Fats, Rags, Oils, and Grease Program

Bedford Regional Water Authority

3rd Edition

Revised April, 2018

Introduction

Fats, Rags, Oils, and Grease ("FROG") are common causes of blockages and Sanitary Sewer Overflows ("SSO"s) in communities across the United States. According to a 2004 EPA Report to Congress, nearly half of the blockages that resulted in SSOs were caused by grease[1]. Sanitary sewer lines are not equipped to handle FROG; the results of grease and oil discharged to a Sanitary Sewer System are costly to remedy and create public health hazards when overflows occur. The Bedford Regional Water Authority ("Authority") has designed this program to eliminate FROG from the sewer systems in Bedford County.

Sources of FROG

- Residential
  - Improper disposal of grease and oil produced from regular cooking
  - Cleaning habits, including putting cooking oil and grease down the drain
  - Improper disposal of motor oil and mechanical grease products
  - Flushing wipes, rags, paper towels, and any other personal hygiene products down the drain, including those labelled as "flushable"
- Commercial
  - Failure to use Best Management Practices ("BMP"s) in regard to grease disposal and regular cleaning
  - Absence of a needed Grease Interceptor device
  - Inadequate maintenance of Grease Interceptor devices
  - Improper disposal of wipes, shop rags, and paper products down the drain

Problems Caused by FROG

- Interior
  - Slow draining sinks and toilets
  - Blockages in drain pipes
  - Costly drain backups that can result in sewage on the floor, fines, and lost business for commercial locations
- Exterior
  - Sewer line blockages
    - Increased cleaning frequency and cost
    - Weakening of sewer infrastructure
  - Sanitary Sewer Overflows
    - Environmental Health Risks
      - Contaminated streams possibly resulting in fish kills and harm to other aquatic life
      - Harm to land dwelling plants and animals
    - Human Health Risks
      - Exposure to raw sewage
      - Possible contact with infectious bacteria, viruses, and parasites
    - Economic Consequences
      - Clean up costs
      - State and Federal fines
      - Land and stream rejuvenation costs
      - Forced rate increases to recover funds lost from overflow management

[1] Report to Congress Impacts and Control of CSOs and SSOs, p 4-28.

Solution

This FROG Program has been designed to provide a solution for the costly and hazardous problems that FROG creates. The regulations in this program are designed to protect the sanitary sewer system from FROG in order to prevent SSOs and Sanitary Sewer Blockages so we can provide our customers with the best possible service and protect our community and the environment from the damage that FROG can cause. These regulations are designed to primarily regulate Food Service Establishments; customers with petroleum based oil and grease are also included in order to prevent hazardous sewer line conditions and the negative impact these substances can have on the Publicly Owned Treatment Works (POTW). Any commercial entity that could potentially contribute to SSO's through the discharge of rags to the sanitary sewer system will also be monitored under this program. Additionally, since residential discharge is often a significant contributor to grease and rags in the sanitary sewer system, Public Outreach and Education is incorporated into this program in order to decrease the problems that residential customers experience as a result of FROG.

FROG Program Authority

Authority for this program is provided by Environmental Protection Agency Clean Water Act Pretreatment Program regulations at 40 CFR 403.5(b) (3). The Virginia Pollutant Discharge Elimination System permit also provides authority for this program by requiring regulation of indirect discharges that have the ability to cause interference at the POTW. This includes anything that has the ability to obstruct the flow to the POTW or interfere with the treatment processes at the POTW. This policy is also supplemental to the Bedford Regional Water Authority's Industrial Wastes and Pretreatment Policy and complies with the regulations found in Section 18-50 of the Bedford County Code and Chapter 58, Article VIII of the Town of Bedford Code.

Food Service Establishments

All Food Service Establishments (FSEs) are required to have a properly sized Grease Interceptor Device installed and maintained in a manner that prevents the pass through of fats, oils, and grease to the sanitary sewer system.

I. New Food Service Establishments

All new FSE's are required to install a grease interceptor device prior to opening for business.

- **A.** Site plans and building plans must show location, size, and type of grease interceptor device and must include calculations used to determine size.
- **B.** The Bedford County Department of Community Development, Division of Building Inspections must be contacted prior to making any plumbing or electrical modifications necessary for grease interceptor device installation.
- **C.** The Grease Interceptor Device Registration form must be submitted to the Bedford Regional Water Authority prior to installation of the device.
- **D.** The Grease Interceptor Device must meet the minimum requirements set forth by this document and be reviewed and approved by the Bedford Regional Water Authority Compliance Coordinator.
- **E.** The Grease Interceptor Device must be installed according to manufacturer's instructions and the State of Virginia Plumbing Code.
- **F.** All regulations listed above apply to existing structures renovated to contain new FSE's.

II. Existing Food Service Establishments

All existing FSE's are required to have a properly sized, installed, and maintained grease interceptor device.

- **A.** All FSE's are required to have a Grease Interceptor Device Registration form on file with the Bedford Regional Water Authority.
- **B.** All FSE's are required to submit quarterly Grease Interceptor Maintenance Reports to the Bedford Regional Water Authority.

C. Any renovations that result in an increase in food production, change in type of food served, or alteration to the kitchen area of an FSE require a review of the existing Grease Interceptor device to ensure the size is adequate for it to remain effective. If the Grease Interceptor device is not adequately sized to accommodate the changes, then a new, properly sized Grease Interceptor device must be installed and registered.

D. Any existing FSE that does not have a grease interceptor device will have 90 days from the date of notification by the Bedford Regional Water Authority to install a device in accordance with the FROG Program regulations.

E. There will be no "grandfathered in" provisions made. All FSE's are expected to comply with all of the regulations of the Bedford Regional Water Authority FROG Program.

Design and Installation of Grease Interceptors

I. General Requirements

A. All kitchen fixtures must be routed through the grease interceptor device. Discharge from a dishwasher must pass through a solids interceptor prior to entering the grease interceptor device.

B. Only kitchen fixtures should be routed through the grease interceptor device. Sanitary discharge from restrooms or other sources may not be routed through the grease interceptor device.

C. The temperature of the water entering the grease interceptor device must not be higher than 140°F.

D. Food grinders are not to be used. If previously installed, the discharge from the food grinder must pass through a solids interceptor prior to entering the grease interceptor device.

E. The grease interceptor device must be installed according to manufacturer's recommendations, the latest edition of the International Plumbing Code, the Virginia Uniform Statewide Building Code, and the State of Virginia Plumbing Code. The Bedford Regional Water Authority shall provide review and approval and a building permit must be obtained prior to installation.

F. The Bedford Regional Water Authority Compliance Coordinator must be notified and a Grease Interceptor Device Registration form must be submitted prior to the installation of the grease interceptor device.

II. Exterior Grease Interceptor Devices

A. The minimum size for an exterior gravity grease interceptor device is 1000 gallons. The minimum size for an exterior hydro-mechanical grease interceptor is 100 GPM or 1000lbs.

