



*Where community comes first.*

## **First Utility District of Knox County Fats, Oils & Grease (FOG) Management Policy**

### **RATIONALE:**

1. First Utility District of Knox County (District) must prevent sewer system overflows, blockages, and obstruction in its sewer system caused by the collection of fats, oils and greases (FOG).
2. The management of an effective FOG program with the food service establishments, commercial facilities, and industrial facilities will prevent sewer system overflows and sewer obstructions; and reduce the operational costs of the District.
3. The District's *Sewer Use Policy* references this policy regarding all food service establishments (including but not limited to cafes, restaurants, motels, hotels, grocery stores, retirement centers, hospitals, mobile food units, prisons, or other commercial food preparation establishments) that cook or prepare food are required to comply with this FOG Management Policy.
4. The District's *Sewer Use Policy* references the prohibition of the discharge of any fats, oils and grease, or other solid or viscous substances, that will cause obstruction or interference to the District's sewer system. This FOG policy is established to enforce those prohibitions.

### **Policy:**

1. The attached Fats, Oils & Grease (FOG) Management Policy is adopted by the Board of Commissioners for the First Utility District of Knox County.

**Effective Date: June 17, 2020**

# First Utility District of Knox County FOG Management Policy

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### I. Purpose

This FOG Management Policy sets forth requirements to aid in the prevention of sanitary sewer blockages, obstructions, and overflows due to the contribution and accumulation of fats, oils, and grease in the First Utility District of Knox County (District) sewer system from commercial, industrial and institutional food service establishments.

### II. Definitions

1. **Black Water:** Wastewater containing human waste, from sanitary fixtures such as toilets and urinals.
2. **Brown Grease:** Fats, oils and grease that is discharged to the grease control equipment.
3. **District:** shall mean the First Utility District of Knox County, General Manager, or their duly authorized representative.
4. **FOG (fats, oils, & grease):** Organic polar compounds derived from animal and/or plant sources. FOG may be referred to as “grease” or “greases” in this section.

5. 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 an FSE at the discretion of the District. 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, Daycares) 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 722514
  - Class 5:* Institutions (Schools, Hospitals, Prisons, etc) as defined by NAICS 722310 but not to exclude private operations.
6. Gray Water: Refers to all other wastewater other than black water as defined in this section.
7. Grease Control Equipment (GCE): A device for separating and retaining wastewater FOG prior to wastewater exiting the FSE and entering the District’s sewer system. The GCE is so constructed as to separate and trap or hold fats, oils and grease substances from entering the District’s sewer system. Devices include grease interceptors, grease traps, or other devices approved by the District.
8. Grease Interceptor: Grease Control Equipment identified as a large tank, usually 1,500 gallon to 3,000 gallon capacity, which provides FOG control for a FSE. Grease interceptors will be located outside the FSE.
9. Grease Management Coordinator: person employed by the District 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.
10. Grease Trap: Grease Control Equipment identified as an “under the sink” trap, a small container with baffles, or a floor trap. For an 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 flow control restrictor and venting.
11. Grease Recycle Container: Container used for the storage of yellow grease.
12. NAICS - North American Industry Classification System. The website is found at: (<https://www.census.gov/eos/www/naics/>).
13. Series: (Grease Interceptors Installed in Series): Grease interceptor tanks are installed one after another in a row and are connected by plumbing pipe.

14. 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 shall be made of Sch40, Solvent Weld, Well Casing PVC (ASTM D1785, ASTM F480) and extend to within 12" to 15" of the bottom of the interceptor.
15. User: A customer operating a food service establishment and discharging to the sanitary sewer system.
16. 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.

### **III. 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 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, and volume (in gallons) of grease wastewater removed, and photo documentation of serviced GCE and maintenance log (see form in Exhibit 7). All FSEs shall report maintenance activity using the District-furnished Swift Comply account, accessible through [www.swiftcomply.com](http://www.swiftcomply.com).
3. GCE maintenance records will be available at the FSE premises so they can be provided to the District and/or the Health Department. The FSE shall maintain GCE maintenance records for three (3) years.
4. No FSE will discharge oil and grease in concentrations that exceed the District's numerical limit for oil and grease.
5. **Grease Control Equipment Certification Requirement:**  
All establishments with grease control equipment must have their grease interceptor or grease trap inspected and certified annually by a District-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 the District will follow the Enforcement Respond Guide, including requiring a corrective action response from the FSE owner or authorized representative to the District. Completed certification forms (refer to Exhibit 1, Grease Interceptor Inspection Forms or Grease Trap Inspection Forms) 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 District. The original certification form must be submitted to:

**First Utility District of Knox County**  
**Attn: FOG Program**  
**122 Durwood Road**  
**Knoxville, TN 37922**

**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 Control Inspection form, both Interceptors and Traps, (refer to Exhibit 1) that is submitted to the District. 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.

