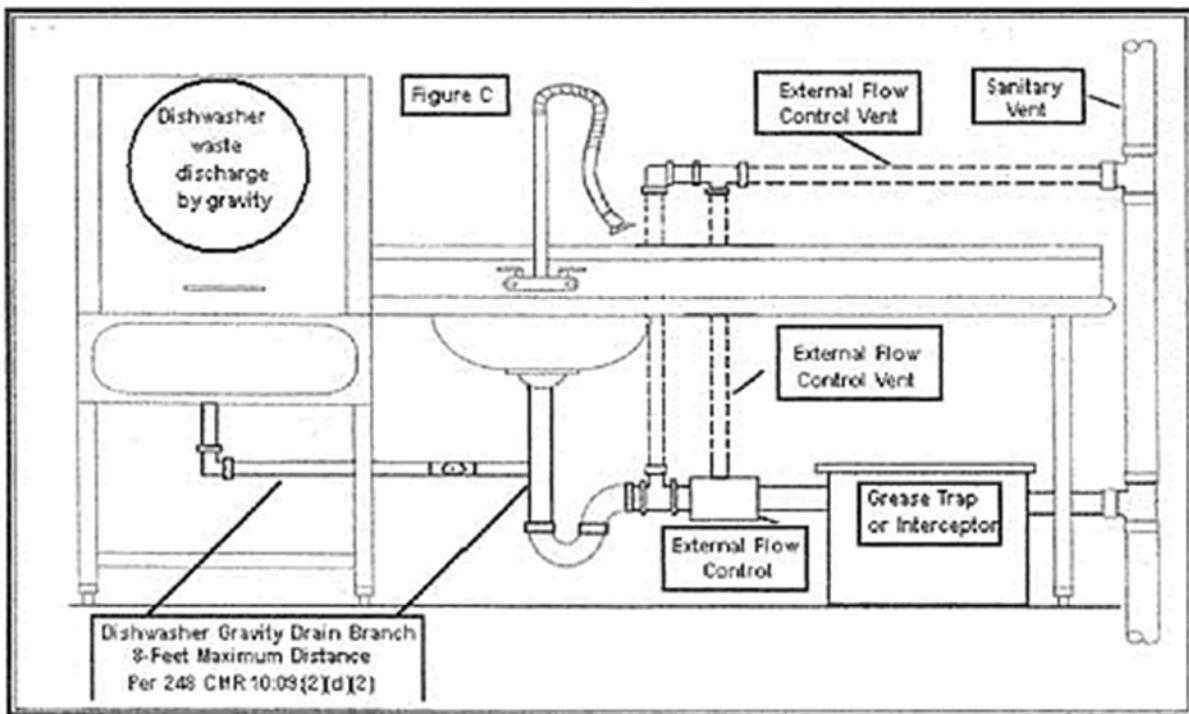
For Restaurants:	Other Establishments with Commercial Kitchens:
$(S) X (GS) X (HR/12) X (LF) = \text{Effective Capacity of Grease Traps and Interceptors in Gallons}$	$(M) X (GM) X (LF) = \text{Effective Capacity of Grease Traps and Interceptors in Gallons}$
WHERE:	WHERE:
<p>S = Number of Seats in Dining Area</p> <p>GS = Gallons of Waste Water Per Seat:</p> <p>HR = Number of Hours Restaurant is Open.</p> <p>LF = Loading Factor</p> <p>Use 25 Gallons for Restaurants with China Dishes and/or automatic dishwashers</p> <p>Use 10 Gallons for Restaurants with Paper or Baskets and No Dishwashers.</p>	<p>M = Meals Prepared Per Day</p> <p>GM = Gallons of Waste Water Per Meal (Use 5 Gallons)</p> <p>LF = Loading Factor</p> <p>Use 1.00 with dishwashing machines and 0.75 without dishwashing machine.</p>
Loading Factors:	
<p>Use 2.00 Interstate Highway,</p> <p>Use 1.00 Main Highway,</p> <p>Use 0.75 Other Highways</p> <p>Use 1.50 Other Roadways</p> <p>Use 1.25 Recreational Areas</p>	

**Table 3: CAPACITY OF GREASE TRAPS AND INTERCEPTORS**

Total Flow Through Rating (g.p.m)	Grease Trap/Interceptor Retention Capacity (pounds)
4	8
6	12
7	14
9	18
10	20
12	24
14	28
15	30
18	36
20	40
25	50
35	70
50	100

## Illustrations of Installation of Grease Interceptors







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## APPENDIX C: EXAMPLE INSPECTION AND MAINTENANCE FORMS

## Grease Trap/Interceptor Cleaning & Disposal Log

# Registro de Limpieza y Eliminación de Trampa/Interceptador de Grasa

<b>Nombre de la Empresa:</b>					
<b>Dirección:</b>			<b>Teléfono:</b>		
<b>Marca, Modelo y Tamaño de Trampa/Interceptador de Grasa:</b>					
<b>Frecuencia de Limpieza Recomendada (marque uno):</b> <input type="checkbox"/> Diariamente <input type="checkbox"/> Semanal <input type="checkbox"/> Quincenal <input type="checkbox"/> Mensual <input type="checkbox"/> Otro:					
<b>Compañía de Servicio Usada:</b>					
<b>Fecha</b>	<b>Limpiado por</b>	<b>Testificado por</b>	<b>Galones Eliminados</b>	<b>Sitio de Eliminación de Grasa</b>	<b>Comentarios</b>
<p>Certifico que este documento fue preparado bajo mi instrucción o supervisión. La información presentada es, a lo mejor de mi conocimiento y creencia, verdadera, precisa y completa. Todos los registros de limpieza e inspecciones serán mantenidos en la empresa por al menos 3 años, de acuerdo con la Ordenanza de FOG de la Ciudad. Fracaso de proveer copias de registros de limpieza e inspecciones durante una inspección de la Ciudad puede resultar en multas u otras penalidades.</p>					
<b>Nombre:</b>			<b>Título:</b>		
<b>Firma:</b>			<b>Fecha:</b>		

## Grease Trap/Interceptor Inspection Log

## Registro de Inspección de Trampa/Interceptador de Grasa

<b>Nombre de la Empresa:</b>		
<b>Dirección:</b>		<b>Teléfono:</b>
<b>Marca, Modelo y Tamaño de Trampa/Interceptador de Grasa:</b>		
<b>Compañía de Servicio Usada (si aplica):</b>		
<b>Fecha</b>	<b>Inspeccionado por</b>	<b>Comentarios</b>
<p>Certifico que este documento fue preparado bajo mi instrucción o supervisión. La información presentada es, a lo mejor de mi conocimiento y creencia, verdadera, precisa y completa. Todos los registros de limpieza e inspecciones serán mantenidos en la empresa por al menos 3 años, de acuerdo con la Ordenanza de FOG de la Ciudad. Fracaso de proveer copias de registros de limpieza e inspecciones durante una inspección de la Ciudad puede resultar en multas u otras penalidades.</p>		
<b>Nombre:</b>		<b>Título:</b>
<b>Firma:</b>		<b>Fecha:</b>

# Food Establishment FOG Control Inspection Checklist

<b>Inspector Name:</b>		<b>Date:</b>	
<b>Establishment:</b>		<b>Time Started:</b>	
<b>Address:</b>		<b>Time Completed:</b>	
<b>Contact Name:</b>		<b>Phone:</b>	
<b>Item No.</b>	<b>Item Description</b>	<b>Compliance Status<sup>1</sup></b>	<b>Comments</b>
1	Grease trap/interceptor maintenance log is available and up to date.		
2	Installed FOG control device(s) is(are) accessible with no obstructions that would prevent inspection and maintenance activities.		
3	The establishment has implemented a staff training program to ensure BMPs for FOG control are followed.		
4	“No Grease” signs are posted in appropriate locations.		
5	The establishment recycles waste cooking oil when possible and can provide records of this.		
6	Food waste is disposed of by recycling or solid waste removal and is not discharged to the grease trap(s)/interceptor.		
7	Grease trap(s)/interceptor is(are) cleaned regularly. Note and record frequency of cleaning.		
8	Grease trap/interceptor cleaning frequency is documented on a maintenance log.		
9	Outdoor grease and oil storage containers are covered and do not show signs of overflowing.		
10	Grease and oil storage containers are protected from discharge to storm drains.		
11	Absorbent pads or other spill control materials are onsite to clean up any spills or leakages that could reach floor or storm drains.		
12	Exhaust system filters are cleaned regularly, which is documented by cleaning records. Note and record frequency of cleaning.		

