



Fats, Oils, and Grease Control Program

Grease Interceptor Maintenance, Procedures and Cleaning Logs

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Introduction to the FOG Program

Every day, significant quantities of fats, oils and grease (FOG) generated during food preparation and clean-up are discharged to Elk River's sewer system. The FOG solidifies on the walls of the pipes, eventually blocking the flow of wastewater. When this happens, wastewater backs up into private properties, typically through kitchen or basement fixtures, or overflows into the environment. Untreated wastewater can pose serious health risks to the public and the resulting property damage can be expensive to clean up.



In May of 2014, the Elk River City Council adopted a Fats, Oil and Grease Control Ordinance under delegation by the U.S. Environmental Protection Agency's Clean Water Act (1972), to improve water quality and eliminate sanitary sewer overflows (SSOs) through implementation of a Fats, Oils and Grease (FOG) Control Program.

The Program requires food services establishments and food manufacturing/processors with the potential to discharge FOG-laden wastewater to have and maintain an adequate grease interceptor, adhere to best management practices and maintain accurate records.

City-Customer Partnership

The goal of Elk River's Wastewater Division is to develop a strong partnership between the City and food service establishments by encouraging all users of the sewer system to do their part to minimize the amount of FOG discharged and to comply with the requirements of the FOG Program. The City will perform periodic inspections to ensure non-residential dischargers are implementing FOG control solutions, including but not limited to kitchen best management practices and adequate cleaning and maintenance of grease control devices.

Education will also play an important role in the FOG Program, as City staff will provide facilities with information about ways to implement or improve their practices. Ultimately, this partnership will minimize grease-related



Impacted Facilities

All food service establishments or food manufacturer/processors that discharge, or have the potential to discharge, FOG-laden wastewater to the City's sewer system are required to comply with the FOG Program. Examples of impacted facilities include:

Restaurants	Hospital and school cafeterias
Carry outs and Caters	Correctional facilities
Pizzerias and Delis	Nursing homes and assisted living facilities
Convenience stores	Coffee shops
Ice cream parlor	Grocery stores

The Problem with FOG

FOG discharged to the sewer system causes:

- Clogged pipes;
- Sewage back-ups through kitchen or bathroom fixtures;
- Sewage discharges into the environment, including the Elk and Mississippi Rivers;
- Expensive clean up and replacement of damaged property; and foul odors.

Program Goals

The FOG Program aims to:

