



# BPU Water and Wastewater Department Fats, Oils & Grease Management Policy 2011

## Basis:

The Board of Public Utilities Water & Sewer Department Fats, Oils and Grease Management Policy is based on the *City of Paris Municipal Code, Sewer Use Ordinance, Section 5.03(1) Oils and Grease and Section 5.05*. The United States Environmental Protection Agency and the State of Tennessee require action be taken to prevent sanitary sewer overflows. In addition, the Environmental Protection Agency’s Capacity, Management, Operation, and Maintenance (CMOM) Program criteria include the implementation and operation of a Fats, Oils and Grease (FOG) Management Program.

## Scope & Purpose:

To prevent sanitary sewer system blockages, obstructions, fouling of treatment equipment and overflows that result from the contribution and accumulation of fats, oils, and grease from Food Service Establishments (FSE), commercial facilities, and other generators of fats, oils, and grease.

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## I. Definitions:

1. Fats, Oils, & Grease (FOG): Organic polar compounds derived from animal and/or plant sources. FOG may be referred to as “grease” or “greases” in this section.
2. Director: Shall mean the Director of the Water and Wastewater Department of the Board of

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Public Utilities (BPU) or other authorized deputy, agent or representative.

3. Best Management Practices (BMP): Schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the introduction of FOG to the sewerage system.
4. 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 the Director. Food Service Establishments will be classified as follows:
  - 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 72213, Mobile Food Vendors as defined by NAICS 722330
  - Class 2:** Limited-Service Restaurants (a.k.a. Fast Food Facilities) as defined by NAICS 722211 and Caterers as defined by NAICS 722320
  - Class 3:** Full Service Restaurants as defined by NAICS 722110
  - Class 4:** Buffet and Cafeteria Facilities as defined by NAICS 72212
  - Class 5:** Institutions (Schools, Hospitals, Prisons, etc) as defined by NAICS 722310 but not to exclude self-run operations.
5. (Brown) Grease: Fats, oils and grease that is discharged to the grease control equipment.
6. (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.
7. Grease Control Equipment (GCE): A device for separating and retaining wastewater FOG prior to wastewater exiting the FSE and entering the BPU's sewer system. The GCE is so constructed as to separate and trap or hold fats, oils and grease substances from entering the BPU's sewer system. Devices include grease interceptors, grease traps, or other devices approved by the Director.
8. Grease Interceptor: Grease Control Equipment identified as a large tank, usually 750 gallon to 2000 gallon capacity, which provides FOG control for a FSE. Grease interceptors will be located outside the FSE, unless a variance request has been granted.
9. Grease Trap: Grease Control Equipment identified as an "under the sink" trap, a small container with baffles, or a floor trap. 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 will have a flow control restrictor and venting.
10. Grease Recycle Container: Container used for the storage of yellow grease.
11. NAICS: North American Industry Classification System. The website is found at: (<http://www.census.gov/epcd/www/naics.html>)
12. Series: (Grease Interceptors Installed in Series): Grease interceptor tanks are installed one after another in a row and are connected by plumbing pipe.
13. Tee or T (Influent & Effluent): A T-shaped pipe extending from the ground surface below

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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 PVC or equivalent material, and extend to within 12" to 15" of the bottom of the interceptor.

14. (Black) Water: Wastewater containing human waste, from sanitary fixtures such as toilets and urinals.

15. (Gray) Water: Refers to all other wastewater other than black water as defined in this section

## **II. General Requirements:**

1. All existing Food Service Establishments (FSEs) are required to have grease control equipment (GCE) installed, maintained and operating properly, in accordance with this FOG Management Policy.
2. All FSEs will be required to maintain records of cleaning and maintenance of GCE. GCE maintenance records include, at a minimum, the date of cleaning/maintenance, company or person conducting the cleaning/maintenance, volume (in gallons) of grease wastewater removed and final disposal location. A grease waste hauler completed manifest, that includes all the minimum information mentioned above, will meet this requirement.
3. GCE maintenance records will be available at the FSE premises so they can be provided to BPU or their representative, and/or the Health Department. The FSE shall maintain GCE maintenance records for three (3) years.
4. Owners of Commercial Property will be held responsible for wastewater discharges from leaseholder on their property.