<sup>1</sup>Use the following codes for Compliance Status:

“C” = Compliance with the item

“V” = Violation of the item (provide explanation in Notes)

“N/A” = Not applicable (provide explanation in Notes)

“N/C” = Not checked (provide explanation in Notes)

# Food Establishment FOG Control Inspection Checklist

## Notes:

Inspector Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Lista de Comprobaciòn para la Inspecciòn de Control de FOG en Empresas de Servicio de Comida

<b>Nombre del Inspector:</b>		<b>Fecha:</b>	
<b>Empresa:</b>		<b>Tiempo de Empezar:</b>	
<b>Direcciòn:</b>		<b>Tiempo de Completar:</b>	
<b>Nombre del Contacto:</b>		<b>Telèfono:</b>	
<b>No. del Artículo</b>	<b>Descripcìon del Artículo</b>	<b>Estatus de Conformidad<sup>1</sup></b>	<b>Comentarios</b>
1	Registro de mantenimiento de trampas/interceptadores de grasa està disponible y puesto al dia.		
2	Aparatos de control de FOG estàn accesible sin obstrucciones que impedirian actividades de inspecciòn y mantenimiento.		
3	La empresa ha implementado un programa de capacitaciòn de empleados para asegurar que las mejores pràcticas de gestiòn de control de FOG sean seguidas.		
4	Señales que dicen "No Grasas o Aceites" estàn puestas en lugares apropiados.		
5	La empresa recicla aceite de cocina usado cuando es posible y puede proveer registros de esto.		
6	Se disponen los residuos de comida por reciclar or remociòn de residuos sòlidos y no se disponen a la(s) trampa(s)/interceptador(es) de grasa.		
7	Se limpia(n) la(s) trampa(s)/interceptador de grasa regularmente. Note y grabe la frecuencia de la limpieza		
8	Se documenta la frecuencia de la limpieza de la trampa/interceptador de grasa en un registro de mantenimiento.		
9	Los contenedores de grasa y aceite al aire libre estàn cubiertos y no tienen indicaciones de haberse desbordado.		
10	Se proctectan los contenedores de grasa y aceite de descargo a los colectors de aguas pluviales.		
11	Almohadillas absorbentes u otros materiales para controlar vertidos estàn en el sitio para limpiar cualesquieres vertidos o fugas que pudieran llegar a colectores de aguas pluviales o a desagués de piso.		
12	Se limpia los filtros para el sistema de escape regularmente, lo cual se documenta en registros de limpieza. Note y grabe la frecuencia de la limpieza.		

<sup>1</sup>Use los siguientes còdigos para notar el Estatus de Conformidad:

"C" = Conformidad con el articulo

"V" = Violaciòn del articulo (provee explanaciòn en los Comentarios)

"N/A" = No aplica (provee explanaciòn en los Comentarios)

"N/C" = No comprobado (provee explanaciòn en los Comentarios)

## **Lista de Comprobaciòn para la Inspecciòn de Control de FOG en Empresas de Servicio de Comida**

## Comentarios:

**Firma del Inspector:** \_\_\_\_\_ **Fecha:** \_\_\_\_\_



---

## APPENDIX D: APPLICATION FOR GREASE HAULER REGISTRATION



## APPLICATION FOR GREASE HAULER REGISTRATION

(Pursuant to Chapter 8.32 of the Revised Ordinances of the City of Lawrence)

---

### GENERAL INFORMATION

Name of Business \_\_\_\_\_ Date \_\_\_\_\_

Business Address \_\_\_\_\_

Type of Business (corporation, sole proprietor, partnership, etc.) \_\_\_\_\_

Mailing Address (if different) \_\_\_\_\_

Company E-mail Address \_\_\_\_\_

Business Telephone # \_\_\_\_\_ Fax # \_\_\_\_\_

Emergency/After Hours Business Telephone # \_\_\_\_\_

Designated Signatory Authority of the Business (person who is able to legally act on behalf of the business):

Name \_\_\_\_\_ Title \_\_\_\_\_

Address \_\_\_\_\_

Has the business been issued any penalties and/or fines relating to hauling waste?  Yes  No

List all permits currently held by the business associated with conducting grease removal, hauling, and/or disposal:

Permit Type	Permit No.	Issuing Agency

---

### SERVICE INFORMATION

Indicate service(s) provided by the business involving grease removal, hauling, and/or disposal:

<input type="checkbox"/> Pump Grease Traps/Interceptors	<input type="checkbox"/> Pump Septic Tanks
<input type="checkbox"/> Pump Portable Toilets	<input type="checkbox"/> Provide Grease Waste Treatment at a Separate Facility
<input type="checkbox"/> Provide Additional Plumbing Services	<input type="checkbox"/> Other (specify): _____

List all vehicles that will be used to pump or transport grease waste:

Vehicle Make/Model	License No.	Vehicle Capacity (gallons)

List all sites that are currently being used or anticipated to be used for disposal of grease waste:

1. Disposal Facility Name \_\_\_\_\_  
Disposal Facility Address \_\_\_\_\_  
Owner of Disposal Facility \_\_\_\_\_ Telephone # \_\_\_\_\_
2. Disposal Facility Name \_\_\_\_\_  
Disposal Facility Address \_\_\_\_\_  
Owner of Disposal Facility \_\_\_\_\_ Telephone # \_\_\_\_\_

(Attach additional sheets if necessary)



## APPLICATION FOR GREASE HAULER REGISTRATION

(Pursuant to Chapter 8.32 of the Revised Ordinances of the City of Lawrence)

---

### INSURANCE INFORMATION

Attach proof of an insurance policy or surety bond demonstrating that the business has the ability to respond to damages resulting from grease removal, hauling, and/or disposal.

---

### RECORDKEEPING

Registered Grease Haulers are required to maintain written documentation of maintenance and grease removal activities conducted at food service establishments (FSEs) in accordance with Chapter 8.32 of the Revised Ordinances. Records shall be provided to the FSE Owner and available for inspection by the City at the City's request for at least 3 years from the date of service.

---

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application, and affirm that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Print Name \_\_\_\_\_ Title \_\_\_\_\_

-----  
**TO BE COMPLETED BY THE WATER & SEWER DEPARTMENT:**

Signature of Commissioner \_\_\_\_\_ Date \_\_\_\_\_



---

## APPENDIX E: ANNUAL FOG PERMIT APPLICATION AND SUPPORTING DOCUMENTS



# FATS, OILS AND GREASE (FOG) PERMIT

## ESTABLISHMENT INFORMATION

Name of Establishment \_\_\_\_\_ Date \_\_\_\_\_

Business Address \_\_\_\_\_ Telephone # \_\_\_\_\_

Mailing Address (if different) \_\_\_\_\_

Name & Title of Applicant \_\_\_\_\_ Telephone # \_\_\_\_\_

Address of Applicant \_\_\_\_\_

E-mail \_\_\_\_\_

Name of Owner (if different from applicant) \_\_\_\_\_

## **FACILITY OPERATIONAL CHARACTERISTICS**

Days and Hours of Operation: \_\_\_\_\_

Indicate the quantity of each item that you currently have or will install in your facility:

<input type="checkbox"/> Grill	<input type="checkbox"/> Deep Fryer	<input type="checkbox"/> 3 Bay Pot Sink
<input type="checkbox"/> Oven	<input type="checkbox"/> Floor Drains	<input type="checkbox"/> 2 Bay Pot Sink
<input type="checkbox"/> Dishwasher	<input type="checkbox"/> Hand Sink	<input type="checkbox"/> Single Bay Sink
<input type="checkbox"/> Pre Rinse Sink	<input type="checkbox"/> Tilt Kettle/Crock Pot	<input type="checkbox"/> Other Equipment
<input type="checkbox"/> Mop Sink	<input type="checkbox"/> Garbage Disposal	

## DISCHARGE INFORMATION

Fill in the following information about your current wastewater flow (if known).