B. The grease interceptor device should provide no less than 30 minutes of water retention time. Peak flow rates of all plumbing fixtures routed through the grease interceptor device should be used to calculate the retention time.

C. The grease interceptor device must be watertight, contain 4" minimum diameter outlet and inlet tees that are plugged with removable threaded caps, and have a minimum of 2 compartments with an interior baffle wall that contains a 4" minimum port. There must be an air gap at the top to ensure the grease interceptor device does not become air bound and it must be properly vented to the atmosphere.

D. The grease interceptor device must have a built in sample port on the effluent line and access ports that provide full surface area access. The grease interceptor device should be safely accessible at all times in order to facilitate maintenance, inspection, cleaning, and sampling.

E. Repair of the grease interceptor device must be done using boots or link seals. Grouting material is not to be used for repairs.

III. Interior Grease Interceptor Devices

A. The minimum size for an interior grease interceptor device is 100lb capacity unit or 20 GPM hydro-mechanical device.

B. The grease interceptor device should provide no less than 30 minutes of water retention time. Peak flow rates of all plumbing fixtures routed through the grease interceptor device should be used to calculate the retention time.

C. The grease interceptor device must be watertight, have an air gap at the top to ensure the device does not become air bound, and be properly vented.

D. The grease interceptor device must have a built in sample port on the effluent line and access ports that provide full surface area access. The grease interceptor device should be safely accessible at all times in order to facilitate maintenance, inspection, cleaning, and sampling.
E. The grease interceptor must not have rust and/or corrosion and be kept sealed except for maintenance and inspection.

IV. Automatic Grease Removal Devices

A. Automatic grease removal devices are acceptable fats, oils, and grease control devices provided that they meet the general requirements set forth in the FROG Program.
B. The automatic grease removal device must be sized appropriately and have sufficient capacity to accommodate all of the fixtures discharging to the device.
C. The automatic grease removal device must be cleaned daily at a minimum.
D. The automatic grease removal device must not have rust and/or corrosion and must be kept in good working order. If any part of the device fails to function properly, it must be repaired immediately to prevent the pass through of oil and grease to the sanitary sewer.
E. The automatic grease removal device must have a built in sample port on the effluent line and should be safely accessible at all times in order to facilitate maintenance, inspection, cleaning, and sampling.

Food Service Establishment Management & Maintenance

I. Best Management Practices

A. Cooking Oil
   1. Cooking oil should not be poured down any facility drain.
   2. Cooking oil should be collected and recycled.
   3. Containers used to collect cooking oil should be emptied before they become full and remain covered at all times, especially when being carried, moved, or stored outside in order to prevent spills and leaks.
   4. Cooking oil containers kept outside must be stored in a manner that will not allow spills or leaks to enter the sanitary or storm sewer.
   5. Cooking oil spills must be dry cleaned and kept away from floor drains or outdoor sewer drains.
   6. All staff must be trained on proper disposal and cleaning of cooking oil.

B. Grease
   1. All sinks must have drain screens in place and maintained in order to keep larger particles from going down the drain.
   2. Signs must be posted at all sinks to remind employees that oil, grease, and food particles are not to be put down the drain.
   3. All dishes, cookware, utensils, cutlery, and floor areas should be scraped into trash containers and wiped prior to rinsing and washing.
   4. Grease should not be dissolved by hot water, chemicals, enzymes, or emulsifying agents and put down the drain. The grease will re-solidify in the sewer line and cause harmful effects.
   5. All staff must be trained on the best management practices that pertain to grease and the cleaning of kitchen items that are in contact with grease.

II. Grease Interceptor Maintenance

A. Exterior Grease Interceptor Devices
   1. The minimum cleaning frequency for an exterior grease interceptor device is 90 days. More frequent cleaning is required if that frequency is not sufficient to prevent grease pass through to the sewer system.

2. The total amount of combined grease and solids may not exceed 25% of the total volume of the device. This amount is calculated by obtaining a core sample of the contents of the device and measuring the amount of solids, water, and grease each in inches and using the following calculation:

$$\frac{g+s}{t} \times 100 = \%\ of\ grease\ and\ solids$$

Where:
g= inches of grease measured
s= inches of solids measured
t= total number of inches in core sample

3. Exterior grease interceptor devices must be pumped out by a transporter that is approved by the Bedford Regional Water Authority.
4. Exterior grease interceptor devices must be completely emptied when cleaned. Decanting and/or stacking by transporters are not allowed, and reports of either practice must be reported to the Bedford Regional Water Authority.
5. Contents of the exterior grease interceptor device must be transported and discharged at a facility authorized to receive the wastewater.
6. All cleaning and maintenance is to be observed by a representative from the FSE.
7. The Required Maintenance File must be maintained and kept onsite with copies of all maintenance invoices and manifests for the past 3 years.
8. The Quarterly Grease Interceptor Device Report must be received by the Bedford Regional Water Authority by the 10th day of the following months: January, April, July, and October.

B. Interior Grease Interceptor Devices
1. The minimum cleaning frequency for an interior grease interceptor device is every 30 days. More frequent cleaning is required if that frequency is not sufficient to prevent grease pass through to the sewer system.
2. Interior grease interceptors may be cleaned by the FSE management. Wastewater removed from the interceptor must be placed in a sealed container and recycled or thrown away. Contents are not to be disposed of in any other manner and should not be dumped on the ground or in the sanitary or storm sewer.
3. If cleaning is done by a third party, all cleaning and maintenance is to be observed by a representative from the FSE and all contents of the interior grease interceptor device must be transported and discharged at a facility authorized to receive the wastewater.
4. The Required Maintenance File must be maintained and kept onsite with copies of all maintenance invoices and manifests for the past 3 years.
5. The Quarterly Grease Interceptor Device Report must be received by the Bedford Regional Water Authority by the 10th day of the following months: January, April, July, and October.

Petroleum Using Establishments

Petroleum using establishments are required to have Oil/Water separator devices and, in some cases, grit interceptors.

I. New Petroleum Using Establishments

All new petroleum using establishments are required to install an oil/ water separator device prior to opening for business.

A. Site plans and building plans must show location, size, and type of oil/ water separator device and must include calculations used to determine size.
B. The Bedford County Department of Community Development, Division of Building Inspections must be contacted prior to making any plumbing or electrical modifications necessary for oil/ water separator device installation.
C. The Oil/ Water Separator Device Registration form must be submitted to the Bedford Regional Water Authority prior to installation of the device.

D. The Oil/ water separator device must meet the minimum requirements set forth by this document and be reviewed and approved by the Bedford Regional Water Authority Compliance Coordinator.
E. The Oil/ water separator device must be installed according to manufacturer's instructions, the Virginia State Plumbing Code, and the American Petroleum Institute specifications.
F. All regulations listed above apply to existing structures renovated to contain new petroleum using establishments.

