



Fats, Oils & Grease (FOG) Management Program Regulation # 09-2016 (Effective 04/01/2016)

Introduction

The Fats, Oils & Grease (FOG) Management Program is being developed and promulgated by the Hopkinsville Water Environment Authority (HWEA) as part of the *Hopkinsville KY Code of Ordinances, Chapter 52* in order to prevent sewer users from discharging FOG to the HWEA sewer. The goal of the program is to reduce or eliminate sanitary sewer overflows, sewer line obstructions, interference, inhibition, or other disruption of the Publicly Owned Treatment Works (POTW) due to FOG related discharge. The following statements are applicable in support of this program;

- ✓ The United States Environmental Protection Agency's Capacity, Management, Operation and Maintenance (CMOM) Program requires implementation of a FOG Program in order to reduce accumulations of FOG that restrict the capacity of the POTW and may cause overflows.
- ✓ The basis for this FOG Management Program is the *Hopkinsville KY Code of Ordinances, Chapter 52, Section 52.019 (D) Prohibited Discharges; Section 52.061 (A), (B- 4, 7, 9, & 12) Restricted Discharges; Section 52.064 Special Industrial Pretreatment Requirements; and Section 52.090 Inspection and Sampling*. Also, this FOG Management Policy is referenced in the *Hopkinsville KY Code of Ordinances, Chapter 52, Section 52.063 Grease, Oil and Sand Interceptors*.
- ✓ The FOG program has specific requirements for food service establishments, commercial facilities, and industrial facilities in order to reduce FOG related discharges into the POTW and help prevent FOG related overflows in an effort to reduce operational costs to HWEA.
- ✓ HWEA is required to prevent sewer system blockages and obstruction in the POTW caused by the accumulation of FOG. It is essential to protect the public from the possibility of contamination or pollution by reducing and / or eliminating sanitary sewer overflows caused by FOG related problems.
- ✓ The implementation of this program is necessary in order to provide continuous oversight for the management, education, and enforcement of FOG control issues to prevent sanitary sewer overflows and sewer line obstructions within the POTW.



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63-100 - Purpose.

The Fats, Oils and Grease (FOG) Management Program sets forth requirements to aid in the prevention of sanitary sewer blockages, obstructions, and overflows due to the contribution and accumulation of FOG into the HWEA sewer system from commercial, industrial, and institutional food service establishments. The objective is to eliminate FOG related sanitary sewer overflows and sewer line blockages to protect the area streams, prevent residential and commercial property damage, decrease sewer maintenance costs, and improve environmental quality.

63-101 - Definitions

- (a) Act or the Act: the Federal Water Pollution Control Act, also known as the Clean Water Act.
- (b) Authorized Representative of the Food Service Establishment: a person who may be
 - (1) The Owner, or
 - (2) General Manager, or
 - (3) Manager, or
 - (4) Duly authorized representative of the individual designated in this definition if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates.
- (c) Black Water or Domestic Sanitary Sewage: Wastewater containing human waste from sanitary fixtures such as toilets and urinals.
- (d) Brown Grease: Fats, oils and grease that is discharged to the grease control equipment. Brown grease can be discharged from kitchen fixture units (i.e., 3-compartment sink, pre-rinse sink, dish machine, mop sink, etc.) or from floors or other locations where the grease has been contaminated in some fashion.
- (e) FOG (fats, oils and grease): Organic polar compounds derived from animal and/or vegetable or plant sources. FOG may be referred to as “grease” or “greases” in this section.
- (f) FOG Program Coordinator: Person employed or designated by the HWEA who is charged with the responsibility of administering the provisions of the grease management program to ensure compliance by users with applicable laws, rules, regulations, policies, and ordinances.

63-101 - Definitions - (cont.)

(g) Food Service Establishment (FSE): Any establishment, business or facility engaged in preparing, serving or making food available for consumption. Single family residences are not a FSE, however, multi-residential facilities may be considered a FSE at the discretion of the President/CEO. Food Service Establishments will be classified as follows:

- (1) **Class 1**: Deli—engaged in the sale of cold-cut and microwaved sandwiches/subs with no frying or grilling on site, ice cream shops and beverage bars as defined by NAICS 722515 (with exception of doughnut shops with on-premise baking and large coffee shops which are classified as Class 2), Day Care facilities (minimum classification—depending on menus, food preparation, culinary cleaning, and number of meals served) as defined by NAICS 624410, and Mobile Food Vendors as defined by NAICS 722330.
- (2) **Class 2**: Limited-Service Restaurants (a.k.a. fast food facilities, drive-in, carry-out) as defined by NAICS 722513, Day Care facilities (maximum classification—depending on menus, food preparation, culinary cleaning, and number of meals served) as defined by NAICS 624410, Full Service Restaurants (minimum classification—seating capacity less than 65) as defined by NAICS 722511, Buffet and Cafeteria facilities (minimum classification—seating capacity less than 65) as defined by 722514, and Caterers as defined by NAICS 722320.
- (3) **Class 3**: Full Service Restaurants (maximum classification—seating capacity greater than 65) as defined by NAICS 722511.
- (4) **Class 4**: Buffet and Cafeteria Facilities (maximum classification—seating capacity greater than 65) as defined by NAICS 722514.
- (5) **Class 5**: Institutions (Schools, Hospitals, Nursing Homes, Prisons, etc) which include NAICS classifications 611110, 611310, 623110, 623311, 623312,

HWEA reserves the right to add or subtract categories of the NAICS from the FSE classifications. Using the best professional judgment as part of the decision, the FOG Program Coordinator shall apply these classifications.