The District shall execute enforcement action on the FSE for failure of annual certification and/or failing to submit annual certification documentation. Enforcement shall be as provided in the District’s *Food Service Establishment Enforcement Response Guide* (Refer to Exhibit 2).

7. FSEs shall observe Best Management Practices (BMPs) for controlling the discharge of FOG from their facility. Examples of BMPs include:

- A. Recycle waste cooking oil; dispose in Grease Recycle Bin or Container. Do NOT pour any grease into sinks, floor drains or mop sinks.
- B. Post “NO GREASE” signs above all kitchen sinks to remind employees.
- C. “Dry Wipe” and scrape into a trash container as much food particles and grease residue from pots, pans, and plates as possible.
- D. Use Strainers in sink drains and floor drains to prevent large food particles and containers from going into the sewer line.
- E. 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!
- F. 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 need to increase pumping frequency of the GCE.
- G. Educate and train all employees on grease control and preventing sewer pipe clogs and sewer overflows.

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, poured or discharged into the FSE sewer lines or District’s sewer system is a violation of this FOG Management Policy and the District’s Sewer Use Policy.

9. It shall be a violation of this FOG Policy to push or flush the non-water portion of GCE into the public sewer.

#### **IV. Approved Grease Waste Haulers**

To ensure proper maintenance of grease control equipment and proper disposal of the FOG, the District will maintain an “Approved Grease Waste Haulers List”. The List is available through the FSE’s Swift Comply account and the District’s FOG Inspector. Criteria for a 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 District of a completed “First Utility District of Knox County Approved Grease Waste Hauler Agreement Form”.
  - The grease waste hauler agreement will include grease waste hauler reporting requirements to the District and making records available to District personnel. Failure to meet any conditions of the grease waste hauler agreement may result in removal of the grease waste hauler from the “Approved Grease Waste Haulers List” and/or enforcement action.

#### **V. Grease Control Equipment Requirements**

**New Food Service Establishment, Existing Food Service Establishments, Upgrading of Existing Food Service Establishment or Change of Ownership of Existing Food Service Establishment Requirement:** Any new FSE, existing FSE, upgrading of an existing FSE, or change of ownership of existing FSE will be required to install and maintain grease control equipment. Food service establishments in one of these categories must submit a FOG plan to the District 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 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 District provides a Grease Control Inquiry Form (refer to Exhibit 3) that can be submitted by the FSE or their representative. The District 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 stormwater shall be plumbed to the GCE.

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 District 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.

Grease Interceptors or Grease Traps will be installed and connected so that it may be easily accessible for inspection, cleaning and removal of grease at any time.

Existing Food Service Establishments are required to meet the FOG Management Policy requirements.

- a. **Variance to Grease Interceptor Installation:** At the discretion of the General Manager, an 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.
- b. **Approval of Grease Control Equipment:** All new FSEs and FSEs that have upgraded their facilities must contact the District for final approval of the grease control equipment. This will include onsite inspection of the grease control equipment by the District, or their authorized representative. Failure of the FSE to contact the District to conduct the inspection of the new GCE may result in discontinuation of water service. (Refer to Exhibit 4 for Inspection form for GCE at new FSE's.)

## VI. 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 - 20gpm/40 pound Grease Trap (NAICS 72213, 722330)

**Class 2:** Limited-Service Restaurants / Caterers / Daycares - 1,500-gal Grease Interceptor (NAICS 722211, 722320)

**Class 3:** Full Service Restaurants- 1,500-gal Grease Interceptor (NAICS 722110)

**Class 4:** Buffet and Cafeteria Facilities- 1,500-gal Grease Interceptor (NAICS 72212)

**Class 5:** Institutions (Schools, Hospitals, Prisons, etc) 2,000-gal Grease Interceptor (NAICS 722310)

To calculate the appropriate size GCE, the FSE's engineer or architect should use a formula that considers fixture units, 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) must be met.

The District will review GCE sizing information received from the completed Grease Control Inquiry Form or the FSE's engineer or architect. The District will decide 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 3,000 gallons for each interceptor tank. If the grease interceptor calculated capacity needs to exceed 3,000 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 to ensure positive flow between the tanks. 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 remove fats, oils, & grease at or below the District's Fat, Oil, and Grease limit of 100 mg/L. Failure to comply may result in enforcement action.