III. Existing Petroleum Using Establishments

All existing petroleum using establishments are required to have a properly sized, installed, and maintained oil/ water separator device.

A. All petroleum using establishments are required to have an Oil/ Water Separator Device Registration form on file with the Bedford Regional Water Authority.
B. Any existing petroleum using establishment that does not have an oil/ water separator device will have 90 days from the date of notification by the Bedford Regional Water Authority to install a device in accordance with the FROG Program regulations.
C. There will be no "grandfathered in" provisions made. All petroleum using establishments are expected to comply with all of the regulations of the Bedford Regional Water Authority FROG Program.

IV. Design and Installation of Oil/ Water Separator Devices

A. All water discharged that may potentially contact petroleum must be routed through the oil/ water separator device. Sanitary discharge should not be routed through the device.
B. If the oil/ water separator device does not have a built-in grit interceptor a separate grit interceptor device must be installed to allow the solid particles to be removed prior to entering the oil/ water separator device.
C. Oil/ water separator devices and grit interceptor devices must be designed and installed according to manufacturer's instructions, the American Petroleum Institute specifications, and the Virginia State Plumbing Code.
D. The oil/ water separator device should provide no less than 30 minutes of water retention time. Peak flow rates of all drains and plumbing fixtures routed through the oil/ water separator device should be used to calculate the retention time.
E. The oil/ water separator device must be watertight, must have an air gap at the top to ensure the device does not become air bound, and be properly vented to the atmosphere.
F. The oil/ water separator device must have a built in sample port on the effluent line and access ports that provide full surface area access. The grease interceptor device should be safely accessible at all times in order to facilitate maintenance, inspection, cleaning, and sampling.
G. The Bedford Regional Water Authority shall provide review and approval and a building permit must be obtained prior to installation.
H. The Bedford Regional Water Authority Compliance Coordinator must be notified and an Oil/ Water Separator Device Registration form must be submitted prior to the installation of the grease interceptor device.

V. Petroleum Using Establishment Management & Maintenance

A. Best Management Practices
    1. Oils and grease should be disposed of properly and never poured down any type of drain.
    2. Oil and grease should not be dissolved by hot water, chemicals, enzymes, or emulsifying agents and put down the drain. Oil and grease in the sewer line can cause harmful effects.
    3. Oil and grease spills must be dry cleaned and kept away from floor drains or outdoor sewer drains.
    4. Containers used to collect oil and grease should be emptied before they become full and remain covered at all times, especially when being carried, moved, or stored outside in order to prevent spills and leaks.
    5. Oil and grease containers kept outside must be stored in a manner that will not allow spills or leaks to enter the sanitary or storm sewer.

6. Oil absorbent materials and shop towels used to clean up oil and grease must be disposed of properly and never put down any drain.
7. All staff must be trained on the best management practices that pertain to oil and grease disposal and the cleaning and/or disposal of items that are in contact with oil and grease.

B. Oil/ Water Separator Maintenance
1. The minimum cleaning frequency for an oil/ water separator device is 90 days. More frequent cleaning is required if that frequency is not sufficient to prevent oil from passing through to the sewer system.
2. The total amount of solids may not exceed 50% of the total volume of the grit interceptor chamber or separate grit interceptor device. Solids emptied must be disposed of in a proper manner and never put down any type of drain or emptied onto the ground.
3. Oil/water separator devices must be pumped out by a transporter that is approved by the Bedford Regional Water Authority.
4. Oil/ water separator devices must be completely emptied when cleaned. Decanting and/or stacking by transporters are not allowed and reports of either practice must be reported to the Bedford Regional Water Authority.
5. Contents of the oil/ water separator device must be transported and discharged at a facility authorized to receive the wastewater.
6. All cleaning and maintenance is to be observed by a representative from the petroleum using establishment.
7. The Required Maintenance File must be maintained and kept onsite with copies of all maintenance invoices and manifests for the past 3 years.
8. The Quarterly Oil/ Water Separator Device Report must be received by the Bedford Regional Water Authority by the 10th day of the following months: January, April, July, and October.

Regulation

I. Record Keeping and Reporting

A. Inspection Logs
1. **Exterior Grease Interceptor Devices** are to be inspected no less than **once a month~~week~~.** The Bedford Regional Water Authority FROG Program **Exterior Grease Interceptor Monthly~~Weekly~~ Inspection Log** must be filled out and signed monthly~~weekly~~ by a member of the FSE management. This log is a part of the Required Maintenance File.
2. **Interior Grease Interceptor Devices** are to be inspected no less than **once a week.** The Bedford Regional Water Authority FROG Program **Interior Grease Interceptor Weekly Inspection Log** must be filled out and signed weekly by a member of the FSE management. This log is a part of the Required Maintenance File.
3. **Automatic Grease Removal Devices** are to be inspected no less than **once a day.** The Bedford Regional Water Authority FROG Program **Automatic Grease Removal Device Daily Inspection Log** must be filled out and signed daily by a member of the FSE management. This log is a part of the Required Maintenance File.
4. **Oil/ Water Separator Devices** are to be inspected no less than **once a month~~week~~.** The Bedford Regional Water Authority FROG Program **Oil/ Water Separator Monthly~~Weekly~~ Inspection Log** must be filled out and signed monthly~~weekly~~ by a member of the petroleum using establishment management. This log is a part of the Required Maintenance File.

B. Cleaning Logs
1. **Exterior Grease Interceptor Devices** are to be cleaned no less than **every 90 days.** Cleaning is to be done by an approved transport company. The Bedford Regional Water Authority FROG Program Exterior Grease Interceptor Cleaning Log is to be filled out and signed by both a member of the FSE management and a representative from the transport company conducting the cleaning. All invoices and paperwork

accompanying the cleaning event is to be kept on file with the cleaning log as part of the Required Maintenance File.

2. **Interior Grease Interceptor Devices** are to be cleaneding no less than **every 30 days**. Cleaning may be done by FSE staff or an approved transport company. The Bedford Regional Water Authority FROG Program Interior Grease Interceptor Cleaning Log is to be filled out and signed by a member of the FSE management and a representative from the transport company conducting the cleaning, if one is used. All invoices and paperwork accompanying the cleaning event is to be kept on file with the cleaning log as part of the Required Maintenance File.
3. **Automatic Grease Removal Devices** are to be cleaned daily. The Bedford Regional Water Authority FROG Program Automatic Grease Removal Device Cleaning Log is to be filled out and signed by a member of the FSE management. This log is a part of the Required Maintenance File.
4. **Oil/ Water Separator Devices** are to be cleaned no less than **every 90 days.** Cleaning is to be done by an approved transport company. The Bedford Regional Water Authority FROG Program Oil/ Water Separator Cleaning Log is to be filled out and signed by both a member of the petroleum using establishment management and a representative from the transport company conducting the cleaning. All invoices and paperwork accompanying the cleaning event is to be kept on file with the cleaning log as part of the Required Maintenance File.