### **5. Grease Control Equipment Annual Certification Requirement:**

All establishments with grease control equipment must have their grease interceptor or grease trap inspected and certified annually by a BPU "certified" grease waste hauler or plumber. If a grease interceptor or grease trap "Passes" the certification requirement, then no further action is required. If a grease interceptor or grease trap "Fails" the certification requirement, then a corrective action response is required from the FSE owner or authorized representative to the BPU. Certification forms {Grease Interceptor Certification (Form A) or Grease Trap Certification (Form B)} must be completed and signed by the grease waste hauler or plumber, as well as the FSE owner or authorized representative, and submitted to the BPU. The original certification form must be submitted to:

Paris Board of Public Utilities

Attn: FOG Program

P.O. Box 460

Paris, TN 38242

6. **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 the BPU. 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 to correct the problem, and the date the corrective action will be completed.
7. Food Service Establishments shall implement Best Management Practices in their operation to minimize the discharge of FOG to the sewer system. Best Management Practices include but are not limited to those found attached to this policy.

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8. 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 or grease, poured or discharged into the FSE sewer lines or BPU's sewer system is a violation of the City of Paris Sewer Use Ordinance.
  9. It shall be a violation of the City of Paris Sewer Use Ordinance to push or flush the non-water portion of GCE into the public sewer.

### **III. Approved Grease Waste Haulers List**

To ensure proper maintenance of grease control equipment and proper disposal of the FOG waste, the BPU 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:

- Signature of the grease waste hauler company's authorized representative and submittal to the BPU a completed "Paris Board of Public Utilities Approved Grease Waste Hauler Agreement Form".
  - The grease waste hauler agreement will include grease waste hauler reporting requirements to the BPU, and making records available to BPU personnel, or their authorized representative. Failure to meet any of the grease waste hauler agreement will result in removal of the grease waste hauler from the "Approved Grease Waste Haulers List", and/or enforcement action.
- Attendance at the BPU Grease Control Equipment Certification Class, or proof of passing a GCE certification class at another recognized POTW.

Based on the effectiveness of the FOG program to prevent obstruction to the sanitary sewer system, and to properly and consistently maintain the sewer system, the BPU, at the Director's discretion, may implement *Section XII: FOG Treatment and Disposal Plan*.

### **IV. Grease Control Equipment Installation Requirements**

**New Food Service Establishment, Upgrading of Existing Food Service Establishment or Change of Ownership of Existing Food Service Establishment Requirement:** Any new FSE, upgrading of an existing FSE or change of ownership of existing FSE will be required to install and maintain a grease interceptor. Food service establishments in one of these categories must submit a FOG plan to the BPU for approval. The FOG plan includes identification of all cooking and food preparation equipment (i.e. fryers, grills, woks, etc...); the number and size of dishwashers, sinks, floor drains, and other plumbing fixtures; type of FSE classification; type of food to be served; and plans for the grease interceptor dimensions and location. The BPU 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.

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 or storm water shall be plumbed to the GCE.

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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 the BPU and shall discharge from the building separately. The kitchen process line(s) shall be plumbed to appropriately sized GCE. Kitchen process lines and sanitary lines may combine prior to entering the public sewer; however the lines cannot be combined until after the GCE.

Existing Food Service Establishments will meet this FOG Management Policy criterion.

**NEW MULTI-UNIT 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. New multi-unit facility, or new “strip mall” facility, owners shall contact the BPU 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. 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 GI when determining the building location. Upon approval from the Director, FSEs in a strip mall may share a grease interceptor.

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. Class 1 FSE facilities are exempt from the requirements to install grease interceptors. Sanitary wastewater, or black water, shall not be connected to GCE.

Approval of Grease Control Equipment: All new FSEs and FSEs that have upgraded their facilities must contact the BPU for final approval of the grease control equipment. This will include onsite inspection of the grease control equipment by the BPU, or their authorized representative. Failure of the FSE to contact the BPU to conduct the inspection of the new GCE will result in escalation of enforcement action.

