FATS, OILS AND GREASE (FOG) CONTROL PROGRAM GUIDANCE MANUAL

MARCH 2014
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1. INTRODUCTION

This document provides municipal pretreatment staff, restaurant and fast food businesses, and any other FOG producing businesses with information about animal and vegetable-based oil and grease pollution prevention, sewer use regulations and best management practices. This program was developed to reduce sewer maintenance by reducing oil and grease discharges into the sewer system and to prevent sanitary sewer overflows due to FOG. In addition to this document, a brochure was prepared as part of the program to communicate and educate the public and commercial sewer users. A copy of this brochure as well as the water/sewer bill insert flyer is attached in Appendix A.

1.1 WHAT IS FOG?

FOG refers to Fats, Oil and Grease found in most residential and commercial kitchens and food service establishments. Waste FOG is a semisolid, viscous liquid that is generated during the food cooking process or during cleaning, maintenance, and sanitizing processes. Many foods that are processed and served contain FOG, including meats, sauces, gravy, dressings, deep-fried foods, baked goods, cheeses, butter and others. Residential users and many different businesses generate FOG wastes by processing or serving food, including; eating and drinking establishments, caterers, hospitals, nursing homes, day care centers, schools and grocery stores.

1.2 WHAT IS THE PROBLEM WITH FOG?

FOG that is dumped down the sewer can coagulate and congeal into a hardened layer on the inside of building sewers, within the sewers under roadways, and can accumulate within pumping stations. This causes a reduction in the effectiveness of these collection lines to transport wastewater away from residences and businesses to the wastewater treatment plant. Wastes containing FOG can accumulate on the inside of these pipes and collection lines to such an extent that the building sewers and wastewater collection lines become blocked with FOG. When building sewers and wastewater collection lines become blocked, the flow of wastewater is obstructed, causing wastewater to back up into your business and possibly into residences and/or businesses within the vicinity of the blockage. These blockages can result in significant public health hazards as well as physical and property damages.

If the FOG causing the wastewater collection line blockage originates from your business, you may likely be the first one affected. When wastewater backs up into a business, a significant public health hazard is present for the owner, employees and customers, the business becomes disrupted, and physical damages to the business property and assets can result. When sewers become blocked with FOG, untreated wastewater may also overflow out of the sewers into streets, parking lots, storm sewers, and ultimately to the environment.

1.3 WHAT CAN BE DONE?

The Town of Billerica has revised the Sanitary Sewer Rules & Regulations and the Board of Health Rules & Regulations that set in place regulations pertaining to FOG for cooking establishments and other facilities from which quantities of grease can be expected to be discharged. The Regulations
require that these FOG producing establishments install and maintain grease traps and other preventative measures in order to prevent FOG from entering into the sanitary sewer.
2. REGULATIONS

Regulations including the Uniform State Plumbing Code, the Plumbing and Discharge Institute Standards, as well as local town regulations incorporate requirements for FOG capture, removal and best management practices. FSE’s shall comply with the most stringent of all applicable State and Town regulations, which are further described in the sub-sections below. The Director of Public Health reserves the right to develop and implement more stringent requirements in the Board of Health Bylaws or to require additional procedures on a case-by-case basis.

2.1 STATE REGULATIONS

The Uniform State Plumbing Code (248 CMR 10.00) references **Grease Traps & Interceptors when Installed Inside of Buildings** and **Grease Interceptors Installed Outside of the Buildings** in Section 10.09 (2) and (3), respectively. The code defines a grease trap as a passive interceptor designed for less than 50 gpm, which is typically located inside a building; and a grease interceptor as a passive interceptor designed for greater than 50 gpm, typically located outside of a building. The code describes the requirements for grease trap installation, maintenance, approval, sizing, testing, rating, as well as other regulations regarding grease traps when installed inside of buildings and outside of buildings. The state plumbing code further references the Plumbing and Drainage Institute (PDI) Standard G101, and mandates that all devices conform to the requirements outlined in the PDI Standard. Plumbing and Drainage Institute Standard G101 establishes the detailed requirements for grease traps, including criteria to properly size the traps, installer requirements, and management requirements. These requirements are enforceable by the Uniform State Plumbing Code.

2.2 TOWN REGULATIONS

In addition to the relevant state codes, the sanitary sewer system in Billerica is also governed by the Town of Billerica Sanitary Sewer Rules and Regulations. The Billerica Sanitary Sewer Rules and Regulations, recently updated, are more stringent than the general regulatory requirements, including the Massachusetts State Environmental Code, Title 5, 310 CMR 15, and Water Pollution Control Regulations, 314 CMR 12.08. Fats, oils, and grease discharge requirements must be in compliance with all applicable regulations, including those listed in Section 16 of the Town of Billerica Sanitary Sewer Rules and Regulations.