C. Required Maintenance File

1. The Required Maintenance File is a file required to be kept on site at each FSE or petroleum using establishment. It must contain the following required documents from the Bedford Regional Water Authority FROG Program specific to the installed device:
   a) Device Registration Form accompanied by Bedford Regional Water Authority Approval Document
   b) Weekly Inspection Log
   c) Cleaning Log accompanied by supporting invoices and/or paperwork accompanying each cleaning event.
   d) Quarterly Report
2. A record of all repairs and/or modifications made to the installed grease interceptor device or oil/ water separator must be kept in the Required Maintenance File.
3. The Required Maintenance File must contain records for the previous 36 months.

D. Reporting

1. The Quarterly Report must be completed and submitted to the Bedford Regional Water Authority by the 10th day of the following months: January, April, July, and October.
2. The Required Maintenance File must be kept onsite, up to date, and accessible for inspection.

II. Inspection and Sampling

A. The Bedford Regional Water Authority Compliance Coordinator may conduct inspections of all FSE's or petroleum using establishments that discharge into the publicly owned sewer system.

B. Owners or occupants must allow the Bedford Regional Water Authority access at all reasonable times to all areas of the facility that contribute to fats, rags, oil, and grease for the purpose of inspection, records review, and sampling.

C. Denial of access and/or unreasonable delays in allowing inspections will be deemed a violation of this program.

D. The Bedford Regional Water Authority must have the ability to set up sampling equipment on the property to verify the quality of the effluent.

III. Compliance

At a minimum, an establishment will be considered to be in non-compliance with the Bedford Regional Water Authority FROG Program based on any of the following:

A. Failure to install an appropriate fats, oil, and grease control device.

B. Failure to clean and/or maintain a fats, oil, and grease control device in a manner that prevents fats, oil, and grease from passing through to the sewer system.

C. Exceeding 25% of the grease/solids depth in an exterior grease interceptor.

D. Failure to maintain Required Maintenance File
E. Failure to submit the Quarterly Report by the 10th of the following months: January, April, July, and October.
F. Falsification of records.
G. Denying access or causing unreasonable delays of inspection.
H. Contributing to or being the source of a sewer line blockage and/or sanitary sewer overflow.

IV. Enforcement

A. Non-compliance with the Bedford Regional Water Authority FROG Program will result in the issuance of a violation. Violations will result in charges and fees based on the Enforcement Matrix.
B. If discharge from any establishment causes a deposit, obstruction, or damage to any publicly owned sewer line or treatment works, the Bedford Regional Water Authority will remove and/or repair it promptly. The cost for removal and/or repair will be charged to the establishment/s that contributed to the deposit, obstruction, or damage.

Appendices

Appendix A- Definitions

Food Service Establishment (FSE) - Any commercial location which prepares and/or packages food or beverages for sale or consumption on or off site. These may include, but are not limited to, food manufacturers, butchers, bakeries, restaurants, delis, food courts, ice cream shops, coffee shops, hospitals, skilled care facilities, nursing facilities, retirement homes, child care facilities, motels/hotels, truck stops, grocery stores, churches, schools, jails, and correctional facilities.

Grease Interceptor Device- A device designed to remove fats, oils, and grease from the wastewater prior to it passing into the sanitary sewer and on to the publicly owned treatment works.

Grit Interceptor Device- A device used to settle out sand, grit, and other inorganic particulates from wastewater prior to passing through another treatment device (i.e. an oil/water separator device) or prior to discharging to the sanitary sewer system.

Hydro-mechanical Grease Interceptor Device- A device designed to remove fats, oils, and grease from discharged wastewater. This type of device is identified by flow rate, separation, and retention efficiency. The design incorporates air entrainment hydro-mechanical separation, interior baffling or barriers in combination or separately, incorporating an external flow control with air intake.

Oil/Water Separator Device- A device designed to remove petroleum based oils and grease from wastewater prior to discharge into the publicly owned sanitary sewer system.

Petroleum Using Establishment- Any commercial establishment that uses petroleum based oils and grease. Including, but not limited to, establishments that service, build, repair, and/or remanufactures engines or motors and any place oils and grease may originate based on a given process operation. Some examples of such establishments are automobile and truck maintenance shops, car and truck wash facilities, truck stops, small engine repair shops, factories, aircraft hangers, and/or machine shops.

Publicly Owned Treatment Works- A facility defined by Section 212 of the Clean Water Act which is owned by a state or municipality. This definition includes any devices and/or systems used in the storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature. In addition, sewers, pipes, and any other structure that conveys wastewater to treatment facility is considered a part of the Publicly Owned Treatment Works.

Sanitary Sewer- Any sewer that carries liquid and water-carried wastes from residences, commercial buildings, industrial plants, or institutions.

Solids Interceptor Device- A device for collecting particulates from pre-rinse stations, food waste grinders, and dishwashers. This device is installed in front of the flow control device and grease interceptor inlet.

Appendix B- Required Forms

I. Device Registration Forms

A. Grease Interceptor Device Registration Form

Bedford Regional Water Authority

1723 Falling Creek Rd.
Bedford, VA 24523
(540) 586-7679

Grease Interceptor Device Registration Form

I. General Information

Establishment Name _____

Physical Address _____

City _____ **State** _____ **Zip Code** _____

Corporate Name _____

Mailing Address _____

City _____ **State** _____ **Zip Code** _____

Primary Contact _____ **Title** _____

Phone _____ **Email** _____

Secondary Contact _____ **Title** _____

Phone _____ **Email** _____

II. Establishment Information

Type of Food Service Establishment:

- ☐ Full Service Restaurant
- ☐ Fast Food Restaurant
- ☐ Take Out Restaurant
- ☐ Deli/ Grill
- ☐ Bakery
- ☐ Coffee Shop
- ☐ Ice Cream Shop
- ☐ Other: _____
- ☐ Concession Stand
- ☐ School
- ☐ Child Care Facility
- ☐ Nursing Facility
- ☐ Hospital
- ☐ Grocery Store

Cuisine

- ☐ American
- ☐ Asian
- ☐ Tex-Mex
- ☐ Italian
- ☐ Other: _____

Food Processing Equipment

Type:	Number:	Type:	Number:
☐ Grill	_____	☐ Wok	_____
☐ Griddle	_____	☐ Microwave	_____
☐ Oven	_____	☐ Steamer	_____
☐ Stove Top	_____	☐ Electric Kettle	_____
☐ Deep Fryer	_____	☐ Frozen Dairy Machine	_____
☐ Pressure Cooker	_____	☐ Other:	_____