### **Grease Control Equipment Sizing:**

**Minimum** acceptable size of grease control equipment for each FSE Classification will be as follows:

**Class 1:** Deli, Ice Cream shops, Beverage Bars, Mobil Food Vendors- 20gpm/40 pound Grease Trap

**Class 2:** Limited-Service Restaurants / Caterers -1,000 gallon Grease Interceptor

**Class 3:** Full Service Restaurants- 1,000 gallon Grease Interceptor

**Class 4:** Buffet and Cafeteria Facilities- 1,500 gallon Grease Interceptor

**Class 5:** Institutions (Schools, Hospitals, Prisons, etc)- 2,000 gallon Grease Interceptor

To calculate the appropriate size GCE, the BPU will utilize a sizing formula that includes the kitchen fixture units. Example:

Fixture Units (total) x Facility type multiplier x 36 (retention time) = Size of Interceptor (gals.)

Should the size of the interceptor calculate to 499 gallons or less with the formula above: Size of interceptor (gals.) x 0.75 (max. cap. of sink) = Flow(gpm) x hours(work day) = Acceptable Flow rate with retention time.

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The BPU will review GCE sizing information received from the FOG plan information or the FSE's engineer, architect or contractor. The BPU 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. Grease interceptor capacity should not exceed 2,000 gallons for each interceptor tank. 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. If additional interceptors are required, they shall be installed in series.

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.

Grease Control Equipment must effectively remove fats, oils, & grease before it reaches downstream sewer lines. Failure to comply will require enforcement action in accordance with the Enforcement Response Plan.

## **Grease Interceptor Design and Installation**

### **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 1/2" 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.*
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 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.*

### **Baffles**

1. The grease interceptor shall have a non-flexing (i.e. Concrete, steel, etc.) baffle the full width of the interceptor, sealed to the walls and the floor, and extend from the floor to within 6" of the ceiling. The baffle shall have an inverted 90 degree sweep 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.*
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.

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## 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 reuses.
3. The manholes are to be accessible for inspection by the BPU.

## Additional Requirements

**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 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 the BPU prior to final approval of grease control equipment.

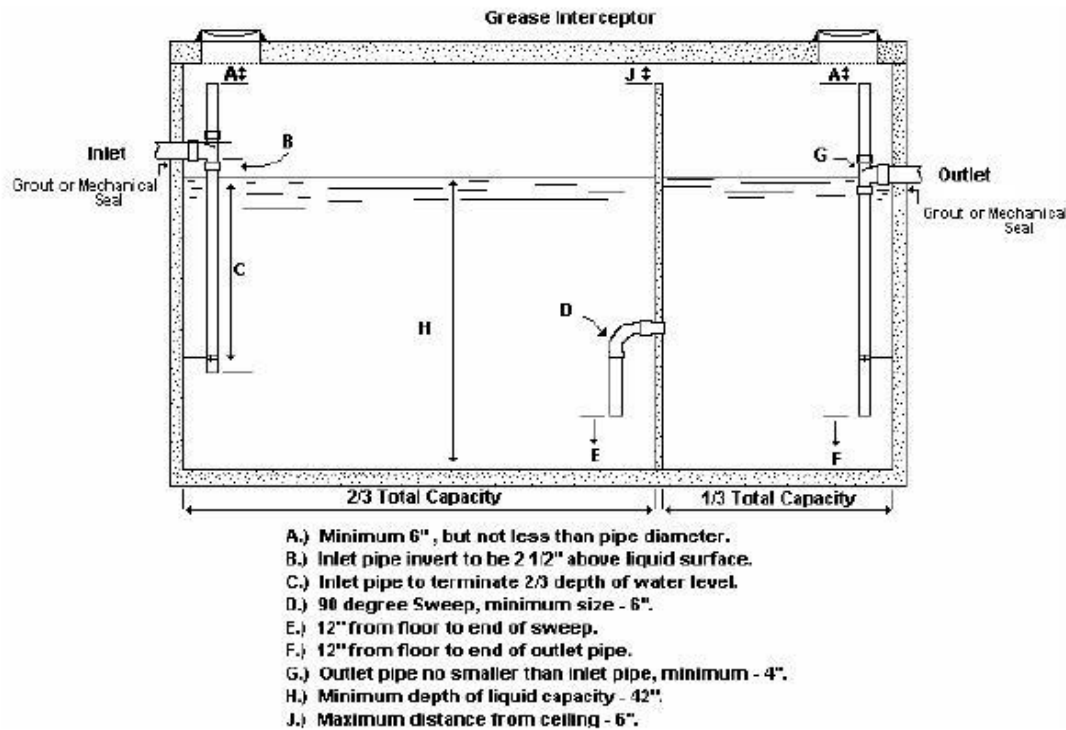
**Location** –Grease Interceptors shall be located so as to be readily accessible for cleaning, maintenance, and inspections. They should be located close to the fixture(s) discharging the greasy wastestream. If possible, Grease Interceptors should not be installed in “drive-thru” lanes or a parking area. Grease Interceptor access manholes shall never be paved over.