Grease trap installation and maintenance is also governed by the Board of Health (BOH) Department. The BOH is responsible for the protection of the public health, welfare, and environment of the Town. The BOH’s Rules and Regulations were developed to supplement those of the Massachusetts General Laws. The Town’s BOH regulations include Chapter 2: Food Service Establishments, which describes general requirements for food service establishments, including regulations on sanitary waste and grease disposal. Chapter 5: Environmental & Miscellaneous Regulations also includes pertinent information regarding grease haulers and grease trap maintenance.
2.2.1 Permissions for Inspection

The Billerica Sanitary Sewer Rules & Regulations grant employees or agents of the Town permission to enter all properties for the purposes of inspection, observation, measurement, sampling, testing, and determining whether the user is complying with all requirements of the regulations, the Wastewater Treatment Plant wastewater discharge permit, or any order issued hereunder without any prior notification. This includes inspection of any records required by the Sewer Use Rules & Regulations. Records for the previous three years should be available to inspectors.
3.  GREASE TRAPS

The installation and maintenance of a grease trap is an important measure in ensuring that a food service establishment does not contribute to problems with the wastewater treatment system.

The Uniform State Plumbing Code (248 CMR 10.00) defines a grease trap as a passive interceptor designed for ≤ 50 gallons per minute (gpm), and a grease interceptor as a passive interceptor designed for > 50 gpm. The Town’s Regulations indirectly define grease traps as an interior device and a grease interceptor as an exterior grease trap. For the purposes of simplicity, this document will use grease trap as a general term where interior grease traps are located inside the building and exterior grease traps are grease interceptors located in the ground outside the building.

All grease traps and interceptors in Massachusetts must have an approval by the Board of Plumbers and Gas in order to be installed in Massachusetts. An online database of the Board’s accepted plumbing products can be found here: http://license.reg.state.ma.us/pubLic/pl_products/pb_pre_form.asp.
4. BEST MANAGEMENT PRACTICES

4.1 INTRODUCTION

Best Management Practices (BMPs) are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters. For purposes of this manual, best management practices include procedures and practices that reduce the discharge of Fats, Oil and Grease (FOG) to the building drain and ultimately to the Wastewater System.

The following BMPs are provided for municipal pretreatment staff, along with restaurant, fast food, and other food preparation businesses with information about animal and vegetable-based oil and grease pollution prevention techniques focused on their businesses. Following these BMPs will prove to be effective in both reducing maintenance costs for business owners, and preventing oil and grease discharges into the sewer system.

Some of the following BMPs are sourced from the following:

- Massachusetts Department of Environmental Protection (www.mass.gov/dep)
- New Hampshire Department of Environmental Services (www.des.state.nh.us)
- Oregon Association of Clean Water Agencies (www.oracwa.org/Pages/bmp.htm)
- Georgia Pollution Prevention Assistance Division, Department of Natural Resources, Atlanta, Georgia (www.dnr.state.ga.us/p2ad/dl/definitions.pdf)

4.2 PREVENT BLOCKAGES IN THE SANITARY SEWER SYSTEM

4.2.1 Commercial Cooking Exhaust System Cleaning

Grease and oily sludge removed from hoods, grease removal devices, fans, ducts, and other appurtenances shall be prevented from entering the sewer system. The Massachusetts Board of Fire Prevention Regulations includes cleaning frequency standards (http://www.mass.gov/eopss/docs/dfs/osfm/cmr/cmr-secured/527011.pdf.) Hood cleaners must be approved and certified by the State Fire Marshall’s Office. A list of the companies that are currently certified can be found here: http://elicense.chs.state.ma.us/DFS_Verification/Search.aspx. All waste grease and oily waters resulting from said cleaning shall be collected in appropriate containers and removed by an approved Septage and Offensive Substances Hauler approved by the Billerica Health Department.

4.2.2 Training of Staff

It is important to train kitchen staff and other employees who may encounter or dispose of FOG so that they can help ensure that BMPs are being implemented. Managers and owners will not always be present, so proper training for employees is necessary in order to fully achieve the
benefits of the BMPs. Inspectors can talk to the establishment manager about the training program that they have implemented and offer suggestions.