- (h) Gray Water: Refers to all other wastewater other than black water as defined in this section.
- (i) Grease Control Equipment (GCE): A device that is designed and constructed for separating and retaining food service establishments' wastewater fats, oils and grease (FOG) prior to entering the HWEA's sewer system. Devices include grease interceptors, grease traps, or other devices approved by HWEA.
- (j) Grease Interceptor: Grease Control Equipment identified as a large, in-ground tank, usually 1,000-gallon to 3,000-gallon capacity, which provides FOG control for a FSE. Grease interceptors will be located outside the FSE, and be approved by HWEA.

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63-101 - Definitions - (cont.)

- (k) Grease Trap: Grease Control Equipment identified as an “under the sink” trap, or a “floor trap” which is a small container or tank with baffles designed for inside installation at kitchen fixtures. For a FSE approved to install a grease trap, the minimum size requirement is the equivalent of a 20-gallon per minute/40 pound capacity trap. All grease traps shall be correctly sized, have a properly installed flow control restrictor and vent pipe, and be approved by HWEA.
- (l) Grease Recycle Container: Container used for the storage of yellow grease.
- (m) HWEA: Shall mean the Sewerage and Water Works Commission dba Hopkinsville Water Environment Authority (HWEA).
- (n) Health Department: The Christian County Health Department.
- (o) President/CEO: The person employed by the Hopkinsville Water Environment Authority in charge of the entire municipal water and sewer system, or his or her authorized deputy, agent or representative.
- (p) NAICS: North American Industry Classification System, using 2012 (or latest) classifications. The website is found at <http://www.census.gov/epcd/www/naics.html>.
- (q) Publicly Owned Treatment Works (POTW): A treatment works, as defined by section 212 of the Act (33 U.S.C. section 1292), which is owned by HWEA. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances, which convey wastewater to a treatment plant.
- (r) Series: (Grease Interceptors Installed in Series): Grease interceptor tanks are installed one after another in a row and are connected by plumbing pipe.
- (s) Tee or T (Influent & Effluent): A T-shaped pipe extending from the ground surface below grade into the grease interceptor to a depth allowing recovery (discharge) of the water layer located under the layer of FOG. Influent & Effluent T's are recommended to be made of schedule 40 PVC or equivalent material, and extend to within 12” to 15” of the bottom of the interceptor.
- (t) User: Any person, corporation, or company who contributes, causes or permits the contribution of wastewater into HWEA's POTW.
- (u) Yellow Grease: Fats, oils and grease that has not been in contact or contaminated from other sources (water, wastewater, solid waste, etc.) and can be recycled. Yellow grease is normally stored in grease recycle container or bin for beneficial reuse.

63-102 - General Requirements

- (a) All existing and proposed Food Service Establishments (FSEs) are required to have grease control equipment (GCE) installed, maintained and operating properly, in accordance with this FOG Management Policy.
- (b) All FSEs will be required to maintain records of cleaning and maintenance of GCE. GCE maintenance records will be maintained on-site of the FSE and include, at a minimum, the date of cleaning/maintenance, company or person conducting the cleaning/maintenance, volume (in gallons) of grease wastewater removed and the final disposal location. In addition, grease waste haulers shall comply with the HWEA manifest documentation requirements for all disposal of FOG waste.
- (c) GCE maintenance records will be available at the FSE premises so they can be provided to the HWEA inspector or their representative, and/or the Health Department. The FSE shall maintain GCE maintenance records for three (3) years.
- (d) No FSE will discharge oil and grease in concentrations that exceed the HWEA's numerical limit (100 mg/L) for oil and grease (animal or vegetable origin).
- (e) Owners of Commercial Property will be held responsible for installation of approved grease control equipment and shall ensure that lease agreements identify the responsible party for proper maintenance to control wastewater discharges from leaseholder on their property.
- (f) Grease Control Equipment Certification Requirement:

All establishments with grease control equipment must have their grease interceptor or grease trap inspected and certified at least annually, defined as period from January 1 through December 31, by a HWEA "certified" grease waste hauler or City licensed/certified plumber. Any FSE that does not provide an annual grease control certification by December 31 of each year will be considered to be in noncompliance. If a grease interceptor or grease trap "Passes" the certification requirement, no further action is required. If a grease interceptor or grease trap "Fails" the certification requirement, a corrective action response is required from the FSE owner or authorized representative to HWEA within 30 days. Completed certification forms Grease Interceptor Certification (Form A) or Grease Trap Certification (Form B) must be completed and signed by the HWEA "certified" grease waste hauler or City licensed plumber, signed by the FSE owner or authorized representative, and submitted to HWEA. The original certification form must be submitted to HWEA at the following address:

HWEA
Attn: FOG Program
P.O. Box 628
Hopkinsville, KY 42240

63-102 - General Requirements - (cont.)