**Cleaning** – Grease interceptors shall be cleaned at a frequency of **not less than once every 90 days** unless approved by the BPU. Approval will be granted on a case by case situation with submittal by the FSE documenting proof of proposed frequency. Grease interceptors must be pumped-in-full when the total accumulations of surface FOG (including floating solids) and settled solids reaches twenty-five percent (25%) of the grease interceptor’s overall liquid depth. This criterion is referred to as the “25 Percent Rule”. Some FSEs may have to pump their grease interceptors on a 30 day or 60 day schedule to meet the 25% rule criteria. At no time, shall the cleaning frequency exceed 90 days unless approved by the BPU. Approval will be granted on a case by case situation with submittal by the FSE documenting proof of proposed frequency.

**Responsibility** – Removal of the grease from the wastewater routed to a public or private sanitary system, is the responsibility of the user/owner.

**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. 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).

Note: 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.



## V. Variance to Grease Interceptor Installation

At the **discretion** of the Director, in some instances where a minimum 1,000 gallon capacity or equivalent grease interceptor is required, a FSE may receive a variance in lieu of the required installation of a 1,000 gallon capacity or equivalent grease interceptor where unusual circumstances, such as space constraints or in the interest of historical preservation, would render an otherwise typical grease interceptor installation impractical or unreasonable. **Final specifications for the capacity and type of all new GCE for any given Food Service Establishment kitchen equipment / plumbing fixture configuration will be determined by BPU. All GCE must be approved by BPU prior to installation.**

### Waiver from Grease Control Equipment Installation with Grease Disposal Mitigation Fee

For Food Service Establishments where the installation of grease interceptor is not feasible and no equivalent alternative grease control equipment can be installed, a waiver from the grease control equipment requirement may be granted with the imposition of a Grease Disposal Mitigation Fee as described herein. BPU's determination to grant the waiver with a Grease Disposal Mitigation Fee will be based upon, but not limited to, evaluation of the following conditions:

- (1) There is no adequate space for installation and / or maintenance of a grease control device.
- (2) There is no adequate slope for gravity flow between kitchen plumbing fixtures and the grease control equipment and / or between the grease control equipment and the private collection lines or the public sewer.
- (3) A variance from grease interceptor installation to allow alternative grease control equipment cannot be granted.



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## **Application for Variance or Waiver of Requirement for Grease Interceptor**

A Food Service Establishment may submit an application for variance or waiver from the grease interceptor requirement to the Director. The Food Service Establishment bears the burden of demonstrating, to the Director's reasonable satisfaction, that the installation of a grease interceptor is not feasible. Upon determination by the Director that reasons are sufficient to justify a variance or waiver, terms and conditions for issuance of the variance or waiver shall be set forth in writing. A variance or waiver may be revoked at any time when any of the terms and conditions for its issuance is not satisfied or if the conditions upon which it was based change so that the justification no longer exists.

### **Grease Disposal Mitigation Fee**

Food Service Establishments that operate without a grease control device may be required to pay an annual Grease Disposal Mitigation Fee to equitably cover the costs of increased maintenance of the sewer system as a result of the Food Service Establishment's inability to adequately remove FOG from its wastewater discharge. This section shall not be interpreted to allow the new construction of Food Service Establishments, or existing Food Service Establishments undergoing remodeling or change in operations, to operate without an approved grease control device unless the Director has determined that it is impossible or impracticable to install or operate a grease control device for the subject facility and has issued a waiver.