4.2.3 “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 and help to minimize grease discharge to the traps and reduce the cost of cleaning and disposal. Inspectors should check appropriate locations of "No Grease" signs.

Per the Uniform State Plumbing Code 10.09(1)(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).”

4.2.4 Dry Wipe

"Dry wipe" pots, pans, and dishware prior to dishwashing. By "dry wiping" the grease out of pots, pans, and dishware and disposing in garbage receptacles, the grease and other materials will not be sent to the grease traps. This will reduce the amount of material going to the grease traps, reduce the frequency of cleaning, and reduce the amount of maintenance costs.

The following are some tips that can be used for dry wipe clean up:

- Use rubber scrapers to remove fats, oils, and grease from cookware, utensils, chafing dishes, and serving ware.

- Use food grade paper to soak up oil and grease under fryer baskets.

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

- Use kitty litter to absorb liquid spills. Sweep and dispose of the litter in the trash, as long as the spilled material is not hazardous.

4.2.5 Dishwashing and Equipment Cleaning

Proper dishwashing and cleaning methods can reduce the entry of solids and FOG into the Wastewater System. These methods include:

- Pre-washing dishes and cookware with hot water and no soap, prior to use of the dishwasher or three-compartment sink, can reduce the discharge of FOG discharge by 25 percent. Pre-wash sinks used for this purpose must be connected to a Grease Trap.
• Prior to washing deep fat fryers, use a rubber spatula to squeegee down the sides, while grease and oil are still warm, and then wipe the fryer with paper towels. Dispose of the paper towels in the garbage.

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

• Pour all liquid grease and oil from pots and pans into a waste grease container that is stored at the pot-washing sink, and then scrape out the solidified grease, if present. Capture accumulated oil, during the cleaning of stoves and ventilation/exhaust hoods, and dispose of it in the garbage, after absorbing all free liquid.

4.2.6 Spill Prevention and Clean-up

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 spill prevention:

• Empty containers, before they are full, to avoid spills.

• Use a cover when transporting spillable materials, particularly liquid wastes containing fats, oils, and grease.

• Provide employees with proper tools (e.g., ladles, ample containers, etc.) to transport materials without spilling.

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

• Block off all sinks and floor drains near the spill.

• Cover the spill with absorbent material (e.g., sand, saw dust, kitty litter, salt, paper towels, etc.).

• Remove spilled material and place it in the garbage.

• Use wet clean-up methods only to remove trace residues.

• Food Service or Cooking Establishments that use large amounts of cooking fats (e.g., deep fat fryers) should develop and post their spill response procedure and maintain spill containment and absorbent supplies.

4.2.7 Extend Oil Life

Skim/filter fryer grease daily and change oil when necessary. Use a test kit provided by your grocery distributor rather than simply “guess” to determine when to change the oil. This extends the life of both the fryer and the oil. Build-up 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. Also, develop a rotation system if multiple fryers are in use. Designate a single fryer for products that are particularly high in deposits, and change that one more often.

4.2.8 Recycling

Think of oil and grease as a valuable commodity. When using deep fat 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 one of the area's recycling companies if feasible. This is the preferred method of disposal for food service establishments that produce any volume of food waste. To practice recycling:

- 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.

4.3 Properly Maintain Grease Trap

The Billerica Sanitary Sewer Rules & Regulations and Board of Health Regulations state specific requirements for grease trap maintenance and cleaning. To ensure compliance with all requirements or for specifics, please refer to the Billerica Sanitary Sewer Rules & Regulations.

All grease traps should be installed so that they are accessible for cleaning and inspection. Grease traps should be inspected regularly and cleaned by a licensed waste grease hauler whenever the level of grease (including both bottom solids and floating grease and solids) exceeds 25% of the effective depth of the trap, or at least every three (3) months, whichever is sooner. If a remote monitoring device is used to measure grease and water levels in the grease trap, inspections may be made at a reduced frequency as approved by the Health Department. This activity shall be noted on a monthly pumping report submitted to the Board of Health.

4.3.1 Procedure for Trap Cleaning

Grease trap maintenance, which is usually performed by permitted haulers or recyclers, consists of removing the entire volume (liquids and solids) from the trap and properly disposing of the material in accordance with all Federal, State, and/or local laws. When performed properly and at the appropriate frequency, grease trap maintenance can greatly reduce the discharge of FOG into the wastewater collection system. For reference, the typical procedure for trap cleaning is outlined below.

1. Pump out any water in the trap to facilitate cleaning. The water should be discharged to the sanitary sewer system. Ensure that the water being pumped out is not over 100 mg/L FOG.