- (g) Failure of a Grease Interceptor Certification or Grease Trap Certification: The FSE owner or authorized representative is responsible for including detailed "Corrective Action Response" information on the Grease Interceptor Certification form or the Grease Trap Certification form that is submitted to HWEA. If necessary, additional pages may be attached to the certification form. At a minimum, the Corrective Action Response information must include the reason for the failed certification, what corrective action will be taken, and the date the corrective action will be completed. Any additional enforcement action will utilize the *HWEA Food Service Establishment Enforcement Response Guide*.
- (h) FSEs shall observe Best Management Practices (BMPs) for controlling the discharge of FOG from their facility. Examples of BMPs include, but are not limited to:
 - (1) Recycle waste cooking oil; dispose in grease recycle bin or container. Do NOT pour any grease into sinks, floor drains or mop sinks.
 - (2) Post "NO GREASE" signs above all kitchen sinks to remind employees.
 - (3) "Dry wipe", and scrape into a trash container as much food particles and grease residue from pots, pans, and plates as possible.
 - (4) Use strainers in sink drains and floor drains to prevent large food particles and containers from going into the sewer line.
 - (5) If an oil or grease spill occurs, clean up using "dry" oil absorbent material or use ice to make grease solidify. Scoop up and dispose into a trash container. Do **NOT** wash oil or grease into drains!
 - (6) Dispose of food items in the trash. Food grinder use is discouraged due to build up of solids in the GCE which causes decreased efficiency and the need to increase pumping frequency of the GCE.
 - (7) Educate and train all employees on grease control and preventing sewer pipe clogs and sewer overflows.
- (i) FSEs shall dispose of yellow grease in an approved container, or recycle container, and the contents shall not be discharged to any sanitary sewer line, storm water grate, drain or conveyance. Yellow grease or oils poured or discharged into the FSE sewer lines or HWEA's sewer system is a violation of this FOG Management Policy.
- (j) It shall be a violation of this FOG Management Policy to push or flush the non-water portion of GCE into the public sewer.

63-103 - Approved Grease Waste Haulers

To ensure proper maintenance of grease control equipment and proper disposal of the FOG waste, HWEA will maintain an "Approved Grease Waste Haulers List." Criteria for the grease waste hauler to be placed on the "Approved Grease Waste Haulers List" include, but are not limited to, the following:

- (a) The grease waste hauler employees that will be completing the food service establishment grease control equipment certification forms must attend a HWEA Grease Control Equipment Certification Class and pass the GCE certification class test. Class information may be obtained at the HWEA Main Office.
- (b) Grease waste haulers and plumbers that pump grease interceptors or grease traps must comply with the requirements of the HWEA FOG Management Policy.
- (c) Signature of the grease waste hauler company's authorized representative and submittal to HWEA of a completed "HWEA Approved Grease Waste Hauler Agreement" form are required.
 - (1) The grease waste hauler agreement will include grease waste hauler reporting requirements to HWEA and making records available to HWEA personnel or their authorized representative. Failure to meet any portion of the grease waste hauler agreement will result in removal of the grease waste hauler from the "HWEA Approved Grease Waste Haulers List" and/or additional enforcement action.

63-104 - Grease Control Equipment Requirements

- (a) **Any new FSE, existing FSE, upgrading of an existing FSE, or change of ownership of existing FSE will be required to install and maintain a GCE.** Food service establishments in one of these categories must submit a FOG plan to HWEA for approval. The FOG plan must include identification of all cooking and food preparation equipment (i.e., fryers, grills, woks, etc.), the number and size of all kitchen plumbing fixture drains (i.e., for dishwashers, sinks, floor drains, etc.), type of FSE classification, type of food to be served, and plans for the grease interceptor dimensions and location. The FSE or their representative will complete a HWEA Grease Control Inquiry Form and submit the form to HWEA. The HWEA's Grease Control Inquiry Form will serve as the FSE's application for a FOG Control Permit. HWEA will review the FOG plan, grease interceptor sizing and approve, or make changes as necessary, to aid in the protection of a FOG discharge from the FSE.
- (b) Prior to installation, all proposed GCEs shall meet the HWEA FOG Program Coordinator's, or their designee's, approval and meet the design specifications as stated in this FOG Management Policy. Only specifically HWEA approved GCE and fixtures can be installed or connected to the grease waste line.
- (c) New construction of FSEs shall have separate sanitary (restroom) and kitchen process lines. The kitchen process lines shall be plumbed to appropriately sized GCE. No sanitary wastewater (black water) or storm water shall be plumbed to the GCE.

