

# The Town of Woodstock Fat, Oil, and Grease Interceptor Program



*Definitions, Prevention, and Inspection*

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# Section 1

## UTILITIES

### Sec. 82-157. Grease, oil and sand interceptors generally.

Grease, oil and sand interceptors shall be provided when, in accordance with Virginia Department of Health and Virginia Building Inspection regulations, they are necessary for the proper handling of liquid wastes containing grease, oil or wax in excessive amounts, or any flammable wastes, sand, and other harmful ingredients. Interceptors shall be required for all food preparation establishments with the exception of private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the town and the International Plumbing Code and shall be located as to be readily and easily accessible for cleaning and inspection. Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight and equipped with easily removable covers which when bolted in place shall be gastight and watertight.

(1) The town, or its authorized agent, reserves the right to inspect the grease traps and to sample effluent on a continual basis to insure proper operation and maintenance. When it has been determined by the town, or its authorized agent, that any user is discharging grease into the sewer system, **a fine of \$100.00 for traps under 500 gallons will be incurred and a fine of \$200.00 for traps over 501 gallons will be incurred.** If maintenance work is necessary, a sewer surcharge shall be added to the utility bill for that user. The sewer surcharge shall be equal to the amount of the maintenance costs incurred by the town in eliminating the grease deposits from the sewer system, but in any event shall not be less than \$250.00. The sewer surcharge fee will be doubled from the prior surcharge fee with each violation.

(2) Prior to the initial assessment of the sewer surcharge, the owner or operator of such establishment shall be notified, in writing, of the town's determination. The owner or operator of said establishment shall then be granted 30 days in which to permanently correct and abate the condition causing the grease to be discharged into the sewer system. The town must approve the abatement action undertaken by the cited organization. Unless the discharge of grease is then permanently eliminated and other conditions cited on the grease trap inspection form are corrected, the initial sewer surcharge shall be assessed ten days thereafter. No user shall be entitled to more than one such notice and grace period in which to correct the condition. The change in management or ownership shall not give an existing establishment an additional grace period in which to correct the condition.

(3) Thereafter, any further discharge of grease into the sewer system by the user which, in the determination of the town, creates a condition requiring maintenance to eliminate the grease deposit shall result in an assessment of a sewer surcharge without further notice or grace. Sewer surcharges shall continue

to be assessed until the grease discharge condition has been permanently corrected to the satisfaction of the town.  
(Code 1968, § 27-54; Ord. of 12-5-95)

**Cross reference** – Fire prevention and protection, ch. 30.

**Sec. 82-158. Maintenance of grease, oil and sand interceptors.**

Where installed, all grease, oil and sand interceptors shall be maintained by the owner, at the owner's expense, in continuously efficient operation at all times.  
(Code 1968, § 27-55)

**Sec. 82-159. Use of preliminary treatment facilities, etc., prerequisite to discharge into public sewer of certain types of waters and wastes generally.**

- (a) The admission into the public sewers of any waters or wastes in excess of 1,000 gallons per day or 200 gallons per hour.
  - (1) Containing a five-day biochemical oxygen demand great than 2.5 pounds per day; or
  - (2) Containing more than three pounds per day of suspended solids; or
  - (3) Containing any quantity of substances having the characteristics described in section 82-156; or
  - (4) Having an average daily flow greater than one-half of one percent of the average daily sewage flow of the town; shall be subject to the review and approval of the superintendent.
  
- (b) Where necessary in the opinion of the superintendent, the owner shall provide at the owner's expense, such preliminary treatment as may be necessary to:
  - (1) Reduce the biochemical oxygen demand to 300 parts per million and the suspended solids to 300 parts per million by weight; or
  - (2) Reduce objectionable characteristics or control the quantities and rates of discharge of such waters or wastes.

Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the superintendent. No construction of such facilities shall be commenced until such approvals are obtained in writing, and in each such instance, the permit shall set the maximum amount of sewage and strength of sewage that will be introduced into the sanitary sewers.

(Code 1968, § 27-56)

**Sec. 82-160. Maintenance of preliminary treatment facilities.**

Where preliminary treatment facilities are provided by an owner for any waters or wastes, such facilities shall be maintained continuously in satisfactory and effective operation by the owner at his or her expense.