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, and deposit the grease into a watertight container.

5. Contact an approved hauler or recycler for grease pick-up, if one is not performing the cleaning.

6. Refill the trap with water.

7. Replace the baffle and the lid.

8. Record the volume of grease removed in the grease trap cleaning and disposal log provided in the Appendix of this manual.

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

Any other maintenance that may need to be performed to the grease trap other than cleaning and disposal should also be recorded using the grease trap maintenance log provided in Appendix D of this manual.

### 4.3.2 Witness Trap Cleanings

Witness all grease trap cleaning and maintenance activities to ensure that the device is properly operating. Grease trap maintenance and cleaning personnel may take shortcuts and not perform the job properly. If the establishment manager inspects the operation and ensures it is consistent with the maintenance procedures provided in this document, they are more assured of getting full value for their money and having a properly operating and clean grease trap.

**NOTE:** The establishment is liable for the condition of their pretreatment devices.

### 4.3.3 Keep a Maintenance Log

It is required by the Town Regulations to ensure that grease trap maintenance is performed on a regular basis. Keeping a maintenance log serves as a record of the frequency and volume of cleaning the trap. The maintenance log can also serve as a tool for the establishment manager to use in order to optimize cleaning frequencies and reduce costs (see Appendix B for a cleaning and disposal log).

Maintenance logs are required by the Town Regulations to be kept on record for three years for inspection by the Town at all times.

Pump out schedules should be properly established and strictly followed to prevent excessive oil and grease loading to wastewater. It is important that these pump outs are complete, i.e.,
the grease caps are removed, the sides are scraped or hosed down, and the trap refilled with water.

4.3.4 Waste Grease Haulers

Appendix C contains a current list of waste grease haulers, as provided by the Billerica Health Department. These businesses will come and pick up grease and transport it to a grease processing facility.

4.4 Grease Monitoring Systems

Grease monitoring systems use transducers similar to that of a fish finder and an embedded microprocessor to continuously sense the positions of the floating solids, bottom solids and the liquid level within the tank. This data is then digitally transmitted to a monitoring or control unit. Monitoring systems must comply with PDI G-102.

Once a monitoring system is installed by a qualified professional, it typically provides continuous monitoring of the sludge, scum and liquid levels in the grease trap. Systems provide real-time information on actual changes as a percent of permissible floating solids, bottom solids and total solids and can also provide the immediate status of the liquid level within the tank in inches.

The Town of Billerica encourages FSE owners to purchase and install a grease trap monitoring system to continuously monitor sludge, scum and liquid levels in grease traps. If FSE owners chose to purchase and install a remote monitoring device, manual inspections may be made at a reduced frequency as approved by the Health Department.

The GREASEwatch™, and Drain-Net monitor are two examples of grease monitoring systems. These monitors control units can be easily programmed to alert the owner when it is time to pump the tank. It also warns of emergency conditions in the tank before failure due to overflow occurs. And because the control unit’s memory keeps an ongoing record of tank measurements, these monitoring systems are a valuable management tool over time. For more information, see http://greasewatch.com, and http://www.greasemonitor.com.
APPENDIX A:  FOG FLYER AND FSE BROCHURE
Here’s how you can help:

• Use less oil when cooking.

• Dry wipe all dishes, pots, and pans before putting them in the dishwasher or washing them in the sink.

• Scrape all food and grease from dishes into the garbage prior to washing.

• Never dump excess grease down the drain. Instead, dump excess grease into a container, allow it to congeal, and then dispose of it in the trash.

• Collect and dispose of large quantities of oil through a town-licensed grease hauler. Frying oils can often be recycled.

• Never dispose of non-biodegradable items such as plastics, dental floss, wipes, etc. down the toilet or drain.

• Ensure that all drains such as kitchen sink drains, shower/tub drains, etc. have properly operating screens. Dispose of the items collected by the drains into the trash rather than flushing them down the drain or toilet.

For more information pertaining to this program and associated regulations, please feel free to contact the following:

Billerica Wastewater Treatment Facility
(978) 671-0956

Billerica Health Department
(978) 671-0931
HELP PREVENT THE PROBLEM!