63-104 - Grease Control Equipment Requirements

- (d) All of the FSEs internal plumbing shall be constructed to separate sanitary (restroom) flow from kitchen process flow. Sanitary flow and kitchen process discharges shall be approved separately by HWEA and shall discharge from the building separately. Kitchen process lines and sanitary lines may combine prior to entering the public sewer; however the lines cannot be combined until after the GCE.
- (e) Grease Interceptors or Grease Traps will be installed and connected so that it is easily accessible for inspection, cleaning and removal of grease at any time.
- (f) Existing Food Service Establishments are required to meet these FOG Management Policy requirements no later than 120 days after the effective date of this FOG Management Policy. HWEA may allow additional time on a case-by-case basis for the FSE to meet FOG Management Policy requirements if there are documented extenuating circumstances.
- (g) New Multi-Unit (Strip Mall) Facilities: New strip malls or strip centers must have two separate sewer line connections at each unit within the strip mall or strip center. One sewer line will be for sanitary wastewater and one sewer line will be for the kitchen area, or potential kitchen area, of each unit. The kitchen area, or potential kitchen area, sewer line will be connected to floor drains in the specified kitchen area, and will connect, or be able to connect, to other food service establishment kitchen fixtures, such as 3-compartment sink, 2-compartment sink, pre-rinse sink, mop sink and hand wash sink.
 - (1) New multi-unit facility, or new "strip mall" facility, owners shall contact HWEA prior to conducting private plumbing work at the multi-unit facility site. Multi-unit facility owners, or their designated contractor, shall have plans for separate private wastewater lines for kitchen and sanitary wastewater for each "individual" unit. In addition, the plans shall identify "stub-out" locations to accommodate a minimum 1,000-gallon grease interceptor for each unit of the multi-unit facility, or provide a larger capacity grease interceptor that could be shared by multiple FSEs in the strip mall. HWEA approval for multiple FSEs connected to one grease interceptor or series of grease interceptors must be approved by HWEA prior to construction. New multi-unit facility, or new "strip mall" facility owners shall consider suitable physical property space and sewer gradient that will be conducive to the installation of an exterior, in-ground grease interceptor when determining the building location.
 - (2) FSEs located in a new multi-unit facility shall have a minimum of a 1,000-gallon grease interceptor installed, unless that FSE is identified as a Class 1 facility. Sanitary wastewater, or black water, shall not be connected to GCE.
- (h) Variance to Grease Interceptor Installation: At the discretion of the President/CEO, a FSE may receive a variance from the required installation of a grease interceptor. Variances will be limited to existing FSEs that have unusual physical location circumstances that will prevent the installation of a large grease interceptor. Sizing will be based on the Standard PDI-G101 of the Plumbing & Drainage Institute, simplified chart, wherever possible.
- (i) Alternative Grease Control Equipment: At the discretion of the President/CEO, alternative grease control equipment may be considered and approved for installation at a FSE. The alternative grease control equipment must control FOG discharges from a FSE and be maintained as outlined in this FOG Management Policy.

63-104 - Grease Control Equipment Requirements

- (j) Approval of Grease Control Equipment: All new FSEs and FSEs that upgrade their facilities (including the addition of new plumbing fixtures or kitchen equipment which, directly or indirectly, affects grease discharge) must contact HWEA for final approval of the grease control equipment. This will include onsite inspection of the grease control equipment by t HWEA, or their authorized representative. Failure of the FSE to contact HWEA to conduct the inspection of the new GCE will result in enforcement action.

63-105 - Grease Control Equipment Sizing

- (a) Minimum acceptable size of grease control equipment for each FSE Classification will be as follows:
 - (1) **Class 1:** Delis, Ice Cream shops, Beverage Bars, Mobile Food Vendors, Day Care facilities (minimum classification) - **20-gpm/40 pound Grease Trap** (NAICS 722515, 722330, 624410). Exceptions to Class 1 are doughnut shops with on premise baking and large coffee shops, which are classified as Class 2 facilities.
 - (2) **Class 2:** Limited-Service Restaurants/ Carry-out/Caterers/Day Care facilities (maximum classification)/ Full Service Restaurants (minimum classification)/ Buffet and Cafeteria facilities (minimum classification) - **1,000-gallon Grease Interceptor** (NAICS 722513, 722511, 72514, 722320, 624410)
 - (3) **Class 3:** Full-Service Restaurants - **1,500-gallon Grease Interceptor** (NAICS 722511)
 - (4) **Class 4:** Buffet and Cafeteria Facilities (maximum classification) - **2,000-gallon Grease Interceptor** (NAICS 722514)
 - (5) **Class 5:** Institutions (Schools, Hospitals, Nursing Homes, Prisons, etc.) - **2,000-gallon Grease Interceptor** (NAICS 611110, 611310, 623110, 623311, 623312, 722310, 813110, 922140)
- (b) To calculate the appropriate size GCE, the FSE's engineer, architect, licensed plumber or contractor should use a formula that considers all kitchen plumbing fixture units, the discharge plumbing pipe for each fixture unit, storage capacity, type of facility and an adequate retention time. The grease control equipment minimum acceptable size for the above listed FSE classifications (Class 1 through 5) shall be met.
- (c) HWEA will review GCE sizing information received from the completed Grease Control Inquiry Form and the FSE's sizing calculations and information. HWEA will make a decision to approve, or require additional grease interceptor volume, based on the type of FSE, the number of fixture units, and additional calculations. Each grease interceptor tank capacity should not exceed 2,000 gallons. In the event that the grease interceptor calculated capacity needs to exceed 2,000 gallons, the FSE shall install an additional interceptor of the appropriate size in series.

63-104 - Grease Control Equipment Requirements - (cont.)

- (d) Grease interceptors that are installed in series shall be installed in such a manner to ensure positive flow between the tanks at all times. Therefore, tanks shall be installed so that the inlet invert of each successive tank shall be a minimum of 2 inches below the outlet invert of the preceding tank.
- (e) Grease Control Equipment must remove fats, oils and grease at or below the HWEA's oil and grease (animal or vegetable origin) limit of 100 mg/L.