# Section 2

## Definitions

- A. Grease** – melted animal fat; any substance identified as grease per the Environmental Protection Agency method 14003.
- B. Grease Interceptor** – typically a concrete structure with a 1,000 to 3,000 gallon capacity that is installed outside of the building, and collects waste only from the kitchen area (no sanitary waste).
- C. Grease Trap** – any device installed inside a facility to separate grease from the wastewater. Generally grease traps are installed in kitchens under the floor or next to a sink, and are much smaller than grease interceptors.
- D. Industrial Pretreatment Program** – the program administered by the Town of Woodstock which utilizes Sec. 82-159 of the Town Code to pretreat or remove materials which have been determined by the EPA and/or the Town of Woodstock to have harmful effects on the collection system, the wastewater treatment facility (WWTP) operations, the receiving stream of the WWTP, or the WWTP residuals program. Typical substances controlled by this program include toxic organic compounds, metals, extreme pH, and cyanide. Industries having processes that have been specifically identified by the EPA are Significant Industrial Users (SIUs) and are issued a wastewater discharge permit, which contain monitoring requirements.
- E. Oil** – any type of various greasy, combustible substances obtained from animal, vegetable, and mineral sources: oils are liquid at ordinary temperatures and soluble in certain organic solvents, but not in water.
- F. Oil Water Separator** – typically an engineered steel tank designed to separate petroleum oil from water through the use of baffled compartments and corrugated plates.
- G. Pretreatment** – a general term used to describe any process which removes a substance from the wastewater stream before it enters the Town of Woodstock sanitary sewer system.
- H. Sand Interceptor (Grit Interceptor)** – typically a concrete structure installed outside the building designed to collect sand, grit, or other inorganic particles prior to admission to the public sanitary sewer.
- I. Conditions For Grease Trap Inspections** – given a point-value on the grease trap inspection form and are graded *satisfactory* or *unsatisfactory*.

1. **Accessibility** – determines whether or not the trap can be easily accessed by facility employees and maintenance personnel. The covers and lids shall be in good working order so that employees and maintenance personnel can monitor and clean the trap(s). A satisfactory score for grease trap accessibility shall be given to a facility whose grease trap can be visually identified, easily accessed (no debris and/or objects blocking it from personnel), and easily opened by maintenance personnel.
2. **General Condition** – determines whether or not the trap itself has appeared to be maintained. A satisfactory score for grease trap condition shall be given to a facility whose grease trap appears to be well-kept by visual observation (no needed repairs).
3. **Grease Accumulation** – determines the amount of grease that has settled and accumulated. A satisfactory score for the condition shall be given to a facility whose grease interceptor is not at the overflow point. The discharge pipe shall be clear of grease with liquid flowing freely.
4. **Solids Accumulation** – determines the amount of solids that have settled and accumulated. A satisfactory score shall be given to the facility whose grease interceptor is not at the overflow point. The discharge pipe shall be free of solids with liquid flowing freely.
5. **Effluent Quality** – determines whether or not there is evidence of grease or, in the event of professional testing, emulsification chemicals in the effluent. Emulsification chemicals are used to breakdown the grease, but they pose a hazard to the Town because the grease solidifies in the lines once again. Testing the effluent determines if the grease is getting into the Town's collection system and then solidifying in the sewer lines (causing backup). The inspector and/or laboratory will determine whether or not the grease and/or chemicals are present. A satisfactory score shall be given to the facility with effluent free of grease and emulsification chemicals.
6. **Downstream Grease** – determines whether or not there is evidence of grease coming into the Town's main from the facility's sewer lateral. The inspector will determine if grease is collecting and solidifying by using a sewer camera to determine which facility the grease is coming from. An absent score shall be earned by the facility who restrains from emitting grease from their sewer lateral.
7. **Maintenance Documentation** – determines whether or not the facility is contracting with a company to service their

grease trap(s). A satisfactory score shall be given to the facility whose grease trap maintenance logs and cleaning records are kept and available for review.