The Grease Disposal Mitigation Fee shall be determined by the current wastewater surcharge rate for BOD and Suspended Solids concentrations. On-site sampling shall be conducted to determine concentrations contributed by Food Service Establishments operating without a grease control device.

## **VI. Grease Interceptor Cleaning/Maintenance Requirements**

1. Grease Interceptor minimum size will be 1,000 gallon capacity, and maximum size will be 2,000 gallon capacity. If the FSE needs additional capacity, then grease interceptors will be installed in series.
2. Partial pump of interceptor contents or on-site pump & treatment of interceptor contents will not be allowed due to reintroduction of fats, oils and grease to the interceptor and pursuant to the Code Federal Regulation (CFR) §403.5 (b) (8), which states "*Specific prohibitions*. In addition, the following pollutants shall not be introduced into a POTW: Any trucked or hauled pollutants, except at discharge points designated by the POTW".
3. Grease interceptors must be pumped-in-full when the total accumulations of surface FOG (including floating solids) and settled solids reaches twenty-five percent (25%) of the grease interceptor's overall liquid depth. This criterion is referred to as the "25 Percent Rule". At no time, shall the cleaning frequency exceed 90 days unless approved by the BPU. Approval will be granted on a case by case situation with submittal by the FSE documenting proof of proposed frequency. Some existing FSEs in Class 2 through 5 will need to consider a pumping schedule of 30 days or 60 days to meet this requirement.
4. The Grease interceptor 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. Effluent-T's that are loose, defective, or not attached must be repaired or replaced immediately.

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5. 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).
  6. Grease Interceptors must be “certified” annually by a grease waste hauler or plumber. Grease Interceptor Certification (Form A) must be completed and submitted to BPU annually. See General Requirements #5 and #6.

## **VII. Grease Trap Sizing, Installation, Cleaning & Maintenance Requirements**

1. *All* grease traps will have flow control restrictor and vented. Failure to have the flow restrictor and venting will be considered a violation.
2. All new FSEs that are allowed to install grease traps must have BPU approval prior to starting operations.
3. Grease Trap minimum size requirement is a **20 gallon per minute / 40 pound capacity trap**.
4. Grease Traps must have the Plumbing Drainage Institute certification, and be installed as per manufacturer’s specifications.
5. 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.
6. No automatic drip or feed system additives are allowed prior to entering the grease trap.
7. A single grease trap device shall be installed for each significant kitchen fixture unit (i.e. each 3 compartment sink). The BPU must approve the number of grease traps and connections to the grease trap.
8. During cleaning of the grease trap, the flow restrictor shall be checked to ensure it is attached and operational.
9. Grease Traps will be cleaned of complete fats, oils, and grease and food solids at a minimum of every two (2) weeks. If the FOG and food solids content of the grease trap are greater than 25%, then the grease trap must be cleaned every week, or as frequently as needed to prevent 25% of capacity being taken from FOG and food solids.
10. Grease Trap waste should 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.
11. Grease Trap waste should not be mixed with yellow grease in the grease recycle container.
12. Grease Traps must be “certified” annually. See General Requirements #5 and #6.

## **VIII. Accidental Discharge Safeguards:**

FSEs 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. This includes implementation of “Best Management Practices” protocols.

## **IX. “Additives” Prohibition for use as Grease Management and Control**

1. Additives include but are not limited to products that contain solvents, emulsifiers, surfactants, caustics, acids, enzymes and bacteria.
2. This FOG management policy prohibits the use of enzymes, hot water, emulsifiers or other additives to cause oil or grease to pass through the user's grease trap or grease interceptor

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designed to remove oil and grease. If the BPU identifies FOG in the downstream sewer system from a FSE that is using an additive, then the BPU may require the FSE to discontinue use of the additive and further enforcement action may be utilized.