Bedford Regional Water Authority

1723 Falling Creek Rd.
Bedford, VA 24523
(540) 586-7679

Kitchen Equipment

Type:	Number:	Drain Size:	Dimensions:		
☐ 2 Compartment Sink			L x W x H	L x W x H	
☐ 3 Compartment Sink			L x W x H	L x W x H	L x W x H
☐ Food Prep Sink			L x W x H		
☐ Hand Washing Sink			L x W x H		
☐ Mop Sink			L x W x H		
☐ Floor Drain					
☐ Dishwasher			GPM: Temp: Distance from GI:		
☐ Food Grinder/ Disposal			GPM:		
☐ Wok/ Tilt Kettle			Gallons:		

III. Grease Interceptor Device

Type (Circle One): **Exterior** **Interior** **Automatic**

☐ Existing Structure ☐ Proposed Structure

Location: _____

Manufacturer: _____ Size: _____

Flow Rate: _____ Cleaning Schedule: _____

Grease Disposal Methods: _____

Service Records ☐ YES ☐ NO How long? _____ Location: _____

Sampling Structure ☐ YES ☐ NO Location: _____

Cleaning ☐ Transporter ☐ FSE Staff (Interior or Automatic Only)

Transporter Company Name: _____

Transporter Company Contact: _____

Phone: _____ Certification #: _____ Exp Date: _____

Sampling Structure: ☐ YES ☐ NO Location: _____

For Proposed Structures please provide the following:

BRWA Approved Grease Interceptor Installation: ☐ YES ☐ NO

BRWA Approved Sampling Structure Installation: ☐ YES ☐ NO

Proposed Flow Rate for Facility (GPM): _____

Number of Appliances and/or Drains that will empty into Grease Interceptor: _____

☐ Structure inspected and approved by BRWA Date: _____

☐ Structure scheduled for inspection by BRWA Date: _____

Bedford Regional Water Authority

1723 Falling Creek Rd.
Bedford, VA 24523
(540) 586-7679

IV. Solids Interceptor Device

Type (Circle One): **Exterior** **Interior** **Automatic**

☐ Existing Structure ☐ Proposed Structure

Location: _____

Manufacturer: _____ Size: _____

Flow Rate: _____ Cleaning Schedule: _____

Solids Disposal Methods: _____

Service Records ☐ YES ☐ NO How long? _____ Location: _____

Sampling Structure ☐ YES ☐ NO Location: _____

Cleaning ☐ Transporter ☐ FSE Staff

Transporter Company Name: _____

Transporter Company Contact: _____

Phone: _____ Certification #: _____ Exp Date: _____

For Proposed Structures please provide the following:

BRWA Approved Solids Interceptor Installation: ☐ YES ☐ NO

Proposed Flow Rate for Facility (GPM): _____

Number of Appliances and/or Drains that will empty into Solids Interceptor: _____

☐ Structure inspected and approved by BRWA Date: _____

☐ Structure scheduled for inspection by BRWA Date: _____

V. Signature

I hereby certify that the above information is correct. I am also aware that any changes in any of the above information will require a re-application and possible increase in the size of the Grease Interceptor Device required.

I also agree to have the Grease Interceptor Device cleaned by a certified transporter service company at a frequency which ensures all operating conditions for the Grease Interceptor are properly maintained.

This registration is valid only for the specific facility, ownership, processes, and operations indicated above. As such, it cannot be sold, transferred, or reassigned.

Owner Signature: _____

Name (Print): _____ **Date:** _____

Please attach a copy of the Food Service Establishment menu.

B. Oil/Water Separator Device Registration Form

Bedford Regional Water Authority

1723 Falling Creek Rd.
Bedford, VA 24523
(540) 586-7679

Oil/ Water Separator Registration Form

I. General Information

Establishment Name _____

Physical Address _____

City _____ **State** _____ **Zip Code** _____

Corporate Name _____

Mailing Address _____

City _____ **State** _____ **Zip Code** _____

Primary Contact _____ **Title** _____

Phone _____ **Email** _____

Secondary Contact _____ **Title** _____

Phone _____ **Email** _____

II. Establishment Information

Type of Establishment:

- ☐ Automotive Maintenance
- ☐ Automotive Repair
- ☐ Car Wash
- ☐ Industrial Facility
- ☐ Fleet Vehicle Facility
- ☐ Gas/ Service Station
- ☐ Truck Wash
- ☐ Other: _____

III. Oil/ Water Separator Device

☐ Existing Structure ☐ Proposed Structure

Location: _____

Manufacturer: _____ Size: _____

Flow Rate: _____ Cleaning Schedule: _____

Oil Disposal Methods: _____

Service Records ☐ YES ☐ NO How long? _____ Location: _____

Sampling Structure ☐ YES ☐ NO Location: _____

Cleaning:

Transporter Company Name: _____

Transporter Company Contact: _____

Phone: _____ Certification #: _____ Exp Date: _____

Sampling Structure: ☐ YES ☐ NO Location: _____

For Proposed Structures please provide the following:

BRWA Approved Oil/ Water Separator Installation: ☐ YES ☐ NO

BRWA Approved Sampling Structure Installation: ☐ YES ☐ NO

Proposed Flow Rate for Facility (GPM): _____

Number of Appliances and/or Drains that will empty into Oil/ Water Separator: _____

☐ Structure inspected and approved by BRWA Date: _____

☐ Structure scheduled for inspection by BRWA Date: _____

IV. Grit Interceptor Device

☐ Existing Structure ☐ Proposed Structure

Location: _____

Manufacturer: _____ Size: _____

Flow Rate: _____ Cleaning Schedule: _____

Solids Disposal Methods: _____

Service Records ☐ YES ☐ NO How long? _____ Location: _____

Cleaning:

Transporter Company Name: _____

Transporter Company Contact: _____

Phone: _____ Certification #: _____ Exp Date: _____

For Proposed Structures please provide the following:

BRWA Approved Grit Interceptor Installation: ☐ YES ☐ NO

Proposed Flow Rate for Facility (GPM): _____

Number of Appliances and/or Drains that will empty into Grit Interceptor: _____

☐ Structure inspected and approved by BRWA Date: _____

☐ Structure scheduled for inspection by BRWA Date: _____

Bedford Regional Water Authority

1723 Falling Creek Rd.
Bedford, VA 24523
(540) 586-7679

V. Signature

I hereby certify that the above information is correct. I am also aware that any changes in any of the above information will require a re-application and possible increase in the size of the Oil/ Water Separator Device required.

I also agree to have the Oil/ Water Separator Device cleaned by a certified transporter service company at a frequency which ensures all operating conditions for the Oil/ Water Separator are properly maintained.

This registration is valid only for the specific facility, ownership, processes, and operations indicated above. As such, it cannot be sold, transferred, or reassigned.