FOG
Fats, Oils, and Grease Control Program

CONTACT INFORMATION
For more information pertaining to the FOG Program, BMPs, and associated regulations, please feel free to contact the following:

Billerica Health Department
http://www.town.billerica.ma.us
(978) 671-0931

Billerica Wastewater Treatment Facility
http://www.billericadpw.org/divisions_wastewater.asp
(978) 671-0956
INTRODUCTION

Fats, oils, and grease (FOG), have become a significant problem for wastewater collection and treatment systems. FOG can coat, congeal, accumulate and cause problematic backups and blockages in the sewer pipes on your property and in public sewers. These blockages may result in costly repairs and may render your restaurant inoperable. Therefore, the Town of Billerica has updated its Sanitary Sewer Rules & Regulations and the Board of Health Regulations accordingly to regulate FOG discharge and to establish minimum pretreatment requirements. A FOG discharge permit, a new component of your food service establishment (FSE) permit is required for all grease traps.

Recent grease clogs in the sewer have resulted in responsible parties incurring fines in excess of $10,000 to cover clog removal and cleanup costs incurred by the Town. Properly maintaining grease traps and implementing the recommended FOG best management practices will prevent your facility from being assessed fines and cleanup fees associated with grease clogs.

For further information regarding FOG discharge requirements and recommendations, refer to the FOG Control Program Guidance Manual, which is available on the Town’s web site.

SEWER USE RULES & REGULATIONS & BOARD OF HEALTH REGULATIONS OVERVIEW

A portion of the requirements of the regulations are listed below:

- Grease traps shall be required at all food preparation areas, restaurants, kitchens, hospitals, bars, cafeterias, clubs, and all other facilities found to discharge FOG.
- All grease traps shall be of a type, design, and capacity specified by the Uniform State Plumbing Code.
- All grease traps shall be readily and easily accessible for user cleaning and Town inspection.

- All grease traps shall be cleaned by a licensed grease hauler when the level of grease reaches 25% of the effective depth of the trap, or at least every three (3) months, whichever is sooner.
- The user shall maintain a written record of grease trap maintenance for three (3) years and such records shall be available for inspection by the Town at all times.
- The user is encouraged to install a grease trap monitoring system to continuously monitor grease levels.
- Best management practices (BMPs) in food preparation and cleanup are expected to be employed.

BEST MANAGEMENT PRACTICES

Best management practices (BMPs) are a series of activities that effectively reduce the amount of waste generated in a business. In the case of FOG control, BMPs include:

- **DO** use less oil and liquid oil instead of solid grease or lard
- **DO** post “NO GREASE” signs above sinks and on the front of dishwashers.
- **DO** dry wipe all dishes, pots, and pans before putting them in the dishwasher.
- **DO** collect and dispose used oil through a licensed grease hauler instead of pouring it down the drain.
- **DO** capture the oil accumulated in ventilation and exhaust hoods.
- **DO** clean grease traps and exhaust hoods regularly.
- **DO** keep grease traps well maintained and properly operating.
- **DON’T** dump excess oil or grease down the drain.
- **DON’T** dispose of waste oil or paint thinner into the sewer.

GREASE TRAPS

A grease trap (sometimes referred to as a grease interceptor when located outside the facility) is a tank that is installed on the drain line to collect and remove oil and grease. These grease traps prevent grease from entering into the waste-water collection system and thus reduce the amount of maintenance due to FOG. Baffles are placed within the tank to increase the retention time of the water in order to allow the oils and grease to congeal and rise to the surface. The grease can then be removed and disposed of properly.

Grease traps can be located inside a building and might only serve specific drains or outside the building in the ground and serve the entire kitchen. The schematic shown above displays a typical outside grease trap.

RIGHT OF ENTRY FOR INSPECTION & SAMPLING

Authorized agents of the Town are permitted to enter all properties for the purpose of inspection, observation, measurement, sampling, testing, and determining whether the user is complying with all requirements of the Sanitary Sewer Rules & Regulations.

Users shall allow authorized representatives of the Town full access to all parts of the premises for the purpose of inspection, photographing, video recording, sampling, records examination, and the performance of any additional duties. A user may be required to install monitoring equipment as determined by the Department of Public Works and/or Health Department.
APPENDIX B:  GREASE TRAP CLEANING AND DISPOSAL LOG

Facility Name: __________________________________________

Address: _______________________________________________

Service Company used: ___________________________________

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FOG Guidance Manual
APPENDIX C: LICENSED SEPTAGE AND GREASE HAULERS
A Community Sanitation Service  
17 Flagg Road  
Westford, MA 01886  
978-692-0021  

# * Action King Services, Inc.  
26 Livingston Street  
Lowell, MA 01852  
978-452-7750  

* Envirotek USA, Inc.  
75 Industrial Avenue  
Tewksbury, MA 01876  
603-508-0445  