3. Additive use will not be a substitute for regular, required cleaning or pumping of grease control equipment.

## **X. Right of Entry – Inspection and Monitoring**

The BPU, 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 policy. FSEs shall allow BPU 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 BPU personnel access to the FSE premises shall be a violation of this policy. The BPU may require that the FSE install monitoring or additional pretreatment equipment if deemed necessary for compliance with this policy.

### **Falsifying Information or Tampering with Process**

It shall be unlawful to make any false statement, representation, record, report, plan or other document that is filed with the BPU, or to tamper with or knowingly render inoperable any grease control device, monitoring device, method or access point required under this policy.

## **XI. Fee Option:**

As necessary and as approved by the Board of Public Utilities, and the Paris City Commission, BPU may charge food service establishments for surveillance fees, inspection fees and for reimbursement for the FOG program costs. This is in addition to reimbursement of costs related to unclogging blockages or repairing damages from overflows or backups.

## **XII. FOG Treatment and Disposal Plan**

The BPU, at the discretion of the Director, may implement a FOG Treatment, Disposal and Resource Recovery Plan (Plan). The plan may be implemented if there are any problems identified with FOG disposal, continued FOG obstruction in the sewer system, or inconsistent maintenance provided by grease waste haulers to prevent FOG discharges from FSEs. The plan will include a Request For Proposal (RFP) for the treatment and disposal of FOG waste generated from the City of Paris food service establishments. 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 of Paris food service establishment grease interceptors and grease traps. The results of the RFP may provide a single source for GCE pumping, GCE certification, FOG treatment, FOG disposal, and reporting to the BPU. The BPU 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 price or at a lower price than the average market cost of GCE maintenance.

## **XIII. Enforcement Action**

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Enforcement Action against the FSE includes, but is not limited to, failure to clean or pump grease control equipment, failure to maintain grease control equipment including inspection and installation of properly functioning effluent-T and baffles, failure to install grease control equipment, failure to control FOG discharge from the FSE, and use of additives so that FOG is diluted and pushed downstream of the FSE.

**Fats, Oils and Grease blockage in downstream manhole from FSE:**

If FSE inspections and field investigations determine that any fats, oils and grease interference or blockage in the sewer system, a sewage pumping station, or the wastewater treatment plant is caused by a particular food service establishment, then that food service establishment shall reimburse the BPU for all labor, equipment, supplies and disposal costs incurred by BPU to clean the interference or blockage. The charges will be added to the FSEs water/wastewater bill. Failure to reimburse the BPU may result in termination of water/wastewater service.

**FSE failure to maintain GCE after Notification or NOV due date:**

If a FSE fails to pump, clean or maintain their GCE after a NOV due date, the BPU may pump/clean the GCE to prevent additional FOG problems downstream. The FSE will be charged twice the actual cost of pumping FSE's GCE, in addition to BPU personnel costs. Mechanical failure of the GCE will be considered a violation of this policy and subject to penalties of up to \$1,000 per violation per day.

**Penalties**

Penalties may be issued as per the FOG management policy, or the Board of Public Utilities Food Service Establishment Enforcement Response Guide.

**Fats, Oil, and Grease (FOG) Best Management Practices (BMPs)**

***Prevent FOG Blockages in the Sanitary Sewer System***

<b>BMP</b>	<b>Reason</b>	<b>Benefits</b>
Train kitchen staff and other employees about how they can help ensure BMPs are implemented.	People are more willing to support an effort if they understand the basis for it.	All of the subsequent benefits of BMPs will have a better chance of being implemented.
Post " <b>No Grease</b> " signs above sinks and on the front of dishwashers.	Signs serve as a constant reminder for staff working in kitchens.	These reminders will help minimize grease discharge to the traps and interceptors and reduce the cost of cleaning and disposal.
Use water temperatures less than 140°F in all sinks, especially in pre-rinse sinks before a mechanical dishwasher, which requires a minimum temperature of 160°F.	Temperatures in excess of 140°F will dissolve grease, but grease can re-congeal or solidify in the sewer collection system as the water cools.	The food service establishment will reduce its costs for the energy – gas or electric – for heating the water.
Use a 3 compartment sink dishwashing system, which includes sinks for washing, rinsing, and sanitizing in a 50-100 ppm bleach solution. Water temperatures are less than 140°F. (See above)	The 3 compartments sink system uses water temperatures less than 140°F where a mechanical dishwasher requires a minimum temperature of 160°F. (See above)	The food service establishment will reduce its costs for the energy - gas or electric - for heating the water for the mechanical dishwasher and for operating the dishwasher.
Recycle waste cooking oil.	This is a cost recovery opportunity.	The FSE is paid for the waste material and it reduces the amount of garbage paid be hauled away.
"Dry wipe" pots, pans, and dishware prior to dishwashing.	The grease and food that remains in pots, pans, and dishware will likely go to the landfill instead of the grease traps and interceptors.	This will reduce the amount of material going to grease traps and interceptors, which will require less frequent cleaning, reducing maintenance costs
Dispose of food waste by recycling and/or solid waste removal.	Some recyclers take food waste for animal feed. In the absence of such recyclers, the food waste can be disposed as solid waste in landfills by solid waste haulers.	Recycling of food wastes will reduce the cost of solid waste disposal.  Disposal by solid waste reduces the frequency and cost of grease trap/interceptor cleaning.