63-106 - Grease Interceptor Design and Installation

(a) Piping Design

- (1) The inlet and outlet piping shall have 2-way cleanout tees installed.
- (2) The inlet piping shall enter the receiving chamber 2 ½ inches above the invert of the outlet piping.
- (3) On the inlet pipe, inside the receiving chamber, a sanitary tee of the same size pipe in the vertical position with the top unplugged shall be provided as a turndown. To provide air circulation and to prevent "air lock", a pipe (nipple) installed in the top tee shall extend to a minimum of 6" clearance from the interceptor ceiling, but not less than the inlet pipe diameter. A pipe installed in the bottom of the tee shall extend to a point of 2/3 the depth of the tank. The inlet T should be made of Schedule 40 PVC or equivalent material. *See illustration Figure 1.*
- (4) The outlet piping shall be no smaller than the inlet piping, but in no case smaller than 4" ID.
- (5) The outlet piping shall extend to 12" above the floor of the interceptor and shall be made of a non-collapsible material. Minimum materials requirement for outlet piping is Schedule 40 PVC.
- (6) The outlet piping shall contain a tee installed vertically with a pipe (nipple) installed in the top of the tee to extend to a minimum of 6" clearance from the interceptor ceiling, but not less than the pipe diameter, with the top open. Minimum requirement for the outlet tee is Schedule 40 PVC. *See illustration.*

(a) Baffles

- (1) The grease interceptor shall have a non-flexing (i.e. concrete, steel, etc.) baffle extending the full width of the interceptor, sealed to the walls and the floor, and extending from the floor to within 6" of the ceiling. The baffle shall have an inverted 90 degree sweep, or schedule 40 PVC tee, fitting at least equal in diameter size to the inlet piping, but in no case less than 6" ID. The bottom of the sweep shall be placed in the vertical position in the inlet compartment 12" above the floor. The sweep shall rise to the horizontal portion, which shall extend through the baffle into the outlet compartment. The baffle wall shall be sealed to the sweep. *See illustration.*

63-106 - Grease Interceptor Design and Installation - (cont.)

- (2) The inlet compartment shall be 2/3 of the total liquid capacity with the outlet compartment at 1/3 liquid capacity of the interceptor.

(b) Access Openings (Manholes)

- (1) Access to grease interceptors shall be provided by a minimum of 1 manhole per interceptor division (baffle chamber) and of 24-inch minimum dimensions terminating 1 inch above finished grade with cast iron frame and cover. An 8" thick concrete pad extending a minimum of 12" beyond the outside dimension of the manhole frame shall be provided. One manhole shall be located above the inlet tee hatch and the other manhole shall be located above the outlet tee hatch. A minimum of 24" of clear opening above each manhole access shall be maintained to facilitate maintenance, cleaning, pumping, and inspections.
- (2) Access openings shall be mechanically sealed and gas tight to contain odors and bacteria and to exclude vermin and ground water, in a manner that permits regular re-uses.
- (3) The manholes shall be accessible for inspection by HWEA.

(c) Additional Requirements

- (1) Water Tight – Precast concrete grease interceptors shall be constructed to be watertight. A static water test shall be conducted by the installer and timed so as to permit verification through visual inspection by HWEA or regulatory agent. The water test shall consist of plugging the outlet (and the inlet if necessary) and filling the tank(s) with water to the tank top a minimum of 24 hours before the inspection. The tank shall not lose water during this test period. Certification by the plumbing contractor shall be supplied to HWEA prior to final approval of grease control equipment.
- (2) Location – Grease interceptors shall be located so as to be readily accessible for cleaning, maintenance, and inspections. They should be located close to the fixture(s) discharging the greasy wastewater. If possible, grease interceptors should not be installed in "drive-thru" lanes or parking areas. Grease interceptor access manholes shall never be paved over, covered by landscaping, or have any other hindrances to allow access.
- (3) Load-Bearing Capacity: Each interceptor shall be structurally designed to withstand any anticipated load to be placed on the interceptor (i.e. vehicular traffic in parking or driving areas). This includes any "risers" or other extensions for the interceptor manholes to insure that any large commercial vehicle will not cause a collapse of the structure.
- (4) Construction Material – Grease Interceptors shall be constructed of sound durable materials, not subject to excessive corrosion or decay, and shall be water and gas tight.

63-106 - Grease Interceptor Design and Installation - (cont.)

- (5) Concrete materials and other grease interceptor materials shall meet the American National Standards Institute, Inc. (ANSI) and International Association of Plumbing and Mechanical Officials (IAPMO) standards.
- (6) Marking and Identification - Prefabricated gravity grease interceptors shall be permanently and legibly marked with the following:
 - a. Manufacturer's name or trademark, or both
 - b. Model number
 - c. Capacity
 - d. Month and year of manufacture
 - e. Load limits and maximum recommended depth of earth cover in feet; and
 - f. Inlet and outlet