\_\_\_\_\_ Maximum Daily Flow (gpd) \_\_\_\_\_ Average Daily Flow (gpd)  
\_\_\_\_\_ No. of hours per day discharge occurs \_\_\_\_\_ Start Date of Discharge

## **GREASE TRAP/INTERCEPTOR INFORMATION**

ID #	Location	Make, Model & Size	New or Existing	Recommended Cleaning Frequency**

**\*\* Important Note:** At a minimum, grease traps and interceptors must be cleaned when FOG and solids accumulate to 25% of the device volume ("25% Rule").



## FATS, OILS AND GREASE (FOG) PERMIT

---

### SUPPORTING DOCUMENTATION CHECKLIST

Identify the supporting documentation attached to this form. If "Other" or "None", please provide an explanation.

- Copies of Grease Trap/Interceptor Cleaning & Disposal Logs
- Copies of Hauling Receipts/Waste Disposal Manifests
- Copies of Employee Training Records
- Other: \_\_\_\_\_
- None: \_\_\_\_\_

---

### GREASE DISPOSAL / HAULER OR GREASE RECYCLER INFORMATION

Name \_\_\_\_\_ Telephone # \_\_\_\_\_  
Name \_\_\_\_\_ Telephone # \_\_\_\_\_

A list of grease haulers is available on the Water & Sewer Department website: [www.cityoflawrence.com/water](http://www.cityoflawrence.com/water)

---

### BEST MANAGEMENT PRACTICES

Identify the Best Management Practices (BMPs) to be implemented by the permittee to minimize the adverse environmental effects of activities authorized under this permit. More information on BMPs is available in the FOG Program Manual on the Water & Sewer Department website: [www.cityoflawrence.com/water](http://www.cityoflawrence.com/water)

- Train kitchen staff.
- Clean grease traps/interceptors routinely.
- Witness all grease trap cleaning and maintenance.
- Dispose of used oil through a grease hauler.
- Recycle waste cooking oil.
- Keep maintenance logs.
- Post "No Grease" signs.
- Dry wipe pots, pans, and dishware prior to dishwashing.
- Cover outdoor grease & oil storage containers.
- Use absorbent pads or other material to clean up spilled fats, oils and grease.
- Other: \_\_\_\_\_

---

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application, and affirm that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information. I certify that upon approval of the permit, this establishment's operation and its resultant wastewater discharge will achieve consistent compliance with the City of Lawrence's FOG Ordinance and applicable federal and local wastewater discharge requirements.

Signature of Applicant \_\_\_\_\_ Date \_\_\_\_\_

*Please be aware that per Chapter 8.32 of the Revised Ordinances, the City of Lawrence has the right to inspect the facility to ensure all requirements of the FOG Ordinance are being met.*

---

### TO BE COMPLETED BY THE WATER & SEWER DEPARTMENT:

Signature of Commissioner \_\_\_\_\_ Date \_\_\_\_\_



# CITY OF LAWRENCE

## INSPECTIONAL SERVICES DEPARTMENT

BUILDING • PLUMBING INSPECTOR • FOOD INSPECTOR • HEALTH DEPARTMENT  
CODE ENFORCEMENT • WEIGHTS & MEASURES

City Hall • 200 Common Street • Lawrence, MA 01840  
Tel: (978) 620-3110 • [www.cityoflawrence.com](http://www.cityoflawrence.com)

Pascual Ruiz  
DIRECTOR OF INSPECTIONAL SERVICES/  
AGENT BOARD OF HEALTH

April 1, 2016

**Re: Annual Food Establishment Permit Renewal Notification**

Dear Food Establishment Owner:

This letter is to inform you that your annual Food Establishment Permit will expire on **May 31, 2016**. A renewal application must be submitted to this Department prior to the expiration date listed above to maintain a valid Food Establishment Permit. Under Massachusetts regulations 105 CMR 590 – State Sanitary Code Chapter X: Minimum Sanitation Standards for Food Establishments and the Federal *1999 Food Code*, “**a person may not operate a food establishment without a valid permit to operate issued by the regulatory authority.**”

Renewal Fees	
Food Establishment Permit	\$125.00
Late Fee Added to Applications Received after May 31	\$100.00
Milk Permit	\$20.00

All applicants for an annual Food Establishment Permit must:

- Have on staff at least one certified food protection manager in each affected establishment who has been issued a **Massachusetts certificate of allergen awareness training** per 105 CMR 590.009(G).
- Pay all outstanding taxes, water, sewer fines and fees to the City and obtain **signoffs from the Tax Collector, Water & Sewer Department, and Inspectional Services Department** per City Ordinance Section 25-10.
- When required, possess a **Certificate in Food Handling Practice** from an accredited program approved by this Department. *Note: Failure to do so will result your license not being renewed and/or suspension of your license to operate a food establishment. If this occurs, your food establishment will have to close until such time as you are in compliance with State regulations.*

**VERY IMPORTANT: YOU MUST BRING IN YOUR ORIGINAL CERTIFICATE IN FOOD HANDLING PRACTICE WHEN YOU COME IN TO APPLY FOR YOUR PERMIT.**

- **\*NEW FOR 2016\*** Have grease trap(s) or interceptor installed to control the discharge of fats, oils, and grease (FOG) into the public sewer system and **obtain a FOG Permit from the Water & Sewer Department** per revised City Ordinance Chapter 8.32.

Return applications and fees **in person** to: City Hall, Inspectional Services Department, Food Division, 200 Common Street, Room 209, Lawrence, MA. Do not mail applications. Payment must be submitted via check or money order made payable to City of Lawrence. **No cash will be accepted per City Ordinance.** If you have any questions, please contact this Department between 8:30-10:00 AM or 1:00-2:00 PM at (978) 620-3130.

Sincerely,

Valda Miller  
Food Inspector

*Este es un documento legal importante, puede que afecte sus derechos.  
Usted debe adquirir una traducción de este documento.*



# CITY OF LAWRENCE

INSPECTIONAL SERVICES DEPARTMENT

BUILDING • PLUMBING INSPECTOR • FOOD INSPECTOR • HEALTH DEPARTMENT

CODE ENFORCEMENT • WEIGHTS & MEASURES

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City Hall • 200 Common Street • Lawrence, MA 01840

Tel: (978) 620-3110 • [www.cityoflawrence.com](http://www.cityoflawrence.com)

Pascual Ruiz  
DIRECTOR OF INSPECTIONAL SERVICES/  
AGENT BOARD OF HEALTH

## PROCEDURES FOR FOOD SERVICES/ RETAIL FOOD ESTABLISHMENTS

### Certificates/Permits Required:

1. Business Certificate (City Clerk's Office, 1<sup>st</sup> Floor Room 107)
2. Certificate of Inspection (Building Department, 2<sup>nd</sup> Floor Room 209)
3. Food Services/Retail Food License/Milk License if applicable (Inspectional Services - Food Division, 2<sup>nd</sup> Floor Room 209)
4. Common Victualler License (Food Services & Catering Only) (Licensing Board, 2<sup>nd</sup> Floor Room 206)
5. Food Safety Course Certification
6. Allergy Awareness Certificate
7. Fats, Oils, and Grease (FOG) Permit (Water & Sewer Department, 2<sup>nd</sup> Floor Room 204)

---

8. Food Truck Requirements
  - i. Transient Vendor Application (City Clerk's Office)
  - ii. Signed Fats, Oils, and Grease Management Plan (Water & Sewer Department)
  - iii. Must have truck inspected by the Fire Department
  - iv. Must apply for a State Hawkers and Peddlers License

### CHANGE OF OWNERSHIP

If a change of ownership occurs in an existing business, that business shall remain closed until proper permits to re-open under new ownership have been approved by the Lawrence Board of Health. Failure to comply will result in immediate closure and a hearing before the Board of Health, before any license being granted to open.