**Fats, Oil, and Grease (FOG) Best Management Practices (BMPs)**

***Properly Maintain Devices to Prevent Introduction into the Sewer System***

<b>BMP</b>	<b>Reason</b>	<b>Benefits</b>
<p>Observe all grease trap or interceptor cleaning / maintenance activities to ensure the device is properly operating and serviced.</p>	<p>Pumpers may take shortcuts. By monitoring the cleaning operation, the FSE manager can ensure that it is consistent with the correct cleaning procedures.</p>	<p>The FSE ensured it is getting full value for the cost of cleaning. Otherwise the establishment may be paying more often than necessary.</p>
<p>Clean undersink and floor grease traps (GT's) at a minimum of every 2 weeks, more often as needed.</p> <p>If grease traps are more than 25% full when cleaned bi-weekly, the cleaning frequency needs to be increased.</p> <p>Mix grease trap wastes with a dry oil absorbent material such as "kitty litter" before disposal.</p>	<p>Undersink and floor GT's have less volume than Grease Interceptors (GI's). Bi-weekly cleaning of undersink and floor GT will reduce the FOG concentration level being discharged</p> <p>If the FSE does not have a GI, an undersink trap is the only means of controlling grease. Unless there is adequate protection, BPU requires installation of a GI.</p> <p>The disposal of liquid wastes with solid waste is prohibited.</p>	<p>This will reduce the FOG concentration level being discharged to the BPU's sanitary sewerage system.</p> <p>The FSE can avoid the high costs associated with the containment and cleanup of FOG spills and overflows and penalties or fines that may result from an illegal discharge.</p>
<p>Clean Grease Interceptors (GI's) at a minimum of every 90 days, more often as needed.</p> <p>Follow the "25% Rule"</p> <p>Do not allow the GI top grease layers and the bottom food solids layers in combination to exceed 25% of the total GI liquid capacity at any time.</p>	<p>GIs must be cleaned at a minimum of every 90 days to ensure that the "25% Rule" is met.</p> <p>Cleaning frequency is determined by the type of establishment, interceptor size, and the volume of flow discharged by the FSE.</p>	<p>Routine cleaning prevents clogging of the FSE sewer drain line and the BPU's sewer lines, avoiding the high costs associated with a blockage or overflow. The FSE will incur all costs associated with clearing both private and public sewer lines of FOG related blockages and cleanup of overflows.</p>
<p>Keep a maintenance log.</p>	<p>A log serves as a record of the frequency of cleaning the interceptor. It is required by BPU to ensure that maintenance is performed on a regular basis.</p>	<p>The maintenance log serves as a record of cleaning frequency and can help the establishment manager optimize cleaning frequency to reduce cost.</p>