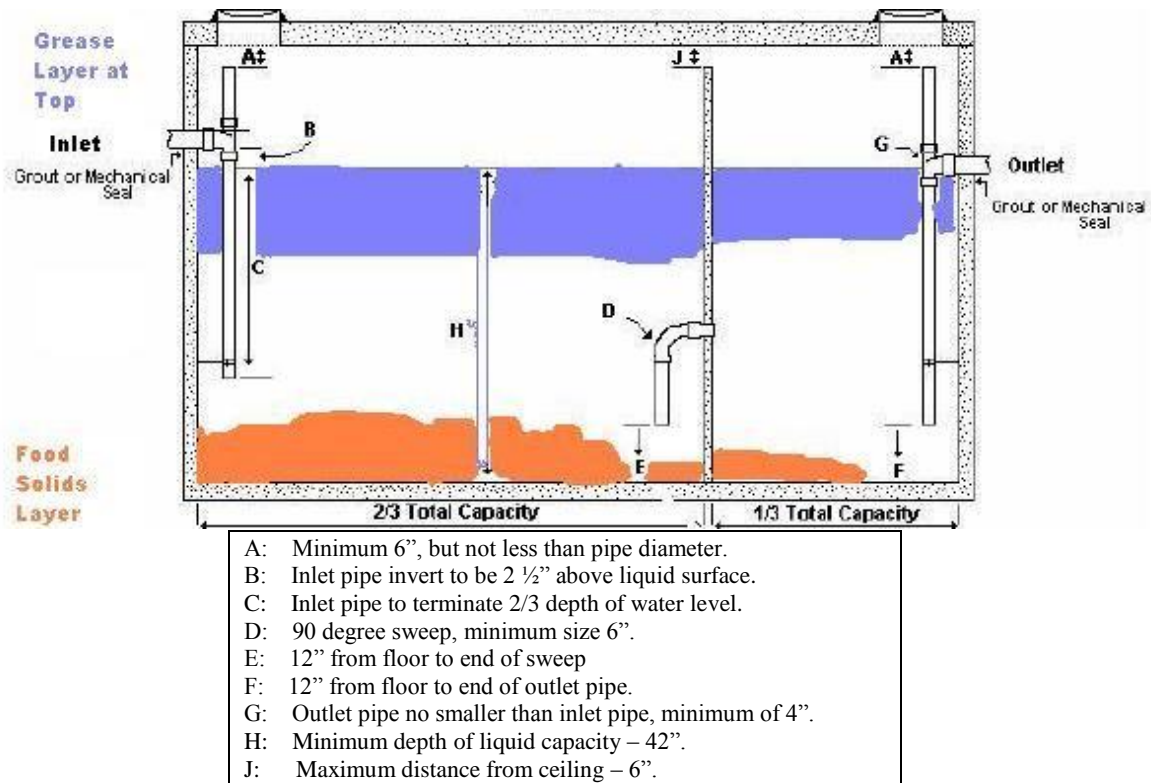


Figure 1 Grease Interceptor Typical Detail

63-107 - Grease Interceptor Cleaning and Maintenance Requirements

- (a) Partial pump of interceptor contents or on-site pump and treatment of interceptor contents will NOT be allowed due to reintroduction of fats, oils and grease to the interceptor. In no way shall the pumped material be returned to any private or public portion of the sanitary sewer collection system. All grease waste haulers and procedures for pumping grease interceptors shall be in compliance with this FOG Management Policy.
- (b) Responsibility – Maintaining the grease interceptor(s), including complete pumping of contents at the required frequency and insuring proper components are installed, is the responsibility of the user/owner. Commercial property owners shall ensure that lease agreements identify the responsible party for proper maintenance to control wastewater discharges from leaseholder on their property.
- (c) Grease interceptors must be pumped-in-full (total pump of all contents) when the total accumulations of surface FOG (including floating solids) and settled solids reaches twenty-five percent (25%) of the grease interceptor’s inlet liquid depth. This criterion is referred to as the “25 Percent Rule”. At no time, shall the cleaning frequency exceed 90 days unless approved in writing by HWEA. Failure to meet this requirement shall result in enforcement action. Approval will be granted on a case by case situation with submittal by the FSE documenting proof that a reduced cleaning frequency will meet the requirements of this FOG Management Policy. Some existing FSEs in Class 2 through 5 may need to consider a more frequent pumping schedule to meet this requirement. A HWEA approved manifest of grease interceptor cleaning/maintenance, and an FSE grease interceptor self-monitoring checklist shall be maintained onsite at the FSE and provided to HWEA upon request. These documents need to be provided to HWEA for review before approval can be granted for a cleaning frequency to exceed 90 days.
- (d) The Grease interceptor’s influent-T and effluent-T will be inspected during cleaning and maintenance and the condition noted by the grease waste hauler’s company or individual conducting the maintenance. Influent and effluent-Ts that are loose, defective, or not attached must be repaired or replaced immediately. Grease waste haulers or individuals conducting any maintenance or pumping will use caution to not damage or dislodge Ts, or cause other grease interceptor component damage. Any repairs to the grease interceptor should be documented and kept on file at the FSE.
- (e) Grease Interceptors must have access manholes over the influent-T and effluent-T for inspection and ease of cleaning/maintenance. Access manholes will be provided for all separate compartments of interceptors for complete cleaning (i.e. interceptor with two main baffles or three compartments will have access manholes at each compartment). The manholes are to be accessible for inspection by HWEA.
- (f) Grease Interceptor waste must be hauled offsite and disposed at a State and POTW approved disposal location. All disposal of grease interceptor waste must meet the requirements of City’s Sewer Ordinances. HWEA approved manifests must be used.
- (g) Grease Interceptors must be “certified” annually by a HWEA approved grease waste hauler or plumber. A Grease Interceptor Certification (Form A) must be completed and submitted to HWEA annually.

63-107 - Grease Interceptor Cleaning and Maintenance Requirements - (cont.)

- (h) HWEA may mandate the FSE to require the grease waste hauler to contact HWEA by telephone at least 24 hours prior to any cleaning, pumping, maintenance, inspection, or certification of the grease interceptor. HWEA has the right to be present to inspect all maintenance.