Owner Signature: _____

Name (Print): _____ **Date:** _____

VI. Quarterly Report Forms

A. Exterior Grease Interceptor Quarterly Report Form

Bedford Regional Water Authority

1723 Falling Creek Rd
Bedford, VA 24523
(540) 586-7679

Quarterly Exterior Grease Interceptor Device Report

Food Service Establishment Name _____

Physical Address _____

City _____ **State** _____ **Zip Code** _____

Name of Person Completing Report _____ **Title** _____

Phone _____ **Email** _____

Grease Interceptor Cleaned **Yes** ☐ **No** ☐

Date of Cleaning _____

Cleaning Company _____

Cleaning Observed By _____ **Title** _____

Grease/ Solids Percentage _____ **Grease Observed in the Outlet T?** **Yes** ☐ **No** ☐

Repairs Needed? **Yes** ☐ **No** ☐ **Repairs Performed** **Yes** ☐ **No** ☐

Date of Next Scheduled Cleaning _____

Please List or Explain any upcoming changes to the Food Service Establishment (i.e., renovations, remodeling, change in ownership...):

_____

_____

Please keep a copy of this form at the Food Service Establishment as a part of the Required Maintenance File. In addition to this form please attach a copy of the Exterior Grease Interceptor Cleaning Log and the Exterior Grease Interceptor Weekly Inspection Log.

B. Quarterly Interior Grease Interceptor Report Form

Bedford Regional Water Authority

1723 Falling Creek Rd
Bedford, VA 24523
(540) 586-7679

Quarterly Interior Grease Interceptor Device Report

Food Service Establishment Name _____

Physical Address _____

City _____ **State** _____ **Zip Code** _____

Name of Person Completing Report _____ **Title** _____

Phone _____ **Email** _____

Grease Interceptor Cleaned **Yes** ☐ **No** ☐

Dates of Cleaning _____

Cleaning Company
(If applicable) _____

Cleaning Completed By
(If completed by FSE employee) _____ **Title** _____

Grease Disposal Method _____

Repairs Needed? **Yes** ☐ **No** ☐ **Repairs Performed** **Yes** ☐ **No** ☐

Date of Next Scheduled Cleaning _____

Please List or Explain any upcoming changes to the Food Service Establishment (i.e., renovations, remodeling, change in ownership...):

_____

_____

Please keep a copy of this form at the Food Service Establishment as a part of the Required Maintenance File. In addition to this form please attach a copy of the Interior Grease Interceptor Cleaning Log and the Interior Grease Interceptor Weekly Inspection Log.

C. Quarterly Automatic Grease Removal Device Report Form

Bedford Regional Water Authority

1723 Falling Creek Rd
Bedford, VA 24523
(540) 586-7679

Quarterly Automatic Grease Removal Device Report

Food Service Establishment Name _____

Physical Address _____

City _____ **State** _____ **Zip Code** _____

Name of Person Completing Report _____ **Title** _____

Phone _____ **Email** _____

Grease Removal Device Cleaned Daily **Yes** ☐ **No** ☐

Grease Disposal Method _____

Repairs Needed? **Yes** ☐ **No** ☐ **Repairs Performed** **Yes** ☐ **No** ☐

Date of Next Scheduled Service _____

Please List or Explain any upcoming changes to the Food Service Establishment (i.e., renovations, remodeling, change in ownership...):

_____

_____

Please keep a copy of this form at the Food Service Establishment as a part of the Required Maintenance File. In addition to this form please attach a copy of the Automatic Grease Removal Device Cleaning Log and the Automatic Grease Removal Device Daily Inspection Log.

D. Quarterly Oil/Water Device Separator Report Form

Bedford Regional Water Authority

1723 Falling Creek Rd
Bedford, VA 24523
(540) 586-7679

Quarterly Oil/ Water Separator Device Report

Establishment Name _____

Physical Address _____

City _____ **State** _____ **Zip Code** _____

Name of Person Completing Report _____ **Title** _____

Phone _____ **Email** _____

Oil/ Water Separator Cleaned **Yes** ☐ **No** ☐

Date of Cleaning _____

Cleaning Company _____

Cleaning Observed By _____ **Title** _____

Oil Observed in sample port? **Yes** ☐ **No** ☐

Repairs Needed? **Yes** ☐ **No** ☐ **Repairs Performed** **Yes** ☐ **No** ☐

Date of Next Scheduled Cleaning _____

Please List or Explain any upcoming changes to the Establishment (i.e., renovations, remodeling, change in ownership...):

_____

_____

Please keep a copy of this form at the Establishment as a part of the Required Maintenance File.
In addition to this form please attach a copy of the Oil/ Water Separator Cleaning Log and the Oil/ Water Separator Weekly Inspection Log.

VII. Cleaning Logs

A. Exterior Grease Interceptor Cleaning Log

Bedford Regional Water Authority

Exterior Grease Interceptor Cleaning Log

Facility Name: _____ **Phone Number:** _____

Facility Address: _____ **Contact Name:** _____

Grease Interceptor Device Brand: _____ **Grease Interceptor Size:** Flow Rate _____ gpm Total Volume _____ gal **Device Location:** _____

Cleaning Company: _____ **Phone Number:** _____ **City, State:** _____

Cleaning Date & Time	Company	Grease/Solids Percentage	Maintenance Needed (Yes/No)	Description	Additional Comments or Observations	Signature FSE Representative Transport Company Representative

This form should be kept on site and available for inspection for 3 years from the latest date on the form.

B. Interior Grease Interceptor Cleaning Log

Bedford Regional Water Authority

Interior Grease Interceptor Cleaning Log

Facility Name: _____ **Phone Number:** _____

Facility Address: _____ **Contact Name:** _____

Grease Interceptor Device Brand: _____ **Grease Interceptor Size:** Flow Rate _____ gpm Total Volume _____ gal **Device Location:** _____

Cleaning Company: _____ **Phone Number:** _____ **City, State:** _____

(If Applicable)

Cleaning Date & Time	Company (Person/Company)	Grease/Solids Disposal Method	Maintenance Needed (Yes/No)	Description	Additional Comments or Observations	Signature FSE Representative Transport Company Representative

This form should be kept on site and available for inspection for 3 years from the latest date on the form.

C. Automatic Grease Removal Device Cleaning Log

Bedford Regional Water Authority

Automatic Grease Removal Device Daily Cleaning Log

Facility Name: _____ **Phone Number:** _____

Facility Address: _____ **Contact Name:** _____

Grease Interceptor Device Brand: _____ **Grease Interceptor Size:** Flow Rate _____ gpm Total Volume _____ gal **Device Location:** _____

Cleaning Company: _____ **Phone Number:** _____ **City, State:** _____

(If Applicable)

Cleaning Date & Time	Name	Grease/Solids Disposal Method	Maintenance Needed (Yes/No)	Description	Additional Comments or Observations	Signature

This form should be kept on site and available for inspection for 3 years from the latest date on the form.