John’s Septic Solution  
6 Carmel Street  
Wilmington, MA 01887  
978-587-1192  

John’s Sewer & Pipe Cleaning, Inc.  
323 New Boston Street, Suite 2  
Woburn, MA 01801  
781-569-6695  

* Howland Disposal Services  
20 Roberts Road  
Plymouth, MA 02360  
508-746-9600  

* RM Ratta Corporation  
81A Westford Road  
Ayer, MA 01432  
978-772-1600  

* Raggs Septic Service, Inc.  
577 Main Street  
Concord, MA 01742  
978-562-4500  

* Rooter-Man, Inc.  
P.O. Box 293  
Billerica, MA 01821  
978-671-0101  

* Soucy’s Sewer Service, Inc.  
78 North Broadway, Rte. 28  
Salem, NH 03079-2102  
603-898-9339  

* Stewart/Andover Septic Service  
58 South Kimball Street  
Bradford, MA 01835  
978-372-7471  

* Tewksbury Sewer Service, Inc.  
95 Helvetia Street  
Tewksbury, MA 01876  
978-851-9084  

* United Site Services  
239 Neck Road  
Haverhill, MA 01835  
508-406-5064  

* Wayne’s Drains, Inc.  
P.O. Box 298  
Wilmington, MA 01887  
781-272-3100  

* Wind River Environmental, LLC  
577 Main Street  
Hudson, MA 01749  
978-562-4500  

* Pumps Grease Traps and Sewage  
# Provides Portable Toilets
### APPENDIX D: GREASE TRAP INSPECTION CHECKLIST & MAINTENANCE FORM

**Billerica Grease Trap Maintenance Form**

<table>
<thead>
<tr>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Name:</td>
</tr>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>Phone:</td>
</tr>
<tr>
<td>Contact Person:</td>
</tr>
<tr>
<td>Maintenance Log: □ Yes □ No □ Up to Date</td>
</tr>
</tbody>
</table>

**Cover Condition**

- □ Accessible
- □ Obstructed

**Tank Condition**

- □ Needs Pumping
- □ Clean
- □ Faulty Condition

**Monitor Condition**

- □ Operating Normally
- □ Damaged

Signed: ____________________________________________
Inspector: _____________________________  Date: __________________
Establishment: _________________________
Address:______________________________  Time Started:____________
Contact Name:_________________________  Time Completed:_________
Phone:________________________________

<table>
<thead>
<tr>
<th>No.</th>
<th>Item Description</th>
<th>Field Data (where appropriate)</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The establishment has implemented a training program to ensure that the BMPs are followed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>“No Grease” signs are posted in appropriate locations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The establishment recycles waste cooking oil and can provide records of this.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The establishment “dry wipes” pots, pans, and dishware prior to rinsing and washing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Food waste is disposed of by recycling or solid waste removal and is not discharged to the grease traps.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Grease trap(s) is cleaned regularly. Note and record the frequency of cleaning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Grease trap cleaning frequency is documented on a maintenance log.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Grease trap does not contain greater than 1/4 the depth in grease accumulation. Estimate and record amount of grease in trap.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Outdoor grease and oil storage containers are covered and do not show signs of overflowing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Grease and oil storage containers are protected from discharge to storm drains.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Absorbent pads or other materials (not free flowing material such as cat litter) are used to clean up any spills or leakages that could reach the storm drain.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Storm drain catch basins show now signs of grease or oil.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>The roof shows no signs of grease and oil from the exhaust system.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Exhaust system filters are cleaned regularly, which is documented by cleaning records. Note and record frequency of cleaning.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An entry should be made for each item using the following codes:
“C” – Compliance with the item
“V” – Violation of the item (provide explanation in the Notes)
“NA” – Not applicable (provide explanation in the Notes)
“NC” – Not checked (provide explanation in the Notes)
Notes:

________________________________________________________________________
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Signature: _____________________________ Date: ___________________
APPENDIX E: APPLICATION FOR PERMIT TO OPERATE A FOOD ESTABLISHMENT
Application for Permit to Operate a Food Establishment

Name of Establishment _______________________________________________Date ________________________

Business Address ________________________________________Telephone # _____________________________
e-mail

Mailing Address (if different) _________________________________________

Name & Title of Applicant _________________________________Telephone # _____________________________

Address of Applicant _____________________________________________________________________________

Name of Owner (if different from applicant) ___________________________________________________________