63-108 - Grease Trap Sizing, Installation, Cleaning, and Maintenance

- (a) **All** grease traps will have a properly installed and vented flow control restrictor. Failure to have the flow restrictor and venting will be considered a violation.
- (b) All new FSEs that are allowed to install grease traps must have HWEA written approval prior to starting operations.
- (c) A Grease Trap's minimum size requirement is **20-gallon-per-minute/40-pound capacity**. Drainage time of particular kitchen fixtures, such as a 3 compartment sink, should be considered when selecting the grease trap size.
- (d) Grease Traps must have the Plumbing Drainage Institute certification, and be installed as per manufacturer's specifications.
- (e) At the discretion of the President/CEO, alternative grease control equipment may be considered and approved for installation. The alternative grease control equipment must control FOG discharges and be maintained as outlined in this FOG Management Policy.
- (f) No automatic dishwasher shall be connected to an under-the-sink grease trap or floor grease trap. Dishwashers will cause hydraulic overload of the grease trap.
- (g) No automatic drip or feed system for additives is allowed prior to entering the grease trap without written approval from HWEA.
- (h) A single grease trap device shall be installed for each significant kitchen fixture unit (i.e. each 3 compartment sink), unless the Manager or FOG Program Coordinator provides written approval for multiple fixtures to be connected to the grease trap. HWEA must approve the number of grease traps and connections to the grease trap.
- (i) During each cleaning of the grease trap, the flow restrictor shall be checked to ensure it is attached and operational.
- (j) Grease Traps will be completely cleaned of fats, oils and grease and food solids at a minimum of every thirty (30) days. If the FOG and food solids content of the grease trap are greater than 25%, then the grease trap must be cleaned as frequently as needed to prevent 25% of capacity being occupied with FOG and food solids. A written record of grease trap cleaning and maintenance shall be maintained onsite at the FSE and provided to HWEA upon request.
- (k) Grease Trap waste shall be sealed or placed in a container to prevent leachate from leaking, and then disposed or hauled offsite by a grease waste hauler or plumber to an approved disposal location. In no way shall the pumped material be returned to any private or public portion of the sanitary sewer collection system. All grease waste haulers, plumbers, and procedures for pumping grease traps shall be in compliance with the City Ordinances and this FOG Management Policy.

63-108 - Grease Trap Sizing, Installation, Cleaning, and Maintenance - (cont.)

- (l) Grease Trap waste shall not be mixed with yellow grease in the grease recycle container.
- (m) Grease Traps must be “certified” annually. See General Requirements of this FOG Management Policy.
- (n) HWEA may mandate the FSE to require the grease waste hauler to contact HWEA by telephone at least 24 hours prior to any cleaning, pumping, maintenance, inspection, or certification of the grease trap. HWEA has the right to be present to inspect all maintenance.

63-109 - Best Management Practices and Accidental Discharge Prevention

Food Service Establishments shall implement Best Management Practices to prevent the discharge of fats, oils and grease to the HWEA’s sanitary sewer system. Food Service Establishments shall provide such facilities and institute such procedures as are reasonably necessary to prevent or minimize the potential for accidental discharge of fats, oils, and grease into the sewage collection system.

63-110 - “Additives” Limitations and Prohibitions for Use

- (a) Additives include but are not limited to products that contain solvents, emulsifiers, surfactants, caustics, acids, enzymes, and bacteria.
- (b) Any additive(s) placed into the food service establishment discharge line system or grease interceptor on a constant, regular, or scheduled basis shall be reported to HWEA. If HWEA identifies FOG in the downstream sewer system from a FSE that is using an additive, then HWEA can require the FSE to discontinue use of the additive.
- (c) No additive can be used prior to the grease trap (inside under-the-sink or floor trap).
- (d) Additive use will not be a substitute for regular, required cleaning, or pumping of grease control equipment as required in this FOG Management Policy.
- (e) This FOG Management Policy prohibits the use of chemicals, acids, caustics, enzymes, hot water, emulsifiers, surfactants, or other additives to cause oil or grease to pass through the user's grease trap or grease interceptor designed to remove oil and grease.

63-111 - Private Sewer Line Cleaning of FOG Requirement

Any grease waste hauler, plumber, or contractor that cleans FOG from a food service establishments’ private sewer lines must insure that the FOG and other debris cleaned from the private sewer lines does not cause an obstruction or blockage in the HWEA’s sanitary sewer system. The FOG or other debris cleaned from the private sewer line should be “vactored” or removed by the grease waste hauler, plumber, or contractor prior to entry into the HWEA sanitary sewer system to prevent obstruction or blockage to the HWEA’s sanitary sewer system. The grease waste hauler, plumber, or contractor shall immediately contact HWEA if FOG is “pushed” or “jetted” into the HWEA sanitary sewer system to make HWEA aware of the FOG and debris at the specific location.