**Do not mail applications. Sign offs are required from the Tax Collector, Water & Sewer Department, and Inspectional Services Department before any permit may be granted.**



---

## **APPENDIX F: FOG MANAGEMENT PLAN TEMPLATE FOR TEMPORARY ESTABLISHMENTS AND EVENTS**



# FATS, OILS AND GREASE (FOG) MANAGEMENT PLAN FOR TEMPORARY FOOD SERVICE ESTABLISHMENTS AND EVENTS

FOG refers collectively to the fats, oils, and grease found in kitchens and commercial food service establishments (FSEs). FOG that enters the public sewer system can build up until it completely blocks sewer pipes, causing raw sewage to back up inside buildings or overflow outside into streets and streams.

The City has implemented a FOG Program to reduce FOG discharge into the public sewer system and eliminate sanitary sewer overflows (SSOs) that can threaten public health. Per City Ordinance Chapter 8.32, **"all temporary food service establishments and events in the City of Lawrence that use, generate, or store FOG shall have a written FOG management plan before the Board of Health will issue a temporary food service permit."**

The purpose of this FOG Management Plan is to implement practices that will reduce the discharge of FOG entering the City of Lawrence's sewer system. Temporary food service permits shall not be issued until this Plan has been reviewed and signed by the Water & Sewer Commissioner.

## ESTABLISHMENT INFORMATION

Name of Establishment \_\_\_\_\_ Date \_\_\_\_\_

Mailing Address \_\_\_\_\_ Telephone # \_\_\_\_\_

Name & Title of Applicant \_\_\_\_\_ Telephone # \_\_\_\_\_

Address of Applicant \_\_\_\_\_

E-mail \_\_\_\_\_

Name of Owner (if different from applicant) \_\_\_\_\_

Event Location Name \_\_\_\_\_

Event Coordinator \_\_\_\_\_ Telephone # \_\_\_\_\_

## **FACILITY OPERATIONAL CHARACTERISTICS**

Type of Food Served \_\_\_\_\_

Days and Hours of Operation: \_\_\_\_\_

## DISCHARGE INFORMATION

Fill in the following information about your current wastewater flow (if known).

\_\_\_\_\_ Maximum Daily Flow (gpd) \_\_\_\_\_ Average Daily Flow (gpd)

## **BEST MANAGEMENT PRACTICES**

Identify the Best Management Practices (BMPs) to be implemented by the permittee to minimize the adverse environmental effects of activities authorized under this permit. More information on BMPs is available in the FOG Program Manual on the Water & Sewer Department website: [www.cityoflawrence.com/water](http://www.cityoflawrence.com/water)

- Train kitchen staff.
- Clean grease traps/interceptors routinely.
- Witness all grease trap cleaning and maintenance.
- Dispose of used oil through a licensed grease hauler.
- Recycle waste cooking oil.
- Post "No Grease" signs.
- Dry wipe pots, pans, and dishware prior to dishwashing.
- Cover outdoor grease & oil storage containers.
- Use absorbent pads or other material to clean up spilled fats, oils and grease.
- Other: \_\_\_\_\_



# FATS, OILS AND GREASE (FOG) MANAGEMENT PLAN FOR TEMPORARY FOOD SERVICE ESTABLISHMENTS AND EVENTS

## GREASE TRAP INFORMATION

ID #	Location	Make, Model & Size

## FOG DISPOSAL PROCEDURES

Describe specific procedures for collecting and disposing of fats, oils and grease from your temporary FSE or event:

## GREASE DISPOSAL / HAULER OR GREASE RECYCLER INFORMATION

Name \_\_\_\_\_ Telephone # \_\_\_\_\_  
Name \_\_\_\_\_ Telephone # \_\_\_\_\_

A list of grease haulers is available on the Water & Sewer Department website: [www.cityoflawrence.com/water](http://www.cityoflawrence.com/water)

## CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application, and affirm that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Signature of Applicant \_\_\_\_\_ Date \_\_\_\_\_

*Please be aware that per Chapter 8.32 of the Revised Ordinances, the City of Lawrence has the right to inspect the facility to ensure all requirements of the FOG Ordinance are being met.*

**TO BE COMPLETED BY THE WATER & SEWER DEPARTMENT:**

Signature of Commissioner  Date 



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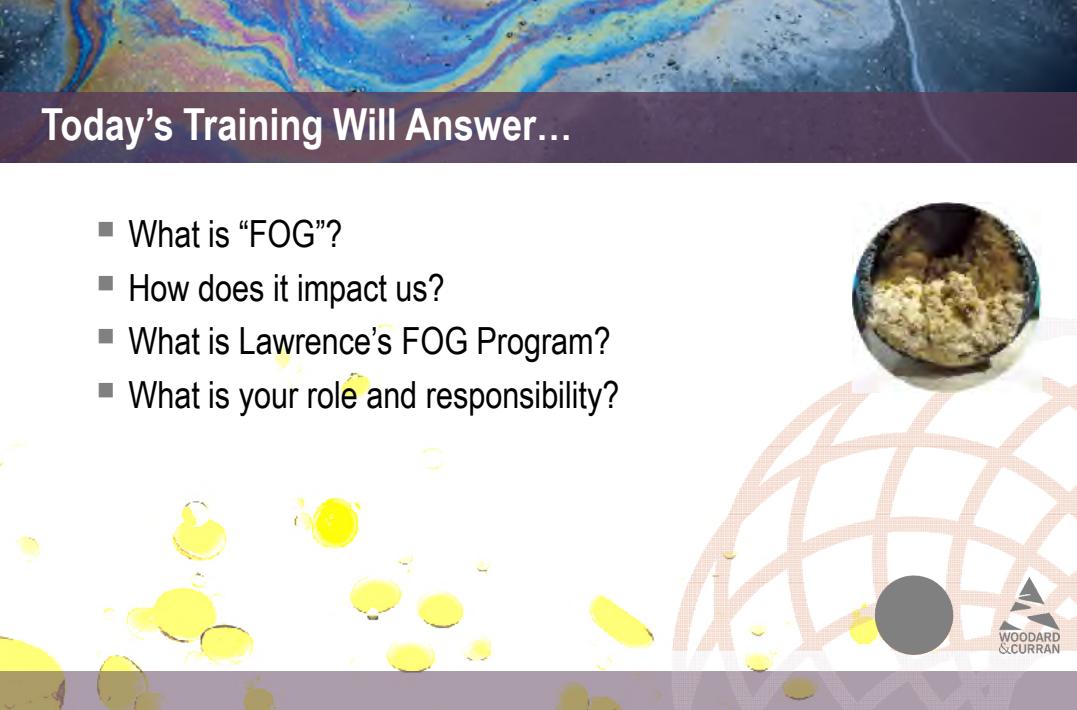
## APPENDIX G: TRAINING PROGRAM



WOODARD & CURRAN

2016

# Lawrence's Fats, Oils, and Grease (FOG) Program



WOODARD & CURRAN

## Today's Training Will Answer...

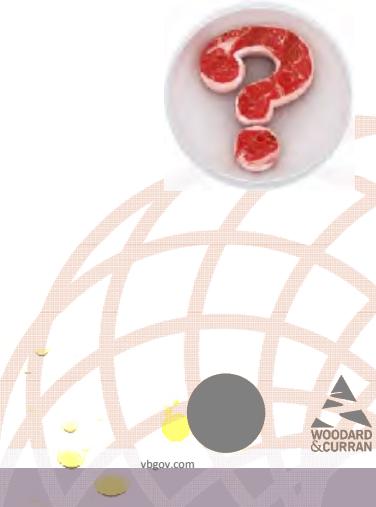
- What is “FOG”?
- How does it impact us?
- What is Lawrence's FOG Program?
- What is your role and responsibility?