**Fats, Oil, and Grease (FOG) Best Management Practices (BMPs)**

***Prevent FOG From Entering Creeks and Streams Through the Storm Drain System***

<b>BMP</b>	<b>Reason</b>	<b>Benefits</b>
Cover outdoor grease recycling containers.	Uncovered grease recycling containers can collect rainwater. Since grease floats, accumulated rainwater can cause it to overflow onto the ground and into the stormwater system and nearby streams.	Reducing FOG discharge to storm drains helps to improve the water quality of receiving streams  The FSE can avoid the high costs associated with the containment and cleanup of FOG spills and overflows and penalties or fines that may result from an illegal discharge.
Locate grease-recycling containers away from storm drain catch basins.	The farther from the catch basin, the more time someone has to clean up spills or drainage prior to entering storm drains.  Be aware of FOG spilled while carrying waste to the grease recycling containers as well as any that may drip from the grease recycling containers.	Reducing FOG discharge to storm drains helps to improve the water quality of receiving streams  The FSE can avoid the high costs associated with the containment and cleanup of FOG spills and overflows and penalties or fines that may result from an illegal discharge.
Use absorbent pads or other material in the catch basins if grease containers are nearby.  Do not use free-flowing absorbents such as "kitty litter" or sawdust.	Absorbent pads and other materials can serve as an effective barrier to grease and oil entering the storm drain system.	Reducing FOG discharge to storm drains helps to improve the water quality of receiving streams  The FSE can avoid the high costs associated with the containment and cleanup of FOG spills and overflows and penalties or fines that may result from an illegal discharge.
Use absorbent pads or other material to clean up spills around outdoor equipment, containers or dumpsters.  Do not use free-flowing absorbents such as "kitty litter" or sawdust.	Absorbent pads or materials can help clean up FOG spilled on the ground and prevent it from flowing to the storm drain system.  Free-flowing absorbents may wash into the storm drain system.	Reducing FOG discharge to storm drains helps to improve the water quality of receiving streams  The FSE can avoid the high costs associated with the containment and cleanup of FOG spills and overflows and penalties or fines that may result from an illegal discharge.
Routinely clean kitchen exhaust system filters.	If FOG escapes through the kitchen exhaust system, it can accumulate on the roof of the establishment and eventually enter the storm drain system when it rains.	Reducing FOG discharge to storm drains helps to improve the water quality of receiving streams  The FSE can avoid the high costs associated with the containment and cleanup of FOG spills and overflows and penalties or fines that may result from an illegal discharge.

## General Prohibitions Relating to Discharge of FOG

Prohibition	Basis
Do not discharge FOG that will cause an obstruction in a sewer, or pass through or interference at a wastewater treatment facility.	Grease can solidify and trap other solid particles to completely plug the wastewater collection system.
Do not discharge grease, shredded garbage, animal guts or tissues, paunch manure, bones, hide, hair, or entrails.	These materials in combination or alone can cause blockages and other operations and maintenance problems in the wastewater collection and treatment system.
Do not discharge wastewater with temperatures in excess of 140°F to any grease control device. This includes water from mechanical dishwashers that have a minimum required temperature of 160°F.	<p>Temperatures in excess of 140°F will dissolve grease, which may re-congeal as the water cools and cause blockages in the collection system.</p> <p>High temperature water, such as from a dishwasher, may be discharged to a GI if there is sufficient volume to allow time for the grease and water to separate and be retained therein.</p> <p>The high volume also provides dilution of the detergents in the dishwasher waste.</p>
Do not discharge food wastes and scraps into any type of grease removal device.	Food wastes will greatly reduce the capacity of the device for retaining grease and may increase the possibility of blockages.
Do not discharge caustics, acids, solvents, or other emulsifying agents.	<p>Though emulsifying agents can dissolve solidified grease, the grease can re-congeal further downstream in the sewer collection system.</p> <p>These substances can have harmful effects on the wastewater treatment system and can be a hazard to employees working in the collection system.</p>
Do not discharge FOG containing substances that will become viscous between 32°F (0°C) and 150°F (65°C).	The temperatures shown are temperatures that can occur in the wastewater collection and treatment system. If these substances congeal, solidify, or become too viscous, they can cause blockages and other operations and maintenance problems.
Do not utilize biological agents for grease remediation.	The agents may disrupt the biological treatment process at the wastewater treatment plant.
Do not clean equipment outdoors in an area where water can flow to the gutter, storm drain, or street.	Grease and dirt will be washed off the equipment and enter the storm drain system and flow to nearby streams.