If corporation or partnership, give name, title & home address of officers or partners

Name    Title    Home Address
__________________________________________________________
__________________________________________________________
__________________________________________________________

State of Incorporation_________ Name & Address of Local Agent _____________________________________________________________

Emergency Person:  Name _________________________________Home #_____________Cell #_______________
e-mail _________________________________________________________________________________________

Type of Establishment   Check all that apply   Duration of Permit       Amount To Be Paid
Retail Food   _____   Annual       _____   ________
Food Service    _____        ________
Caterer    _____   Temporary _____   ________
Residential
Limited Retail Prepackage _____   Seasonal _____   ________
Mobile *   _____        ________

TOTAL FEE ________

Dates of Operation if not Annual _______________________

PAYMENT IS DUE WITH APPLICATION

• Applications for mobile food units or pushcarts must include a list of the hand wash and toilet facilities available on each route. Attach a separate sheet.

Water Source ____________________________________  Sewage Disposal __________________________________

Days & Hours of Operation __________________________________________________________________________

If Restaurant:  Number of seats ___________

Person trained in Anti-Choking Procedures (if 25 seats or more) Yes ____ No ____ Date of Training ________________

Name of Certified Food Protection Manager ________________________________ Date of Certification ____________

LATE RENEWALS WILL BE ASSESSED A LATE FEE IN ACCORDANCE WITH THE MOST CURRENT BOARD OF HEALTH FEE SCHEDULE. LATE FEES ARE EQUAL TO THE ORIGINAL PERMIT FEE. FAILURE TO TAKE APPROPRIATE ACTION TO RENEW PERMITS MAY RESULT IN ADDITIONAL FEES OR FINES TO BE IMPOSED OR OTHER ADMINISTRATIVE ACTION.

Pursuant to M.G.L. Ch 62C, sec. 49A, I certify under the penalties of perjury that I, to my best knowledge and belief, have filed all state tax returns and paid all state taxes required under law.

__________________________________
Federal Identification Number

_____________________________________
Print Name of Individual or Corporate Name

_____________________________________
Signature of Individual or Corporate Name

by___________________________________
Corporate Officer (if applicable)

RECEIVED
FATS, OILS AND GREASE (FOG)

FACILITY OPERATIONAL CHARACTERISTICS
1. Please indicate the quantity of each item that you currently have in your facility or will install.

- Grill  
- Oven  
- Dishwasher  
- Pre Rinse Sink  
- Mop Sink  
- Deep Fryer  
- Floor Drains  
- Hand Sink  
- Tilt Kettle/Crock Pot  
- Garbage Disposal  
- 3 Bay Pot Sink  
- 2 Bay Pot Sink  
- Single Bay Sink  
- Other Equipment

2. Fill in the following information about your current wastewater flow.

<table>
<thead>
<tr>
<th>Maximum Daily Flow (gpd)</th>
<th>Average Daily Flow (gpd)</th>
<th>No. of hours per day discharge occurs</th>
<th>Start Date of Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Identify the Best Management Practices (BMPs) to be implemented by the permittee to minimize the adverse environmental effects of activities authorized under this permit. (See FOG Control Program Guidance Manual for BMPs)

- Train Kitchen Staff
- Recycle waste cooking oil
- Cover outdoor grease & oil storage containers
- Dispose of used oil through a licensed grease hauler
- Use absorbent pads or other material to clean up spilled material
- Routinely clean kitchen exhaust system filters
- Post "No Grease" signs
- Clean grease traps routinely
- Keep a maintenance log
- Dry wipe pots, pans, and dishware prior to dishwashing
- Witness all grease trap cleaning and maintenance
- Utilize grease trap monitoring system

- Received BMP’s List
- Received Guidance Manual

GREASE TRAP INFORMATION

<table>
<thead>
<tr>
<th>ID #</th>
<th>Location</th>
<th>Make, Model &amp; Size</th>
<th>New or Existing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Licensed Grease Recycler Information

Name of Recycler: ___________________________ Phone: ___________________________

Licensed Grease Disposal / Hauler Information

Name of Hauler: ___________________________ Phone: ___________________________

Monitoring System

Type of Monitoring System (ultrasonic, etc.): ___________________________
Manufacturer: ___________________________ Phone: ___________________________
Model/Serial No.: ___________________________ Date of installation: ___________________________

Note: Monitoring Systems must comply with PDI G-102.
## APPENDIX F: INSTALLATION CHECKLIST