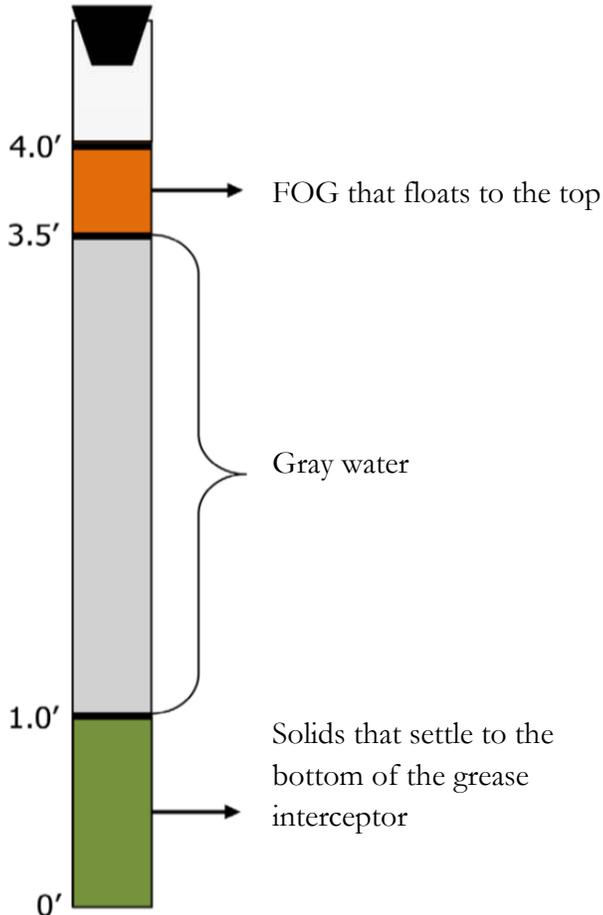
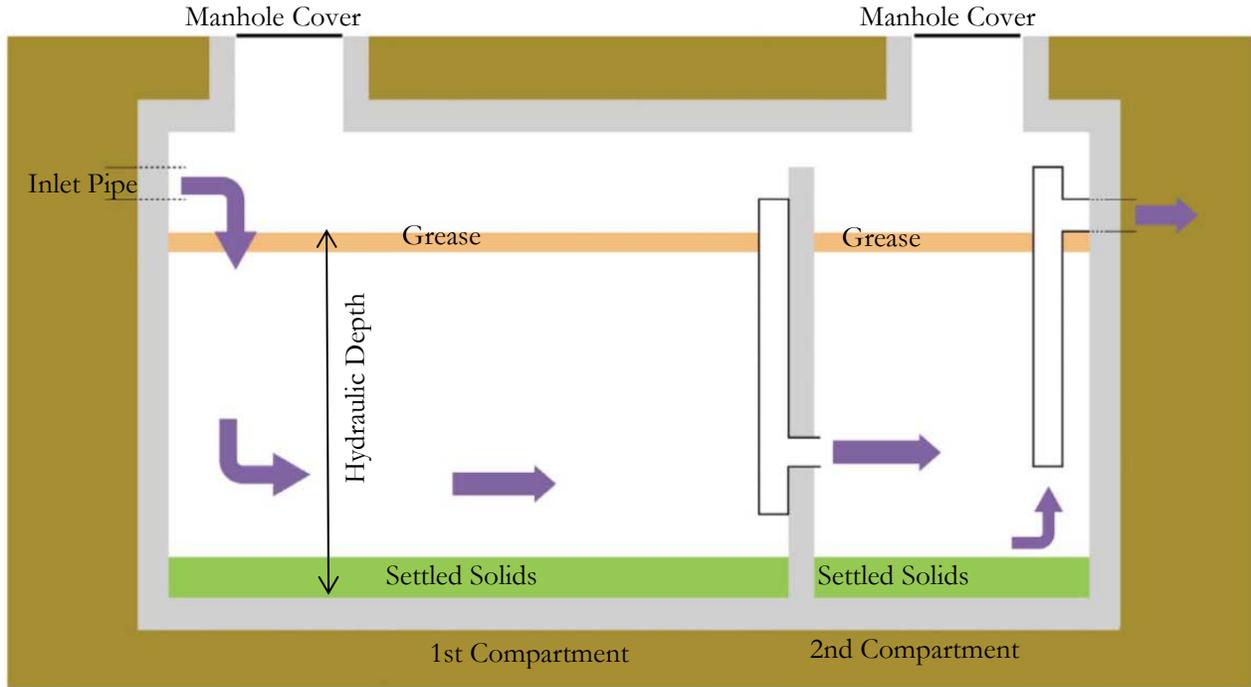
- Maintain compliance with the Clean Water Act and requirements set forth by City Code;
- Eliminate dry-weather, grease-related sanitary sewer overflows;
- Minimize the amount of FOG discharged to the sewer system;
- Improve current grease control device maintenance practices;
- Educate all users of the sewer system about kitchen best management practices.

Program Requirements

All food service establishments or food manufacturer/processors that discharge or have the potential to discharge FOG-laden wastewater must be in compliance with the FOG Program requirements described below:

- **Have a properly sized, installed, and functioning grease interceptor.** To be effective, all grease control devices are to be sized and installed in accordance with the most recent adopted version of the Minnesota Plumbing Code Section 4715;
- **Clean and maintain the grease interceptor frequently enough to comply with the 25% Rule*.** Cleaning frequency will depend on the number of fixtures discharging to it, the seating capacity of the establishment and the volume of the device. Implementing kitchen best management practices can reduce the required cleaning frequency;
- **Keep a grease interceptor maintenance log up-to date and on-site.** The maintenance log must document all grease interceptor inspections, maintenance and disposal activities performed. In addition, records such as waste hauler manifests must be retained for three years;
- **Properly collect and dispose of FOG.** FOG should be disposed of as solid waste or stored in a covered, leak-proof receptacle until it can be taken off-site by a licensed hauler.