WOODARD & CURRAN

WOODARD & CURRAN

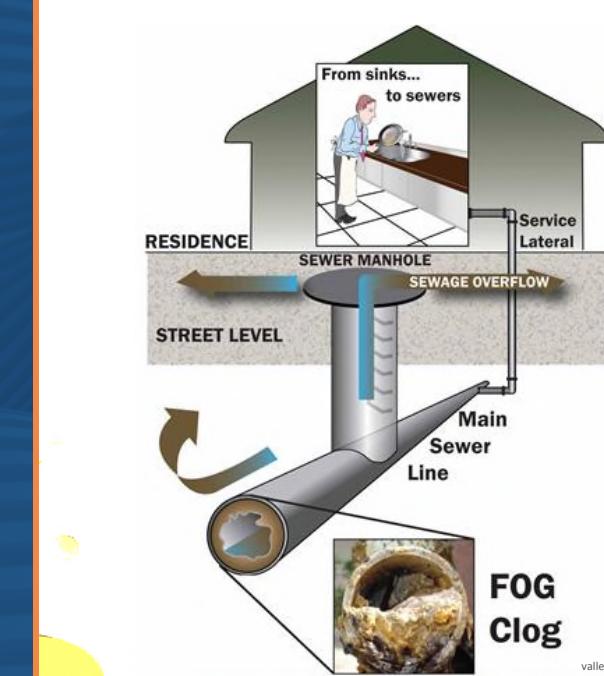
## What is “FOG”?

- Refers collectively to fats, oils, and grease
- Byproduct of cooking that is derived from plant and animal sources



vbgov.com

WOODARD & CURRAN



RESIDENCE

SEWER MANHOLE

SEWAGE OVERFLOW

STREET LEVEL

Service Lateral

Main Sewer Line

From sinks... to sewers

FOG Clog

valley-sanitary.org

### Sewer Blockage Formation

The start of a blocked pipe begins when grease and solids collect on the top and sides of the pipe interior.

The build-up increases over time when grease and other debris are washed down the drain.

Excessive accumulation will restrict the flow of wastewater and can result in a sanitary sewer overflow.

Courtesy Birch Bay Water and Sewer District

WOODARD & CURRAN

## Sanitary Sewer Overflows (SSOs)



Hampshire Street, Lawrence

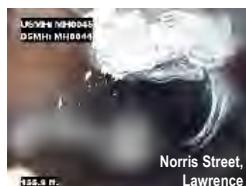
2 Mill Street  
US Citizenship and Immigration Services Building



Hampshire Street, Lawrence



Beaconsfield Street,  
Lawrence



Norris Street,  
Lawrence





**Lawrence's FOG Program**

- FOG Ordinance Requirements
- Installation of Grease Traps or Interceptors at Food Service Establishments (FSEs)
- Inspection & Enforcement
- Public Education

47 Shattuck Road, Suite 110  
Andover, MA 01810  
978-429-4271

[woodardcurran.com](http://woodardcurran.com)  
COMMITMENT & INTEGRITY DRIVE RESULTS

Fats, Oils, and Grease (FOG)  
PROGRAM  
MANUAL

227206  
City of Lawrence, MA  
June 2015

## 2015 Ordinance Amendments

Enhanced Regulation of Fats, Oil and Grease Discharges into Sanitary Sewer System from Food Service Establishments



*Friendley's*



classichits957.com



## Why The Amendments?

**The Clean Water Act Requires It!**

- **Best Management of Fats, Oil and Grease** before entering sewers reduces likelihood of failure, sewage overflows or backups and reactive maintenance



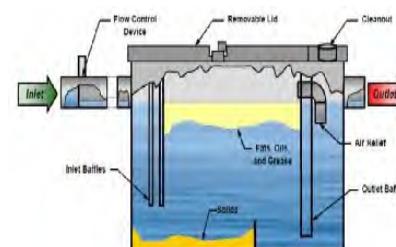
## Revised FOG Ordinance

- Clarifies and Strengthens Requirements Regulating Discharge of FOG
  - Moves requirements from Title 13 (Sewer) into Title 8 (Health and Safety)
- Requires acquisition of a FOG Permit concurrent with Food Service Permit
- Prohibits FOG in excessive concentrations
- Board of Health (or its agents) shall administer and enforce
- Enforcement may consist of fines and other enforcement options under Title 20



## What are the Requirements?

- Requires installation of grease trap or interceptor for Food Service Establishments
- Requires Maintenance Logs, Owner Inspection and Licensed Inspector, Cleaning, Pumping of Grease Interceptors
- Temporary FSE shall have FOG Management Plan before issuance of temporary FSE permit