<table>
<thead>
<tr>
<th>No.</th>
<th>Item Description</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Each grease trap serves not more than four single compartment sinks of the same depth. Grease trap is sized based upon the number of fixtures discharging to it.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>No food waste disposal unit is connected to or discharges into any grease trap.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Waste from toilets and urinals does not discharge to the exterior grease traps.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The vertical distance between the fixtures outlets and grease trap weirs is as short as practical.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Each fixture connected to a grease trap is provided with an approved type flow control or restricting device installed in a readily accessible and visible location. Devices shall be designed so that the flow through the device or devices at no time exceeds the rated capacity of the grease trap.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Each fixture discharging into a grease trap is individually trapped and vented in an approved manner.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Each grease trap is properly vented to allow air circulation throughout the entire drain system.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Grease trap is easily accessible for inspection and cleaning and access does not require the use of ladders or the removal of bulky equipment.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>There is a minimum of one access point into each compartment of the exterior trap and no access points are greater than 10 feet apart. Each access opening is leak-resistant and cannot slide, rotate, or flip.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Location of exterior grease traps are shown on approved building plans. Drawings of traps are complete and show all dimensions, capacities, reinforcing and structural design calculations.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The grease trap should be sized so that its rated capacity is never less than 40% of the individual fixture capacity in gallons.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Installed grease traps shall have a grease retention capacity of not less than 2 lbs of grease for each gallon per minute (gpm) of flow.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>All waste enters the trap through the inlet pipe.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Exterior grease trap cover is gastight and has a minimum opening of 20 inches in diameter.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>A sample box is provided on the outlet side of exterior grease traps. This is recommended and may be required for periodic sampling of the effluent quality.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Exterior grease trap is permanently and legibly marked with the manufacturer’s name of trademark, model number, and certification seal of the Plumbing &amp; Drainage Institute (PDI) or AMSE.</td>
<td></td>
</tr>
</tbody>
</table>
An entry should be made for each item using the following codes:
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“NC” – Not checked (provide explanation in the Notes)

Notes:
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Signature:_____________________________ Date:______________________
APPENDIX G: POSTERS FOR FSE’S
# Managing FATS, OILS, and GREASE

<table>
<thead>
<tr>
<th>DON’T…</th>
<th>DO…</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DO NOT pour cooking residue directly into the drain.</td>
<td>1. Wipe pots, pans, and work areas prior to washing.</td>
</tr>
<tr>
<td>2. DO NOT dispose of food waste into the garbage disposal.</td>
<td>2. Dispose of food waste directly into the trash.</td>
</tr>
<tr>
<td>3. DO NOT pour waste oil directly into the drain.</td>
<td>3. Collect waste oil and store for recycling.</td>
</tr>
<tr>
<td>4. DO NOT wash floor mats where water will run off directly into the storm drain.</td>
<td>4. Clean mats inside over a utility sink.</td>
</tr>
</tbody>
</table>
* **N**o kitchen waste down toilets

* **N**o Grease down the sink

* **N**o food waste down the sink

* **N**o Grease down floor drains

* **Y**es scrape dishes to waste containers

* **Y**es Dry wipe pots, pans, grease trays

* **Y**es Dry wipe all grease spills

* **Y**es use grease collection containers

Courtesy of PDI
WWW.PDIONLINE.ORG
Get the Grease out of the Kitchen!

Yes...

- Scrape all dishes to waste containers
- Dry wipe all pots, pans, and grease collection pans
- Dry wipe any grease spills

No...

- No kitchen waste down toilets
- No grease down sink
- No food waste down sink
- No grease down floor drain
PLACE USED OIL AND GREASE IN A GREASE RECYCLING BIN

Photos courtesy of the Sacramento Regional County Sanitation District.

www.roseville.ca.us/foodfats
PROPER DISPOSAL OF FATS, OILS AND GREASE
TOP BEST MANAGEMENT PRACTICES (BMPS) ILLUSTRATED

www.roseville.ca.us/foodfats

Dry wipe all food waste from dishware, cookware and work areas into the garbage.

Keep all spilled grease or oil from going down drains by using absorbent materials to block and clean up spills.

Photos courtesy of the Sacramento Regional County Sanitation District.
Billerica, MA DPW & Health Department
Fats, Oils and Grease (FOG) Prevention Program

APPENDIX H: COMMERCIAL COOKING EXHAUST SYSTEM CLEANING FLYER
FOR MORE INFORMATION CONTACT:

Billerica Wastewater Treatment Facility
(978) 671-0956

Billerica Health Department
(978) 671-0931