63-112 - Right of Entry, Inspections, and Monitoring

- (a) HWEA, or their authorized representative, shall have the right to enter the premises of FSEs to determine whether the FSE is complying with the requirements of this FOG Management Policy and the *Hopkinsville KY Code of Ordinances, Chapter 52, Section 52.120 and 52.121*. FSEs shall allow HWEA personnel, or their authorized representative, upon presentation of proper credentials, full access to all parts of the premises for the purpose of inspection, monitoring, and/or records examination. Unreasonable delays in allowing HWEA personnel access to the FSE premises shall be a violation of this FOG Management Policy.
- (b) All grease interceptors and traps shall be subject to review, evaluation and inspection by HWEA or their authorized representative. Inspections will determine proper maintenance, changes in operation, proper records and files, ability of interceptor or trap to prevent grease from entering the system, and any other factors pertaining to the control of grease discharges to the HWEA sewer system. HWEA can require the FSE to notify HWEA 24 hours prior to any pumping, cleaning, maintenance, or certification of the GCE so HWEA can do a visual inspection of the total GCE tank. HWEA can require the FSE to schedule pumping of their interceptor if HWEA determines that the interceptor may be defective or there is chronic FOG obstruction in the downstream sewer from the FSE. HWEA personnel, or their authorized representative, reserve the right to make determinations of interceptor or trap condition, and adequacy based on review of all information regarding the interceptor's or trap's performance and can require increased cleaning frequency, additional maintenance, modification or replacement of the GCE. All records will be available on site for review by HWEA personnel, or their authorized representative, for a period of 36 months. Copies shall be provided upon request from HWEA.
- (c) HWEA may require that the FSE install monitoring or additional pretreatment equipment deemed necessary for compliance with this FOG Management Policy and the *Hopkinsville KY Code of Ordinances, Chapter 52, Section 52.091*.

63-113 - Fees and Permits

- (a) HWEA may charge inspection, monitoring, assessment, impact, surcharge, commercial food facility, and/or permit fees to the food service establishments to get reimbursement for the FOG program and/or POTW impact costs.
- (b) A monthly FOG program fee may be added to each FSE's Wastewater bill.
- (c) An additional compliance inspection fee may be charged to each food service establishment for each re-inspection due to noncompliance issues.
- (d) HWEA may issue FOG Control Permits to food service establishments. All new FSEs shall complete the HWEA's Grease Control Inquiry Form and submit the form to the City, which will serve as the FSE's FOG permit application. The HWEA's FOG inspection form will serve as the permit application for existing FSEs. FOG Control Permits may be issued for a period or duration of up to 5 years. Additional fees may be implemented by HWEA for food service establishment wastewater treatment and impacts to the POTW.

63-114 - FOG Treatment, Disposal, and Resource Recovery Plan

HWEA may implement a FOG Treatment, Disposal, and Resource Recovery Plan (Plan). The plan may be implemented if problems continue with FOG disposal, FOG obstruction in the sewer system, or inconsistent maintenance of FSE grease control equipment provided by grease waste haulers to prevent FOG discharges. The plan may include a Request For Proposal (RFP) for the treatment and disposal of FOG waste generated from the City's food service establishments. The RFP may include that the successful RFP respondent provide some form of beneficial reuse of the FOG waste that is treated. Also, the RFP may include a cost estimate for maintenance (complete pump of grease interceptors and grease traps) and certification of the grease control equipment of all City food service establishment grease interceptors and grease traps. The results of the RFP may provide a single source for HWEA CE pumping, GCE certification, FOG treatment, FOG disposal, and reporting to HWEA. HWEA will implement quality control practices to ensure that the successful RFP respondent meets all RFP requirements. In addition, the total cost of the food service establishment GCE pumping, and FOG treatment and disposal should be the same or lower cost than the average market cost of GCE maintenance as determined by HWEA.

63-115 - Violations and Enforcement Action

- (a) HWEA will use the *HWEA Food Service Establishment Enforcement Response Guide* as a guide for enforcement actions to be taken. (*Please see Attachment A*).
- (b) Enforcement action against the food service establishment includes, but is not limited to, failure to clean or pump grease control equipment, failure to maintain grease control equipment including installation of a properly functioning influent / effluent-T and baffle(s), failure to install grease control equipment, failure to control FOG discharge from the FSE, failure to certify the grease interceptor or trap, FSE responsible for sewer line obstruction, FSE responsible for a sanitary sewer overflow, and FSE use of additives so that FOG is diluted and pushed downstream of the FSE.
- (c) Whenever HWEA personnel, or their authorized representative, determine that a grease interceptor or trap is in need of installation, pumping, repairs, maintenance, or replacement, a Noncompliance Notification (NCN) or a Notice of Violation (NOV) will be issued stating the nature of the violation(s) and timeframe for corrective measures.
- (d) If the FSE fails to initiate corrective action in response to a NCN or NOV, a second notice will be issued and additional fees may be assessed. Fees may include compliance inspection fees, costs associated with service calls for sewer line blockages, line cleaning, camera trucks, line and pump repairs, including all labor, material and equipment. Further non-compliance will result in escalation in enforcement action.
- (e) Immediate discontinuance of HWEA wastewater services may be issued if the facility presents an imminent endangerment to the health, welfare of person or to the environment, causes stoppages or excessive maintenance of the sanitary sewer system, causes significant interference with the wastewater treatment plant, or causes HWEA to violate any condition of its NPDES permit. Service shall be reinstated when such conditions have been eliminated and after payment of reconnection fees or other assessed fees.

63-115 - Violations and Enforcement Action - (cont.)

- (f) If inspections and field investigations determine that any fats, oils and grease interference or blockage in the POTW (including the sewer system, a sewage pumping station, or the wastewater treatment plant) is caused by a particular user, or food service establishment, then that user, or FSE, may be required to reimburse HWEA for all labor, equipment, supplies and disposal costs incurred by HWEA to clean the interference or blockage. The charges will be added to the user's or FSE's utility bill. Failure to reimburse HWEA may result in termination of utility services.

**End of
Fats, Oils & Grease (FOG) Management Program
Regulation # 09-2016**