D. Oil/ Water Separator Cleaning Log

Bedford Regional Water Authority

Oil/Water Separator Cleaning Log

Facility Name: _____ **Phone Number:** _____

Facility Address: _____ **Contact Name:** _____

Grease Interceptor Device Brand: _____ **Grease Interceptor Size:** Flow Rate _____ gpm Total Volume _____ gal **Device Location:** _____

Cleaning Company: _____ **Phone Number:** _____ **City, State:** _____

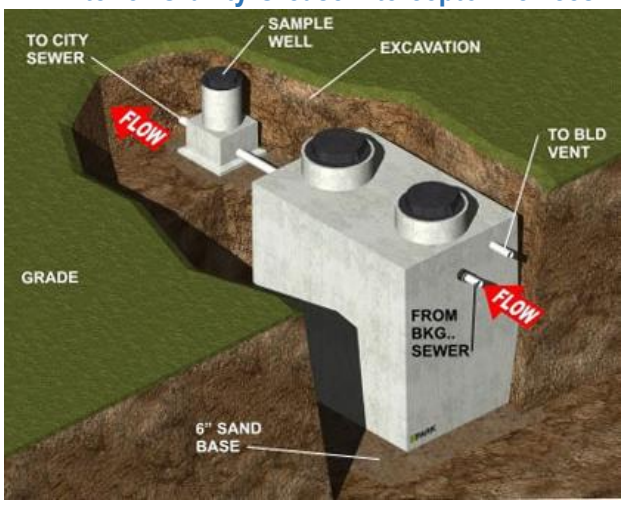
Cleaning Date & Time	Company	Grease/Solids Percentage	Maintenance Needed (Yes/No)	Description	Additional Comments or Observations	Signature Establishment Representative Company Representative

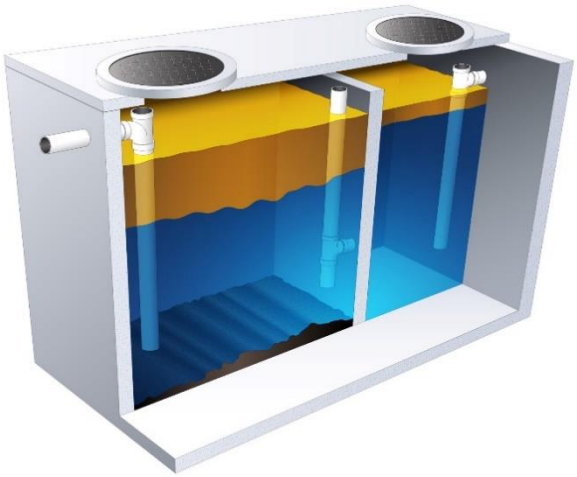
This form should be kept on site and available for inspection for 3 years from the latest date on the form.