Example Calculation - Is this device in compliance with the 25% Rule?



Does this example meet the 25% rule?

Total FOG at top of the device = 0.5 ft.
 Total solids at bottom of the device = 1.0 ft.
 Total depth of device contents = 4.0 ft.

Percentage of FOG + solids:

$$\frac{\text{(FOG + solids)}}{\text{Depth of interceptor contents}} = \frac{(0.5 \text{ ft.} + 1.0 \text{ ft.})}{4.0 \text{ ft.}}$$

$$= \frac{1.5 \text{ ft.}}{4.0 \text{ ft.}} = 37.5\%$$

Answer: No, the 25% rule is not met and the food service establishment needs to increase the cleaning frequency or add capacity.

Purpose of a Grease Interceptor

The two most common types of grease control devices are the **large outdoor gravity interceptor** and the **hydro-mechanical grease trap** located near the fixture(s) it serves. Both types of devices separate the FOG from the wastewater, allowing the FOG-free wastewater to discharge to the City's sewer system. The effectiveness of each device is dependent on frequent clean out and maintenance.



What the FOG Program Means to You

- **More frequent inspections.** Currently inspections are performed in response to a problem in the collection system. The City is now taking a proactive approach to minimize the FOG problem by conducting unannounced inspections to verify compliance with FOG Program requirements.
- **More emphasis on keeping grease out of the sewer system.** All grease-generating food service establishments will be required to have and maintain grease control devices, regardless of past practices.
- **The inspector will open and test the grease control device for compliance with the 25% Rule.**



What to expect when you are Inspected

A properly identified City representative will visit your facility to review the best management practices you have implemented for FOG control.

As a food service establishment manager/owner, you will have an opportunity to describe your grease control device cleaning and FOG handling practices.

If your facility generates grease-laden wastewater and does not have a grease control device, you will be required to install one.

The City may grant a variance or conditional waiver from the minimum requirements if the facility demonstrates to the satisfaction of the City that any FOG discharge is negligible and will have an insignificant impact on the sewer system.

During the initial inspection, the City representative will explain the purpose of a maintenance log and will request to see this log during subsequent inspections.

If your facility has a grease control device, the inspector will check to see that the device is properly installed, check the cleaning frequency recorded on the maintenance log, and check to see that the device is being maintained in accordance with the 25% Rule.

Yellow and brown grease disposal methods will be observed.

The inspector may take photos to document compliance status.



Enforcement

The City of Elk River Wastewater Division will manage the FOG Program through a combination of public notices, inspections and education. Enforcement action for violations of the FOG Program is in accordance with Section 78-156 of the Fats, Oils and Grease Control Ordinance and included in the 2014 Master Fee Schedule.

Maintenance Guidelines for Grease Control Devices

- Clean grease interceptors frequently enough to continually comply with the 25% Rule.
- Remove floating grease, liquids and solids from the grease control device.
- The grease control device should be left completely empty upon completion of maintenance.
- Under no circumstances should the contents of the interceptor be discharged to the City's sewer.
- Flushing the device with hot water, chemicals or emulsifying agents is strictly prohibited.
- Make sure baffles are secure and in place.
- Inspect the grease interceptor frequently for cracks, corrosion or other defects.
- Ensure the lid is secure and properly seated after inspection or maintenance.
- Check that the inlet and outlet tees are not clogged or loose.
- Document all cleaning and maintenance activities.



Best Management Practices for Commercial Food and Restaurant Facilities

Train kitchen staff and employees about how to implement BMPs.

Reason: People are more willing to support an effort if they understand the basis for it.

Benefit: Benefits of BMPs will have a better chance of being implemented.