- 8. Chemical Inventory** – determines if the facility is using emulsification products to clean their grease traps. A satisfactory score shall be given to the facility that produces documentation of Material Safety Data Sheets (MSDS) for the inspector's review.
- 9. Results** – The amount of points will be totaled and if there are more than three (3) missed points, the grease trap has failed the inspection and the inspector will advise the facility, in writing, with the proper means of abatement action. The inspector must comment, sign and date, and have the on-duty facility supervisor sign and date that a copy of the citation was received.

# Section 3

## Sewer Back-Up Prevention

The continuous build-up of grease in sewer lines is a common factor in back-ups. The most common cause for grease being introduced into the system is human error. Grease has the same effect on sewer lines that “bad” cholesterol has in your blood stream. Even if grease is warm and in a liquid state when put into the system, it will quickly solidify and adhere to the inside walls of sewer lines, causing blockages and sewer and manhole overflows. High levels of fat, oil, and grease (FOG) discharged into the sewer system impacts the wastewater treatment facility, affecting the biological activity which works to break down the incoming wastewater.

Large users, such as food processors and restaurants, are required by the Town of Woodstock to install grease traps to reduce the amount of grease entering the system. The larger the amount of food production, the larger the grease trap should be or there should be more grease interceptors in a series (for instance, a series of small tanks – 3- 1,000 gallon traps). Grease traps **must** be maintained and pumped on a routine basis, based on the amount of grease processed. Please call a local contractor for your grease trap installation and maintenance. In addition, the use of emulsification chemicals shall not be used to clean grease traps. The chemical only allows the grease to exit the facility’s sewer lateral, but the grease then solidifies in the Town’s sewer main and at the treatment facility.

# Section 4

# Inspections

Inspections of grease interceptors, grease interceptor maintenance and accessibility, chemical inventory documentation, and maintenance records shall be conducted by the Town of Woodstock wastewater treatment personnel per Section 82-157 of the Town Code. Before the inspections occur, a letter will be sent 30 days prior to all food processing facilities and their corporate offices to notify them of the revised ordinance and of the Town's intentions and mission. The inspections shall occur on a continuous, but random basis of any and all facilities that process food. Inspectors shall utilize a grease interceptor inspection form, which will reflect a point system and the number of three lost points will result in a failure and abatement action on the facility's part.

Businesses shall be responsible for performing adequate testing and monitoring to ensure that grease traps, grease interceptors, and/or oil water separators are functioning properly. Maintenance and cleaning of devices is required per Section 82-158 of the Town Code. Businesses shall keep records of all maintenance activities and monitoring/testing for a minimum of three (3) years.

The Town of Woodstock has elected to notify businesses of regular maintenance needs for these devices as appropriate during the inspection process. All costs incurred by the Town for cleaning sewers downstream or a device failing to meet the Ordinance shall be billed to the account of the facility/operation causing the obstruction in the form of a sewer surcharge no less than but not limited to \$250.00.

The Town of Woodstock has decided to begin inspections not only to enforce code. The Town is going through an extensive Wastewater Treatment Plant upgrade – 25 million dollars worth of improvements - which calls for a minimal amount of grease entering the system. The improved system works to remove nitrogen and phosphorus and adding fats, oil, and grease reverses the Town's costly efforts. In addition, the Town of Woodstock is concerned with the environmental impact of

dumping grease in storm drains or the collection system, as it will cause sewage back-up (Section 3) which may overflow into homes, restaurants, businesses, and out of manholes, where waste may drain to the storm drains. The storm drains eventually drain to the water collection system, which drains to the Shenandoah River, negatively impacting the Chesapeake Bay.

# Section 5



## Town of Woodstock Grease Trap Inspection Form

\_\_\_\_\_  
**Facility Name:**

\_\_\_\_\_  
**Facility Contact Name & Phone Number:**

\_\_\_\_\_  
**Mailing Address:**

\_\_\_\_\_  
**Physical Address:**

\_\_\_\_\_  
**Inspected By:**

\_\_\_\_\_  
**Date:**

1. Number of Traps: \_\_\_\_\_  
2. Type of Food Service: \_\_\_\_\_  
3. Trap Number: \_\_\_\_\_ (Additional form for each trap)  
4. Trap Location: \_\_\_\_\_  
5. Trap Dimensions/Gallons (approximate)  
6. Clean Out Frequency \_\_\_\_\_