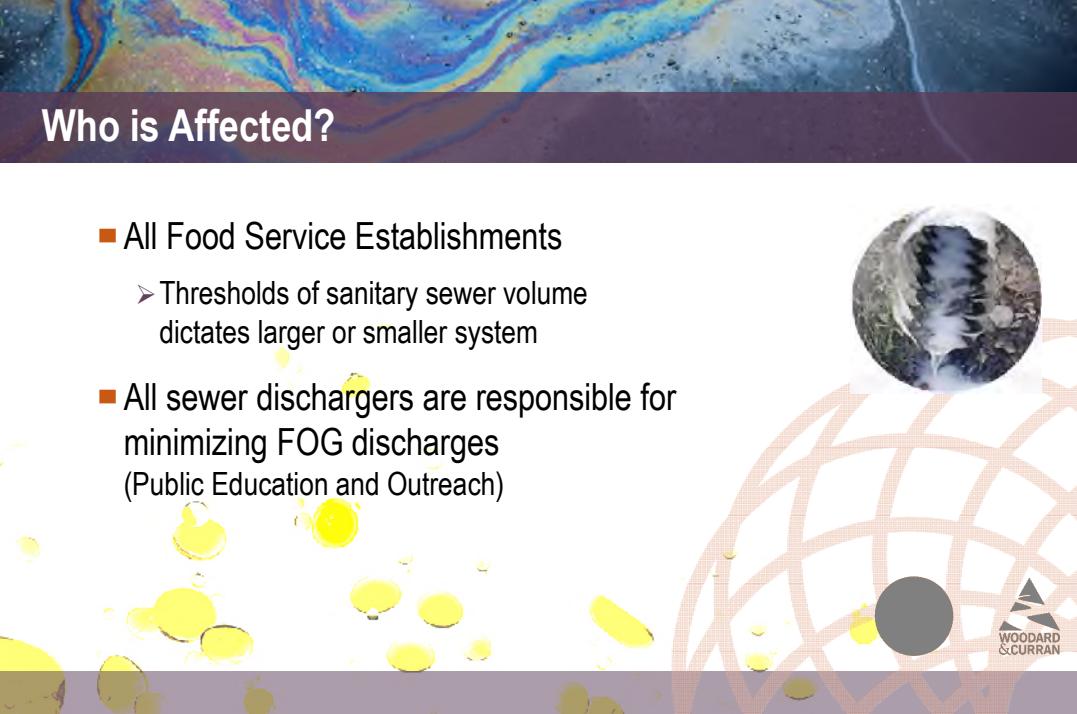
Typical Grease Trap





## Who is Affected?

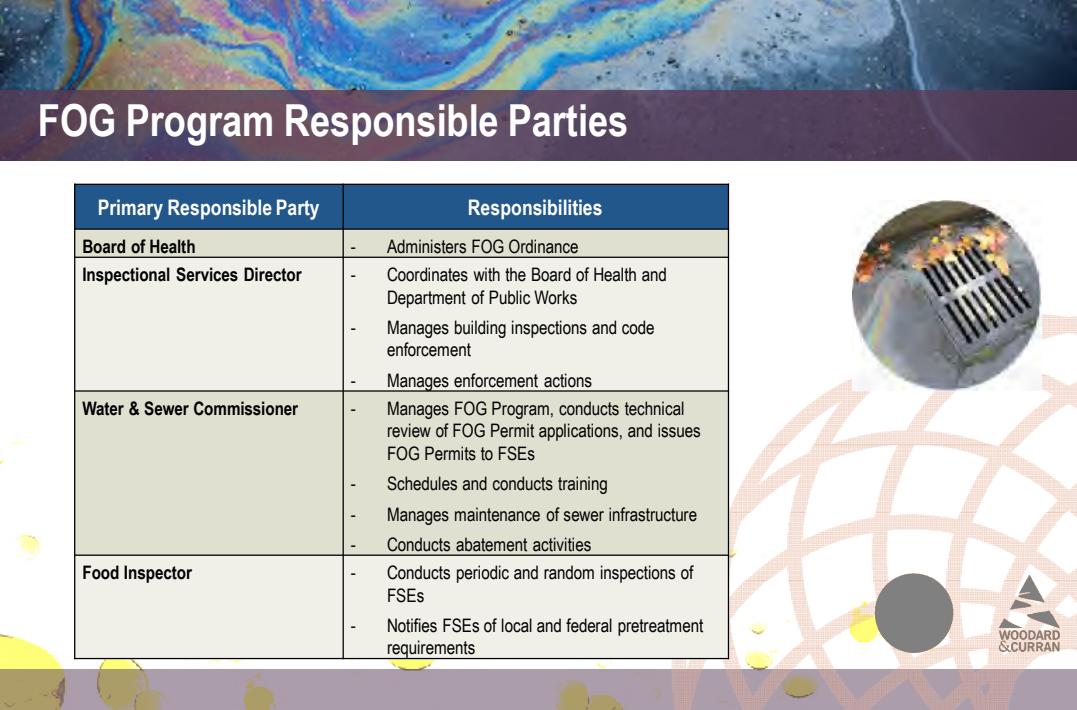
- All Food Service Establishments
  - Thresholds of sanitary sewer volume dictates larger or smaller system
- All sewer dischargers are responsible for minimizing FOG discharges  
(Public Education and Outreach)

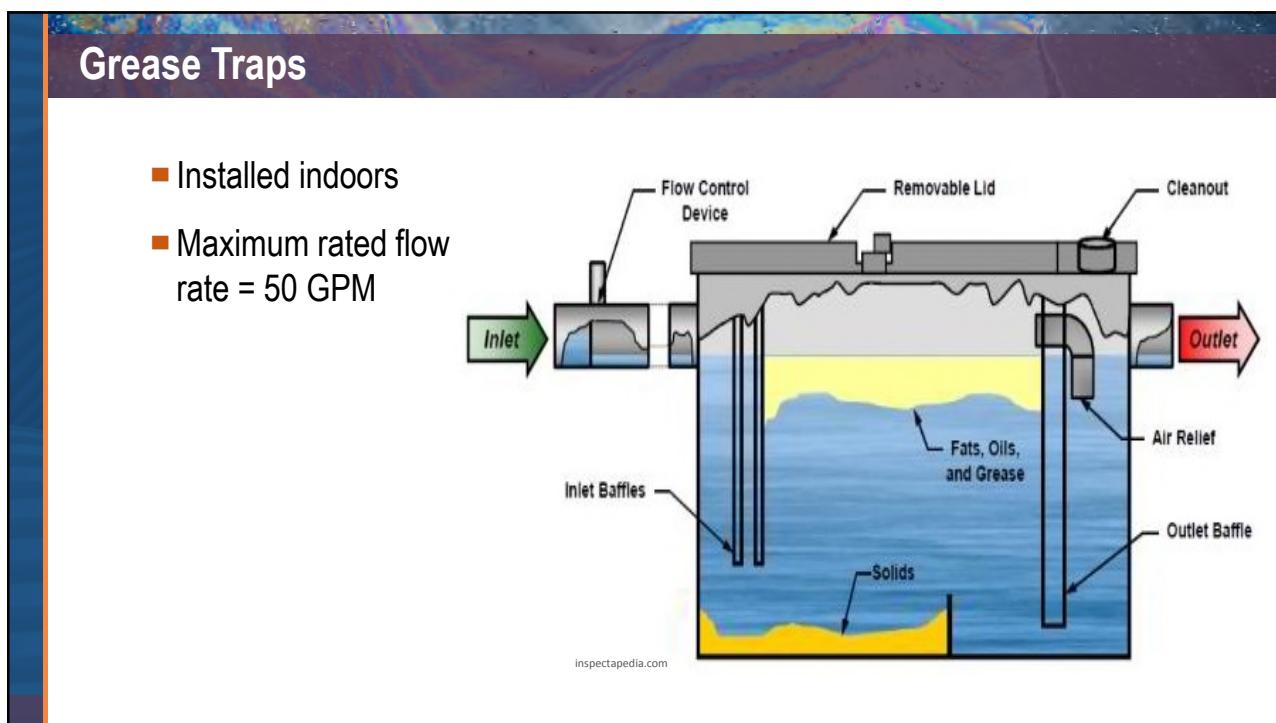
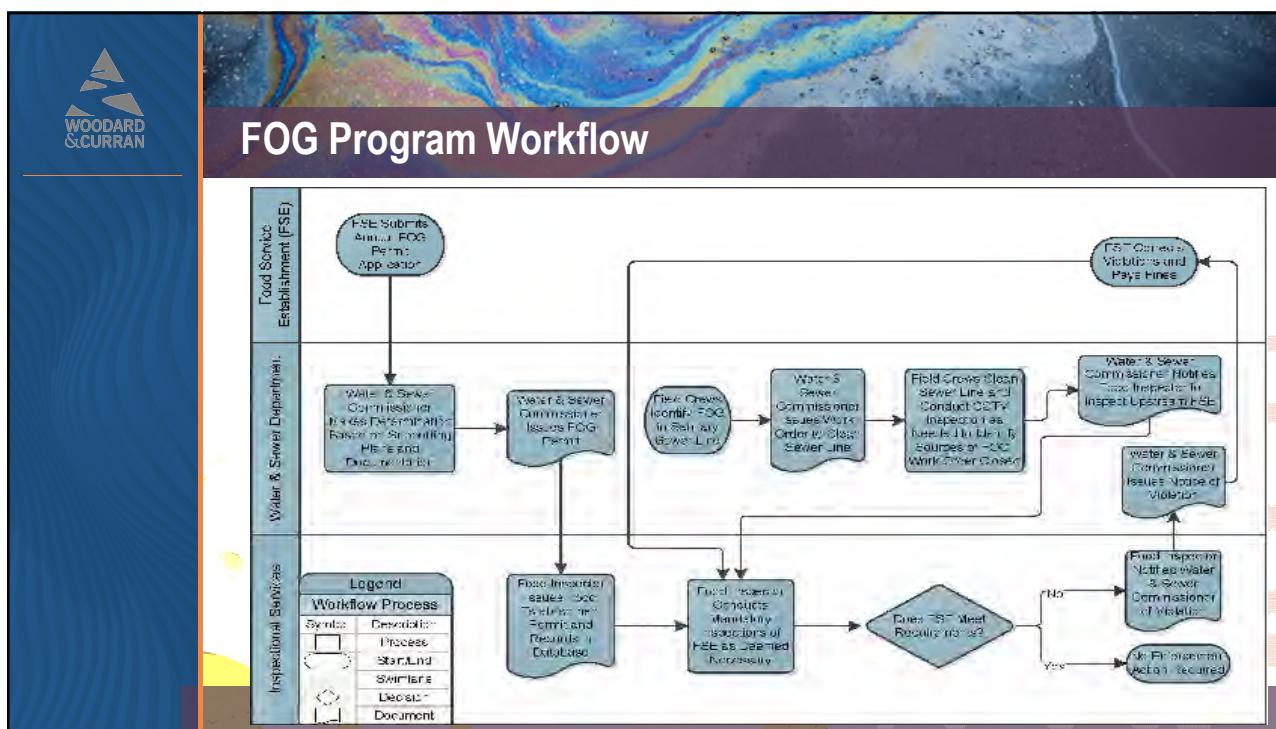