Post “No Grease” signs above sinks and on the front of dishwashers.

Reason: Signs serve as a constant reminder for staff working in kitchens.

Benefit: Minimizes grease discharge to interceptors and reduces the cost of cleaning and disposal.

Dry wipe pots, pans, and dishware prior to dishwashing.

Reason: FOG material will not be sent to grease interceptors.

Benefit: Less FOG collected reduces cleaning, and maintenance costs.

Dispose of food waste by recycling and/or solid waste removal.

Reason: Diverts food wastes from grease interceptors.

Benefit: Reduces the frequency and cost of grease interceptor cleaning.

Recycle waste cooking oil.

Reason: Recycling saves money and doesn't require interceptor pumping.

Benefit: Some companies pay to haul used cooking oil.

Cover outdoor grease and oil storage containers.

Reason: Rainwater causes open containers to overflow onto the ground.

Benefit: Avoids polluting of streams, creeks, and other water bodies.



Routinely clean kitchen exhaust system filters.

Reason: Grease and oil escapes through the kitchen exhaust system, accumulates on exterior surfaces, and eventually entering the storm drain system when it rains.

Benefit: Minimizes chances of grease-related fires and the likelihood of grease entering nearby water bodies.

Do not pour grease down sinks or into toilets.

Reason: Grease poured into a toilet or sink can congeal, clogging sewer pipes and causing backups.

Benefit: Lower plumbing bills and no loss of business due to sewer backups.

Avoid or limit the use of garbage disposals.

Reason: Garbage disposals grind large food particles into small pieces which can fill up grease interceptors causing backups or requiring more frequent cleaning.

Benefit: No sewer backups and less money spent cleaning out the grease interceptor.

Use a 3-sink compartment dishwashing system, including sinks for washing, rinsing, and sanitizing.

Reason: The three-sink system uses water less than 140°F, whereas a mechanical dishwasher requires a minimum temperature of 160°F.

Benefit: The facility will reduce energy costs for heating the water and operating the dishwasher.

Other Things You Can Do

Empty grease containers before they are completely full to prevent overflows.

Check the grease control device regularly.

Do not discharge FOG down drains, sinks, or storm drains.

Ensure grease interceptors are accessible for maintenance and inspection.

Dry wipe dishes before washing to remove grease.

Use garbage grinders as sparingly as possible.

Clean grease spills with absorbent material and then dispose of in the garbage.

Never empty waste from a deep fryer into a sink or floor drain.

Collect and empty grill scrapings and fryer vat grease into a grease recycling container.

Do not pour excess food or liquid food (e.g., dairy products, milk shake syrup, batters, gravy, or dressings) down the drain.

Use licensed haulers to dispose of used grease.

Use detergents; soap contains oil.

Know grease interceptor location.

If there is little or no FOG in the interceptor, verify that it is installed correctly.



Never dispose of sewage or FOG into a storm drain.

Never put FOG removed from the grease control device into the sewer system.



Contact Information

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FOG CONTROL PROGRAM APPENDICES

Appendix 1	Best Management Practices Employee Training Log
Appendix 2	Observation Checklist
Appendix 3	Grease Interceptor Cleaning Log
Appendix 4	Kitchen Exhaust System Filter Cleaning Record
Appendix 5	Cooking Oil 'Yellow Grease' Recycling Log
Appendix 6	Grease Interceptor Certification Checklist
Appendix 7	FOG Control Compliance Report
Appendix 8	Do's and Don'ts to post for Kitchen Staff
Appendix 9	Example of Grease Hauler Manifest

Fats, Oils, and Grease Best Management Practices Observation Checklist for Restaurants

Approved BMPs for Restaurants:

	Yes	No	N/A
1. Train kitchen staff and other employees how to ensure BMPS are implemented			
2. Post "No Grease signs above sinks and on front of dishwashers			
3. Dry wipe pots, pans, and dishware prior to dishwashing			
4. Dispose of food waste by recycling and/or solid waste removal			
5. Recycle waste cooking oil			
6. Cover outdoor grease and oil storage containers			
7. Routinely clean kitchen exhaust system filters			
8. Do not pour grease into sinks or toilets			
9. Avoid or limit the use of garbage disposals			
10. Clean interceptors with a capacity of 100 gallons or less on a weekly basis			
11. Use a 3-sink dishwashing system (sinks for wash, rinse & sanitizing)			
12. Use strainers in sinks to catch food scraps and other solids			
13. Keep a maintenance log on grease interceptor maintenance			

Signature of Owner/Manager

Date of Observation

Grease Interceptor Certification Checklist

Yes	No	Item
		Interceptor is completely clean and all contents removed during service.
	Comments:	
		Sanitary 'T's' on inlet and outlet sides of interceptor compartments are not clogged, loose or damaged.
	Comments:	
		All baffles are secure and in place.
	Comments:	
		Interceptor does not have cracks or defects (wall and floor).
	Comments:	
		Interceptor sample box or clean out (if equipped) was opened & cleaned.
	Comments:	
		Manhole covers are securely and properly seated after cleaning completion.
	Comments:	
		Storm drains are protected from FOG. (Only rainwater belongs in the storm drain system)
	Comments:	
		Record of interceptor cleaning is on location and current.
	Comments:	
		Photo documentation of all inlets and outlet fittings, internal baffles, walls, floors and all other internal structures are attached to this document.
	Comments:	
		I certify under penalty of law that this document was prepared under my direction or supervision in accordance with system design to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person responsible for gathering the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware of penalties for submitted false information, including fines.
Business Name: _____		Address: _____
Interceptor Inspection Date: _____ Attach photographs of any corrections to this checklist. Deficiencies must be corrected on or before next scheduled pump out date. Date deficiencies were corrected: _____		



FOG CONTROL COMPLIANCE REPORT

A Compliance Report along with any additional documents as required by the FSE or FM/P must be submitted to the Chief Wastewater Operator on a bi-annual basis, unless otherwise authorized by the City. All FOG Compliance Reports must be signed by the authorized representative of the FSE or FM/P. The Compliance Report must contain, at a minimum, the following:

1. A copy of the waste hauler service statement from a licensed Liquid Waste Hauler for each pumping event, if applicable;
2. Grease interceptor cleaning maintenance logs;
3. Waste cooking oil service statements or copy of service contract from a licensed Liquid Waste Hauler or waste cooking oil recycler service logs; and
4. Any records of information obtained pursuant to grease interceptor repair or maintenance.

FOG Control Compliance Reports are due according to the following:

<u>Reporting Period</u>	<u>Due Date</u>
January 1 – June 30	July 15
July 1 – December 31	January 15

RECORD KEEPING

The FSE or FM/P must retain for a minimum of three years and make available for inspection and copying the following records:

1. Grease interceptor maintenance logs;
2. Grease interceptor repair service statements;
3. Waste cooking oil hauler or oil recycler statement of service for waste cooking oil removal including method and location of disposal; and,
4. Employee Best Management Practices (BMP) training logs.

FOG CONTROL INSPECTION

Routine Inspections

Routine FOG Control Inspection frequencies may vary depending on the FSE or FM/Ps compliance history. During a routine inspection, the Chief Operator will verify, at a minimum, that the following conditions of the FOG Control program are met:

1. Grease interceptor operation and maintenance;
2. Implementation of BMPs;
3. Waste cooking oil storage and removal; and
4. Record keeping.

If the facilities grease interceptor is found to contain an accumulation of FOG and settled solids that exceeds the 25% Rule or if FOG is found in the facilities lateral sewer line connecting to the City's main sewer line, the facility may be required to have their plumbing system to the City's main sewer line professionally cleaned of all accumulated FOG by a permitted Liquid Waste Hauler within a timeframe determined by the Chief Operator.

In the event the required maintenance is not performed within the required time frame, the City may perform the required maintenance and bill the facility for any costs incurred. Refusal to pay the assessed costs will constitute a separate violation of the Ordinance.