**7. CONDITIONS (For unsatisfactory marks, please provide details in the comments sections. Inspection starts at 11 POINTS and deductions are made based on the allotments below. Deductions can be made in 1/2 point increments. Please reference definition sheet for conditions a – l.)**

- a. Accessibility (1 Point):** Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_
- b. General Condition (1 Point):** Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_
- c. Grease Accumulation (2 Points):** Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_  
Chamber 1 \_\_\_\_\_ Chamber 2 \_\_\_\_\_ Average Depth \_\_\_\_\_
- d. Solids Accumulation (1 Point):** Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_  
Chamber 1 \_\_\_\_\_ Chamber 2 \_\_\_\_\_ Average Depth \_\_\_\_\_
- e. Effluent Quality (2 Points):** Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_ NA \_\_\_\_\_
- f. Downstream Grease (2 Points):** Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_ NA \_\_\_\_\_
- g. Maintenance Documentation (1 Point):** Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

Last Clean Out Date: \_\_\_\_\_

Method of Disposal: \_\_\_\_\_

By Whom: \_\_\_\_\_

**h. Chemical Inventory (1Point):** Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

**i. Results** (More than 3 missed points will result in a failed trap. In addition, the trap may fail at the discretion of the inspector due to structural problems or environmental impact.)

PASS \_\_\_\_\_ FAIL \_\_\_\_\_

**j. Comments by Inspector:**

**k. Fine Amount for Failed Inspection:** \_\_\_\_\_

**l. Maintenance Costs Incurred?**                      yes \_\_\_\_\_                      no \_\_\_\_\_                      NA \_\_\_\_\_

If yes, is this the 1<sup>st</sup> Offense?                      yes \_\_\_\_\_                      no \_\_\_\_\_

If yes, billing will follow as a sewer surcharge on water and sewer bill.

*The facility owner and/or manager must consult with the Town inspectors and officials concerning abatement. Even if the grease trap passes inspection, **items found unsatisfactory must be corrected within thirty (30) days of the issued citation.** Unless the discharge of grease is permanently eliminated, the initial sewer surcharge (added to the utility bill) shall be assessed ten (10) days thereafter. As far as the sewer surcharge is concerned (for maintenance by the Town), there shall only one instance of grace. If the grease trap fails inspection, the fine stands.*

*Contact the Wastewater Treatment Plant Grease Trap Inspector or Chief Operator regarding abatement action and further questions:*

*Town of Woodstock  
Wastewater Treatment Plant  
Grease Trap Inspections  
(540) 459-4436  
(540) 459-8406 facsimile*

*Mailing Address: 135 North Main Street  
Woodstock, VA 22664  
Attn: Grease Trap Inspections*

Printed Name of Facility Manager \_\_\_\_\_ Date \_\_\_\_\_

Signature of Facility Manager \_\_\_\_\_ Date \_\_\_\_\_

Signature of Inspector \_\_\_\_\_ Date \_\_\_\_\_

Signature of Chief Operator \_\_\_\_\_ Date \_\_\_\_\_

Date of Abatement \_\_\_\_\_

*The abatement action that is approved by the Town shall be submitted by the organization to the Town in the form of pictures, receipts, and/or written documentation. Re-inspection by Town inspectors will occur shortly after the date of abatement.*

# Section 6



December 1, 2006

Dear Commercial or Industrial Customer,

On August 1, 2006, The Town of Woodstock Council approved the revision of Section 82-157 of the Town Code pertaining to grease, oil and sand interceptors. It is the Town's mission to eliminate the amount of grease that is deposited into the collection system. Grease is emitted from food processing facilities when grease traps and interceptors are not maintained in the proper manner. It exits the facility's sewer lateral and empties into the collection system, solidifying and causing costly sewer blockages and problems at the Wastewater Treatment Facility.

Fat, oil, and grease adds nutrients to the wastewater stream, adversely impacting the Shenandoah River and Chesapeake Bay when overflows are caused. The Town of Woodstock is currently engineering 25 million dollars worth of improvements to the Wastewater Treatment Facility to remove nitrogen and phosphorous. Adding FOG to the collection system reverses the Town's costly efforts to remove harmful nutrients.