## FOG Program Responsible Parties

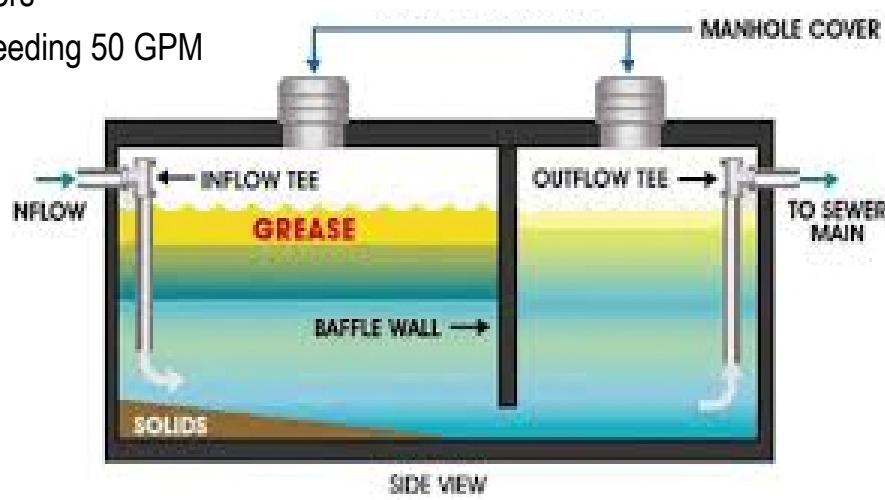
Primary Responsible Party	Responsibilities
Board of Health	<ul style="list-style-type: none"> <li>- Administers FOG Ordinance</li> </ul>
Inspectional Services Director	<ul style="list-style-type: none"> <li>- Coordinates with the Board of Health and Department of Public Works</li> <li>- Manages building inspections and code enforcement</li> <li>- Manages enforcement actions</li> </ul>
Water & Sewer Commissioner	<ul style="list-style-type: none"> <li>- Manages FOG Program, conducts technical review of FOG Permit applications, and issues FOG Permits to FSEs</li> <li>- Schedules and conducts training</li> <li>- Manages maintenance of sewer infrastructure</li> <li>- Conducts abatement activities</li> </ul>
Food Inspector	<ul style="list-style-type: none"> <li>- Conducts periodic and random inspections of FSEs</li> <li>- Notifies FSEs of local and federal pretreatment requirements</li> </ul>



## Grease Interceptors

- Installed outdoors
- Flow rates exceeding 50 GPM



## Grease Trap/Interceptor Maintenance Requirements

- Properly trained FSE employees can conduct routine inspections
- Grease interceptors must be inspected once per month on a set schedule
- Grease traps installed indoors must be inspected on a routine basis as recommended by the device manufacturer
- **All grease trap/interceptors must be inspected at least once per year by a qualified professional.**





## Grease Trap/Interceptor Maintenance Requirements

- Traps/interceptors must be cleaned if the FOG and sludge layers take up 25% of the total volume of the device (i.e. "25% rule")
- Grease interceptors must be cleaned every 3 months, or more if necessary
- Frequency varies depending on amount of FOG sent down the drain
- **All waste oils and collected grease must be recycled or picked up for disposal by an approved grease hauler.**



## Reducing FOG from FSEs

### Best Management Practices

- Train kitchen staff.
- Clean grease traps/interceptors routinely.
- Witness all grease trap cleaning and maintenance.
- Dispose of used oil through a licensed grease hauler.
- Recycle waste cooking oil.
- Post "No Grease" signs.
- Dry wipe pots, pans, and dishware prior to dishwashing.
- and more!!





## Right of Entry for Inspection

■ Authorized agents of the City are permitted to enter all properties connected to the public sewer system to verify compliance with the FOG Ordinance.

- Random Inspection
- Suspected FOG Discharge
- Annual Food Service Inspections





## Program Timeline

FOG PROGRAM SCHEDULE (2015-2016)	2015				2016			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Update FOG Ordinance	█	█	█	█	█	█	█	█
Draft FOG Program Manual for Regulatory Review	█	█	█	█	█	█	█	█
Compile Educational Materials for FSEs & Public	█	█	█	█	█	█	█	█
Finalize FOG Program Manual per Regulatory Comments	█	█	█	█	█	█	█	█
Conduct Staff Training	█	█	█	█	█	█	█	█
Implement Targeted Public Education Program	█	█	█	█	█	█	█	█
Begin Accepting FOG Permit Applications	█	█	█	█	█	█	█	█
Conduct Food Service Establishment Inspections	█	█	█	█	█	█	█	█
Conduct Sewer System Inspection & Maintenance	█	█	█	█	█	█	█	█
Issue Annual FOG Permit Renewal Notification	█	█	█	█	█	█	█	█





Questions?



---

## APPENDIX H: EXAMPLE FOG OUTREACH MATERIAL

# CITY OF LAWRENCE

## FATS, OILS, AND GREASE (FOG) FACT SHEET



### GENERAL REQUIREMENTS FOR FOOD SERVICE ESTABLISHMENTS (FSEs)

All FSEs that prepare and/or serve food for commercial use or sale are required to take the following steps to comply with the FOG Ordinance:

- Have a FOG permit. Owners of FSEs are required to apply for a FOG Permit annually.
- Have grease trap(s) or grease interceptor sized and installed in accordance with the Uniform State Plumbing Code.
- Clean and maintain grease trap(s) or interceptor.
- Keep records of cleaning, maintenance, and employee training for at least 3 years

### WHAT IS FOG?

FOG refers collectively to the fats, oils, and grease found in most residential kitchens and commercial FSEs. Many foods that are processed and served contain FOG, including:

- Meat fats & lard
- Cooking oil
- Butter, cheese & other dairy products
- Baked goods
- Sauces

### WHY IS FOG CONTROL IMPORTANT?

FOG enters the sewer system in liquid form through sinks, dishwashers, and other kitchen fixtures or when food scraps are ground by a food grinder (garbage disposal). FOG solidifies as it cools and sticks to the inside of sewer pipes. Eventually, FOG can build up until it completely blocks sewer pipes, causing raw sewage to back up inside your restaurant or overflow outside into streets and streams.

Commercial restaurants and other FSEs represent a significant portion of FOG entering the sewer system because of the large amounts of grease used in cooking and other food preparation activities.

### WHAT ARE GREASE TRAPS AND INTERCEPTORS?

Grease traps and interceptors are plumbing devices that capture the majority of FOG before it enters the sewer system. Proper design and sizing of grease traps/interceptors are based on the total flow rate of fixtures connected to the device and are regulated by the Uniform State Plumbing Code (248 CMR 10.09). These regulations can be accessed at <http://www.mass.gov/ocabr/licensee/dpl-boards/pl/regulations/rules-and-regs/248-cmr-1000.html>.