Additional Inspections

Facilities may also be inspected in response to any of the following criteria:

1. To verify corrective action has been taken to achieve compliance to any violation found during a routine inspection;
2. The required compliance report was not submitted, submitted late or incomplete;
3. The City received a complaint that the facility is not in compliance with the Ordinance;
4. The facility is suspected of causing a sanitary sewer blockage or SSO; or
5. Other situations that the Chief Wastewater Operator deems necessary.

FOG CONTROL ENFORCEMENT

The Chief Wastewater Operator may bring enforcement actions for noncompliance with the FOG Control Program, as authorized by the Ordinance. A FSE or FM/P found in violation of the Ordinance will be subject to the enforcement actions set forth in the City of Elk River Master Fee Schedule including penalties and potential severance of water and sewer service.



X2X26X2013

Manifest No. 71545

Commercial Waste Manifest

ORIGINATOR INFORMATION

Originator Name BP AM/PM
 Address 4485 Chamblee Dunwoody Rd. Phone (770) 216-4373
 City, State Dunwoody, GA Zip 30338 County DeKalb
 Customer # QTR300CC

Type of Trap: Grease Interceptor Oil/Water Separator Grit/Sand Trap Outside Inside
 Other: _____ Trap Condition: _____

Tank #1 1500 gallons Tank #2 _____ gallons Service Frequency 13 Weeks
 Tank #3 _____ gallons Tank #4 _____ gallons

Generator Certifications: I hereby certify that the wastes listed under this consignment are not hazardous, as defined in regulations promulgated by the State of Georgia, Dept. of Natural Resources, and that the type wastes and quantity indicated are fully accurate.

Originator Name (Printed)	Signature	Date	Time
<u>BP Vibertal</u>	<u>[Signature]</u>	<u>2/25/2013</u>	<u>10:30 AM</u>

TRANSPORTER INFORMATION

Company Apex Environmental Services Driver Name _____
 Address 3350 Montreal Station, Building 1 - Suite 12 Phone (770) 621-9848
 City, State Tucker, GA Zip 30084
 State Registration #: FOG017 FOG Permit #: 002

Transporter Certification: I hereby acknowledge receipt of the above listed waste and will transport and dispose of it in accordance with all applicable laws.

Driver Name (Printed)	Signature	Date	Time
<u>M. S. [Signature]</u>	<u>[Signature]</u>	<u>2/25/2013</u>	<u>10:30 AM</u>

RECEIVER/DISPOSAL INFORMATION

Disposal Name AES Contact Name _____
 Address 3350 Montreal Station, Building 1 - Suite 12 Phone (770) 621-9848
 City, State Tucker, GA Zip 30084 County DeKalb
 EPD Approval/Permit # _____ NPDES # _____ LAS # _____
 Solid Waste Handling # _____ Industrial Pretreatment Permit # _____
 Total Quantity Received Gallons 1500

Certification of Receipt: The above waste was received by this facility within the authorized property boundaries and will be processed, disposed of, or recycled in accordance with all applicable laws.

Disposal Name (Printed)	Signature	Date	Time
<u>[Signature]</u>	<u>[Signature]</u>	<u>2/25/13</u>	<u>11:00 AM</u>

HAULER _____ GENERATOR _____ DISPOSAL _____ GENERATOR _____ COUNTY or INSPECTOR _____
 Georgia Environmental Protection Division Manifest Form. March 2007 rev.1

NO GREASE DOWN THE DRAIN!

KEEP DRAINS FLOWING

**WIPE FOOD AND GREASE
OUT OF POTS BEFORE
WASHING AND DISCARD
WASTE INTO THE TRASH**



**COLLECT AND
RECYCLE USED
COOKING OIL**



**HAVE GREASE
INTERCEPTORS AND TRAPS
CLEANED ON A ROUTINE
SCHEDULE**



**USE ABSORBENTS
TO CLEAN UP
GREASY SPILLS
BEFORE MOPPING**



**WHEN KITCHEN DRAINS ARE FLOWING,
BUSINESS KEEPS FLOWING TOO.**