Appendix C- Approved Devices

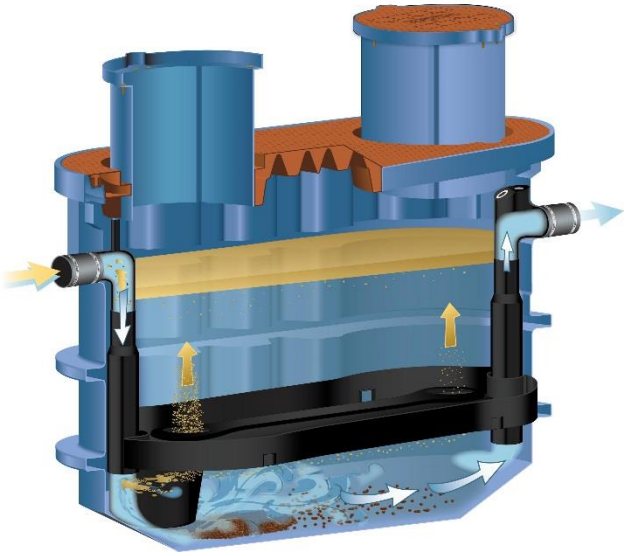
I. Exterior Grease Interceptor Devices

A. Exterior Gravity Grease Interceptor Devices



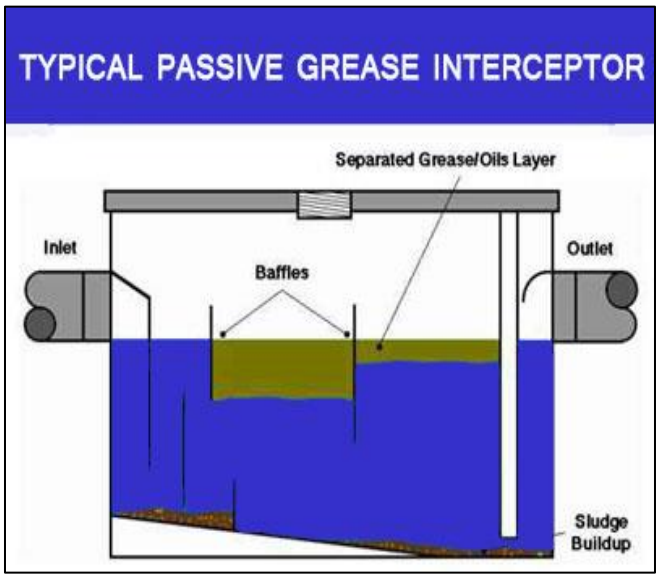


B. Exterior Hydro-mechanical Grease Interceptor Devices

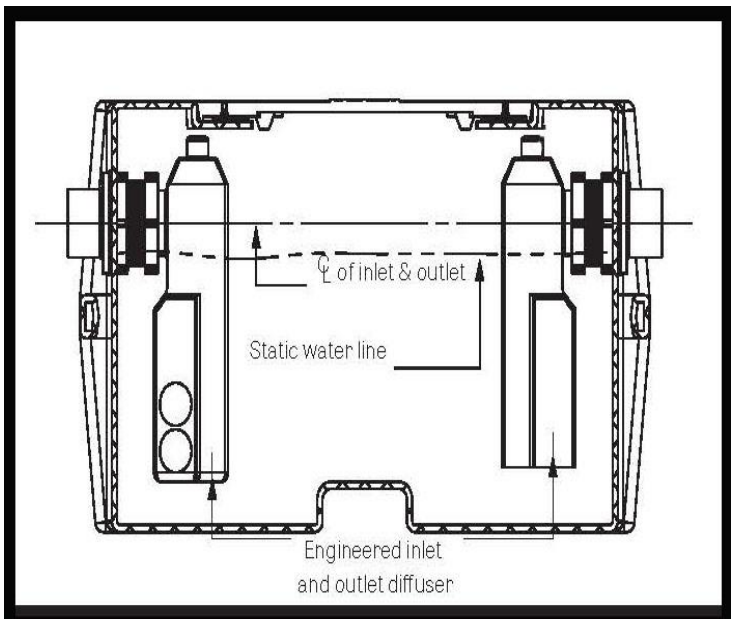


II. Interior Grease Interceptor Devices

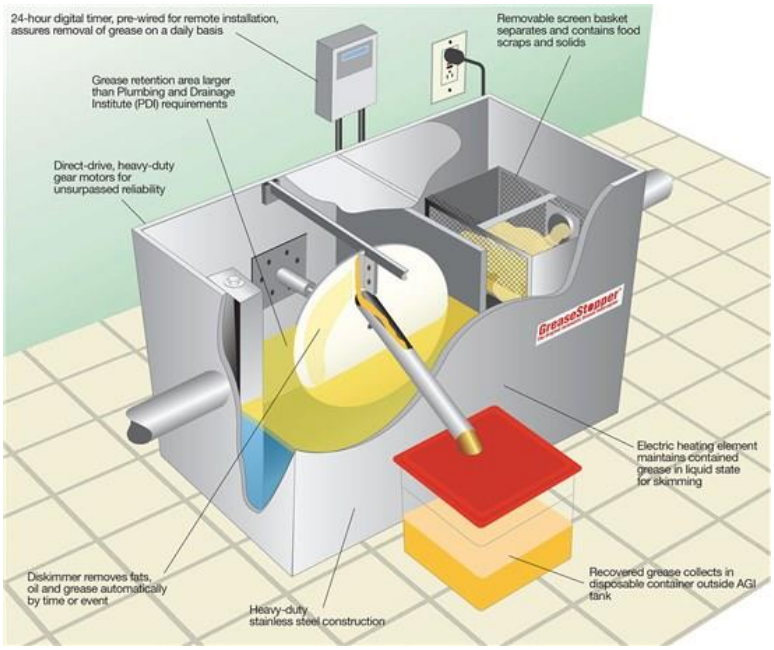
A. Interior Gravity Grease Interceptor Device



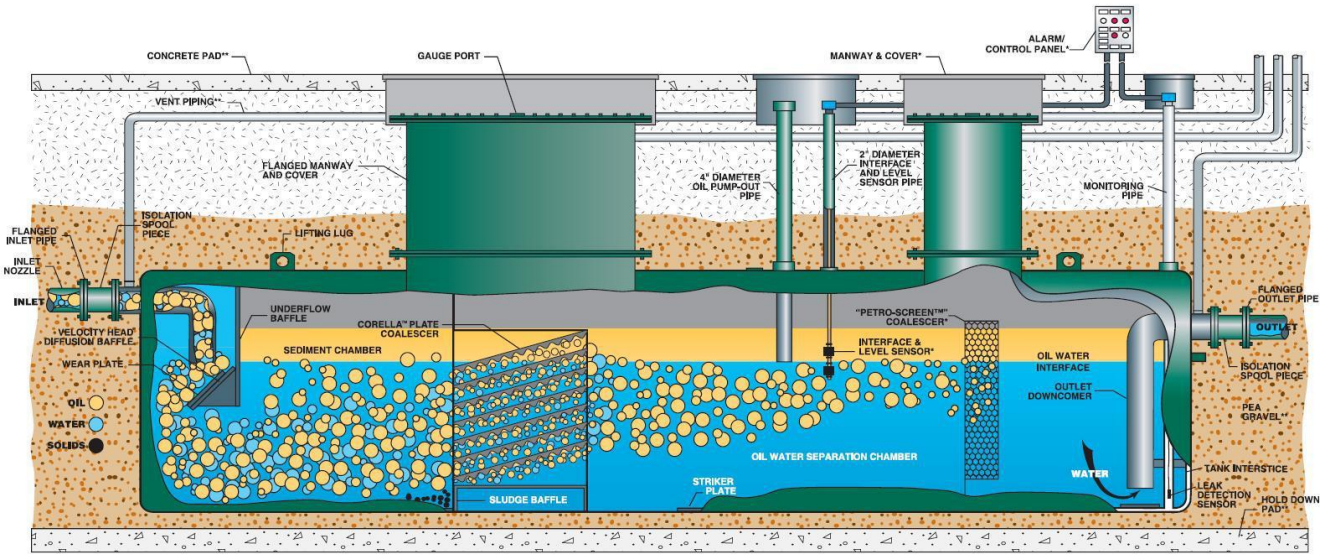
E. Interior Hydro-mechanical Grease Interceptor Device



III. Automatic Grease Removal Devices



IV. Oil/ Water Separator Devices



Appendix D- Enforcement Matrix

	1st Offense	2nd Offense	3rd+ Offense
Minor Violations			
Failure to register grease interceptors, grit interceptors, or oil/water separators.	**Warning:** Submit registration within 5 business days.	**$50.00**	**Doubling:** e.g. 3rd offense $100.00 4th offense $200.00 etc.…
Failure to submit quarterly report by the 10th day of January, April, July, or October.	**Warning:** Submit report within 5 business days.	**$50.00**	**Doubling:** e.g. 3rd offense $100.00 4th offense $200.00 etc.…
Failure to maintain Required Maintenance File.	**Warning:** Initiate within 5 business days.	**$50.00**	**Doubling:** e.g. 3rd offense $100.00 4th offense $200.00 etc.…
Failure to submit records as required.	**Warning:** Submit records within 5 business days.	**$50.00**	**Doubling:** e.g. 3rd offense $100.00 4th offense $200.00 etc.…
Delay in allowing inspection or hindrance of the inspection.	**Warning**	**$50.00**	**Doubling:** e.g. 3rd offense $100.00 4th offense $200.00 etc.…
Moderate Violations*			
Failure to clean out grease interceptor device, grit interceptor device, or oil/water separator device at the minimum frequency or a frequency sufficient to prevent pass through to the sanitary sewer system.	**Notice of Violation**	**$100.00**	**Doubling:** e.g. 3rd offense $200.00 4th offense $300.00 etc.…
Failure to maintain grease interceptor device, grit interceptor device, or oil/water separator device in good working order.	**Notice of Violation**	**$100.00**	**Doubling:** e.g. 3rd offense $200.00 4th offense $300.00 etc.…
Exceeding 25% of the grease/solids depth in an exterior grease interceptor.	**Notice of Violation**	**$100.00**	**Doubling:** e.g. 3rd offense $200.00 4th offense $300.00 etc.…
Severe/ Major Violations*			
Falsification of Records	**$500.00**	**$750.00**	**Doubling:** e.g. 3rd offense $1500.00 4th offense $3000.00 etc.…
Significant contribution to a sewer line blockage and/or sanitary sewer overflow	**$500.00**	**$750.00**	**Doubling:** e.g. 3rd offense $1500.00 4th offense $3000.00 etc.…
Work Associated with Sewer Line Blockage and/or Sanitary Sewer Overflow			
Pre-CCTV work	**$1.50 per Linear Foot (LF)**	**N/A**	**N/A**
Line Cleaning	**$2.00 per LF**	**N/A**	**N/A**
Manhole Cleaning	**$200 per Manhole**	**N/A**	**N/A**
Additional Fee			
Re-Inspection Fee for any written warning or Notice of Violation	**$100.00**	**$100.00**	**$100.00**

***As an alternate approach, water and sewer service may be discontinued at an earlier point in the number of offenses for both moderate and severe/major violations, including immediately, for severe/major violations.**