In order to uphold the above Ordinance, the Town has developed a grease interceptor inspection program which includes inspections by trained wastewater treatment personnel. The Town will begin conducting inspections thirty (30) days from this dated notification. A grease trap program packet is enclosed to prepare you for the inspections and give you an idea of what impact the inspections will have on your business.

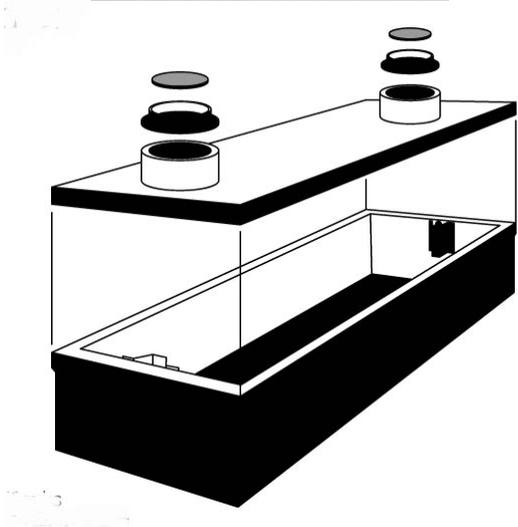
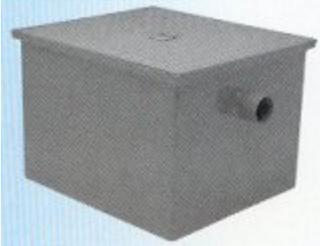
The Town of Woodstock is committed to keeping the Town in excellent working condition. For additional information regarding grease trap maintenance, inspections, and the new requirements, please feel free to contact us.

Sincerely,

Angela K. Clem  
Assistant Town Planner/Risk Manager

Enclosure

# Examples of Grease Interceptors



# Section 7

# Grease Trap/Interceptor Maintenance

The frequency of maintenance to the grease trap or interceptor will largely depend on the size and capacity and the amount of fat, oil, and grease that is deposited into the unit(s). Hot water, acids, caustics, solvents, or emulsifying chemicals should not be used when cleaning out grease traps and interceptors!

## *Grease Trap Cleaning and Maintenance*

| <b>Step</b> | <b>Action</b>  |
|-------------|--|
| 1.          | Bail out any water in the trap or interceptor to facilitate cleaning. The water should be discharged to the sanitary sewer system.                             |
| 2.          | Remove baffles if possible.  |
| 3.          | Dip the accumulated grease out of the interceptor and deposit in a watertight container.   |
| 4.          | Scrape the sides, the lid, and the baffles with a putty knife to remove as much of the grease as possible, and deposit the grease into a watertight container. |
| 5.          | Contact a hauler or recycler for grease pick-up.   |
| 6.          | Replace the baffle and the lid.  |
| 7.          | Record the volume of grease removed on your maintenance log.   |

## *Grease Interceptor Cleaning and Maintenance*

Due to their size, grease interceptors will usually be cleaned by grease haulers and/or recyclers. These licensed professionals will pump the grease interceptors and haul it to the appropriate facility. Facility management must witness the cleaning of their grease interceptor to ensure that it is being properly and fully cleaned. In addition, the hauler should be notifying Department of Environmental Quality when hauling grease.

| <b>Step</b> | <b>Action</b>  |
|-------------|--|
| 1.          | Contact a grease hauler or recycler for cleaning.  |
| 2.          | Ensure that all flow is stopped to the interceptor by shutting the isolation valve in the inlet piping to the interceptor.                                     |
| 3.          | Remove the lid and bail out any water in the trap or interceptor to facilitate cleaning. The water should be discharged to the sanitary sewer system.          |
| 4.          | Remove baffles if possible.  |
| 5.          | Dip the accumulated grease out of the interceptor and deposit in a watertight container.   |
| 6.          | Pump out the settled solids and then the remaining liquids.  |
| 7.          | Scrape the sides, the lid, and the baffles with a putty knife to remove as much of the grease as possible, and deposit the grease into a watertight container. |
| 8.          | Replace the baffle and lid.  |
| 9.          | Record the volume of grease removed in your maintenance log.   |