### WHERE DO I DISPOSE OF WASTE OILS AND COLLECTED GREASE?

Waste oils and collected grease must be recycled or picked up for disposal by a grease hauler. A list of grease haulers near Lawrence is available at <http://www.cityoflawrence.com/water>.

### HOW DO I OBTAIN A FOG PERMIT FOR MY ESTABLISHMENT?

FOG Permits are obtained from the Water & Sewer Department located at City Hall, 200 Common Street, Room 204. Owners of FSEs must fill out a FOG Permit Application to be approved by the Water & Sewer Commissioner.

### HOW CAN I DETERMINE IF MY ESTABLISHMENT IS IN COMPLIANCE?

FSEs that have no grease trap or interceptor, or a device that is undersized, substandard, or inadequately maintained, do not comply with the requirements of the FOG Ordinance.

## ADDITIONAL QUESTIONS?

For more information, contact:

Lawrence Water & Sewer Department - (978) 620-3110

<http://www.cityoflawrence.com/water>

on Facebook at <http://facebook.com/LawrenceH2O>

on Twitter @Lawrence\_H2O

# CIUDAD DE LAWRENCE

## HOJA INFORMATIVA DE GRASAS Y ACEITES (FOG)



### REQUISITOS GENERALES PARA EMPRESAS DE SERVICIO DE COMIDA (FSEs)

Todos los FSEs que preparan y / o sirven comida para uso comercial o venta están obligados a tomar las siguientes medidas para cumplir con la Ordenanza de FOG:

- Tener un permiso de FOG. Los propietarios de FSEs están obligados a solicitar un permiso anual de FOG.
- Tener trampa(s) de grasa o interceptor de grasa instalados a la medida de acuerdo con el Código Uniforme de Plomería del Estado.
- Limpiar y dar mantenimiento la(s) trampa(s) de grasa o interceptor.
- Mantener un registro de limpieza, mantenimiento y entrenamiento de los empleados por lo menos por 3 años.

### ¿QUÉ ES FOG?

FOG (sus siglas en inglés) se refiere colectivamente a las grasas y aceites que se encuentra en la mayoría de las cocinas residenciales y comerciales de restaurantes y otras empresas de servicio de comida (FSEs). Muchos de los alimentos que se procesan y sirven contienen grasas y aceites (FOG), incluyendo:

- Las grasas de la carne y la manteca de cerdo
- El aceite de cocina
- La mantequilla, el queso y otros productos lácteos
- Productos horneados
- Salsas

### ¿POR QUÉ ES IMPORTANTE EL CONTROL DE GRASAS Y ACEITES (FOG)?

FOG pueden entrar en el sistema de alcantarillado en forma líquida a través de sumideros, lavaplatos y otros accesorios de cocina o cuando los restos de comida se muelen en un triturador de alimentos. FOG se solidifican cuando se enfrian y se pegan a las paredes de las tuberías de desagüe. Finalmente, FOG pueden acumularse hasta que las tuberías de alcantarillado esten completamente bloqueadas, causando desbordamiento de aguas residuales dentro de su restaurante o al exterior en calles y arroyos.

Restaurantes comerciales y otras FSEs contribuyen una porción significante de FOG que entran en el sistema de alcantarillado, debido a las grandes cantidades de grasa utilizados en la cocina y durante la preparación de alimentos.

### ¿QUÉ SON TRAMPAS E INTERCEPTORES DE GRASA?

Las trampas e interceptores de grasa son dispositivos de plomería que capturan la mayoría de FOG antes de entrar en el sistema de alcantarillado. El diseño y las dimensiones de las trampas de grasa / interceptores se basan en el caudal total de los accesorios conectados al dispositivo, y son regulados por el Código Uniforme de Plomería del Estado. Consulte a 248 CMR 10.09 para los detalles y requisitos de las dimensiones de la trampa de grasa / interceptor. Estos reglamentos se puede acceder electrónicamente al visitar la siguiente pagina web: <http://www.mass.gov/ocabr/licensee/dpl-boards/pl/regulations/rules-and-reggs/248-cmr-1000.html>.

### ¿COMO DISPONGO DE ACEITES USADOS Y GRASAS RECOGIDAS?

Todos los aceites usados y grasas recogidas deben ser recicladas o eliminadas mediante un transportador de grasas aprobado. Una lista de los transportistas aprobados está disponible en el sitio web de la Ciudad: <http://www.cityoflawrence.com/water>.

### ¿CÓMO PUEDO OBTENER UN PERMISO DE FOG PARA MI EMPRESA?

Los permisos de FOG se obtienen del Departamento de Agua y Alcantarillado situado en el Ayuntamiento, 200 Common Street, Habitación 204. Los propietarios de FSEs deben llenar una Solicitud de Permiso de FOG para ser aprobado por el Comisario de Agua y Alcantarillado.

### ¿CÓMO PUEDO DETERMINAR SI MI EMPRESA/NEGOCIO ESTÁ CUMPLIENDO CON ESTA ORDENANZA?

Los FSEs que no tengan ninguna trampa o interceptor de grasas, o un dispositivo que es insuficiente, deficiente o inadecuadamente mantenido, no cumplen con los requisitos de la Ordenanza de FOG.

### ¿PREGUNTAS ADICIONALES?

Para obtener más información, comuníquese con:

Departamento de Agua y Alcantarillado de Lawrence (978) 620-3110

<http://www.cityoflawrence.com/water>

en Facebook en <http://facebook.com/LawrenceH20>

en Twitter @Lawrence\_H20





# NO GREASE!





# ¡NO GRASAS O ACEITES!



# FOOD SERVICE BEST MANAGEMENT PRACTICES



**DRY** wipe pots, pans and work areas prior to washing



**DO NOT** dump cooking residue directly into any drain



**DISPOSE** of food waste directly into the trash



**DO NOT** dispose of greasy food waste in the garbage disposal



**COLLECT** waste oil to be recycled or picked up for disposal by an approved grease hauler



**DO NOT** pour waste oil or grease directly into any drain



**CLEAN** mats inside over a utility sink



**DO NOT** wash floor mats where water will run off into the storm drain



**KEEP** grease traps and interceptors clean



**DO NOT** use chemicals that claim to dissolve grease in drains

## ADDITIONAL QUESTIONS?

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# MEJORES PRACTICAS PARA EL DESPERDICIO DE GRASAS Y ALIMENTOS



**LIMPIE** las ollas, platos y areas de trabajo antes de lavarlos



**NO** deseche residuos de comida directamente en el desagüe



**DESECHE** los desperdicios de comida directamente en la basura



**NO** deseche los desperdicios de comida grasienta en el triturador de alimentos



**RECICLE** o recoja el aceita y la grasa para su eliminación mediante un servicio transportador de grasa aprobado



**NO** heches grasas o aceites directamente en el desagüe



**LIMPIE** los tapetes de la cocina sobre un fregadero de servicio



**NO** lave los tapetes de la cocina donde el agua con grasas y aceites termine en las aguas pluviales



**MANTENGA** limpias las trampas y receptores de grasa



**NO** utilice productos químicos que dicen disolver la grasa en los drenajes

## ¿PREGUNTAS ADICIONALES ?

Para obtener más información, comuníquese con:

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# **IMPORTANT**

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**This grease trap/interceptor  
shall be inspected and  
thoroughly cleaned on a  
regular and frequent basis.**

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Failure to do so could result in damage  
to the piping system, and the municipal  
or private drainage system(s).





# **IMPORTANTE**

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**Esta trampa/interceptor de  
grasa debe ser inspeccionada  
y limpiada con  
regularidad y frecuencia.**

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**El no hacerlo puede resultar en  
daños en el sistema de tuberías y el  
sistema de drenaje municipal o privada(s).**





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