## **VII. Grease Interceptor Design and Installation**

(Refer to FUD Standard Drawing for graphical depiction of piping, tank, and access.)

### **Piping Design**

1. The inlet and outlet piping shall have 2-way cleanout tees installed.
2. The inlet piping shall enter the receiving chamber 3" 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.
4. The outlet piping shall be no smaller than the inlet piping, but in no case smaller than 4" ID. The outlet piping shall extend to 12" above the floor of the interceptor. Requirement for outlet piping is Schedule 40 PVC.
5. 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.

### **Baffles**

1. The grease interceptor shall have a concrete, monolithically-poured, integral baffle wall 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 4" 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.
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.

### **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. 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. A rise greater than 24-inches shall require a 48" diameter manhole cone, and a maximum of two grade rings may be used to reach final grade.
3. The manhole covers are to be accessible for inspection by the District.

## Additional Requirements

**Dishwashers** shall not be connected to the grease interceptor.

**Water Tight** – Precast concrete grease interceptors shall be constructed to be watertight. Contractor shall vacuum test the grease interceptor per ASTM C1227 Section 9.2.1.3 at a test pressure of 4-inches of mercury (4-in Hg) with zero leakage for a 5-minute test period. Interceptor shall be tested with frames and covers installed and inlet and outlet piping isolated by a plug.

**Location** –Grease interceptors shall be located 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 not be paved over.

**Cleaning** – Grease interceptors shall be cleaned at a frequency of not less than once every 90 days unless approved by the District. 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 District. 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 reinforced concrete with a 28-day compressive strength of 5,000-psi, GR-60 steel reinforcement, and Xypex Red admixture. Each interceptor shall be structurally designed to withstand any anticipated load to be placed on the interceptor (i.e. HS-20 load rating in parking or driving areas). Interceptor shall be manufactured by an NPCA-certified concrete plant.

**Marking and Identification** - Prefabricated concrete interceptors grease interceptors shall be permanently and legibly marked with the following:

- Manufacturer's name or trademark, or both
- Model number
- Capacity
- Month and year of manufacture
- Load limits and maximum recommended depth of earth cover in feet; and
- Inlet and outlet

## VIII. Grease Interceptor Cleaning/Maintenance Requirements

1. 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 discharge of disturbed FOG and solids to the sewer system.
2. 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 overall liquid depth. The District shall establish the required cleaning frequency, but at no time shall the frequency exceed 90 days unless approved by the District.
3. 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. Any repairs to the grease interceptor should be documented and kept on file at the FSE.
4. 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).
5. Grease Interceptor waste must be hauled offsite and disposed at a State-approved disposal location.
6. Grease Interceptors must be "certified" annually by a grease waste hauler or plumber. Grease Interceptor Certification (Exhibit 1) must be completed and submitted to District annually. See General Requirements section, sub-items #6 and #7.

## IX. Grease Trap Sizing, Installation and Maintenance

1. *All* grease traps will have flow control restrictor and be properly 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 District approval prior to starting operations.
3. Grease Trap minimum size requirement is a **20 gallon per minute / 40 pound capacity trap**. No proprietary grease control products will be approved by the District.
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.
6. No automatic drip or feed system for additives is allowed prior to entering the grease trap without written approval from the Grease Management Coordinator.
7. A single grease trap device shall be installed for each significant kitchen fixture

unit (i.e. each 3 compartment sink). The District 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 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 is 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.
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 #6 and #7.

## **X. Accidental Discharge Prevention**

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

## **XI. “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. Use of biological additives is discouraged. Any additive placed into the grease trap or building discharge designed to absorb, purge, consume, treat or otherwise eliminate grease shall require written approval by the Grease Management Coordinator. If the District identifies FOG in the downstream sewer system from a FSE that is using an additive, then the District may require the FSE to discontinue use of the additive.
3. Additive use will not be a substitute for regular, required cleaning or pumping of grease control equipment.
4. This FOG 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.

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

The District 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 as per the District’s Sewer Use Policy *Section 7.1 Right of Entry*.

All GCE shall be subject to review, evaluation and inspection by the District personnel during normal working hours. The District reserves the right to access grease

interceptors outside of normal working hours. Inspections will determine proper maintenance, changes in operation, proper records and files, ability of interceptor to trap and prevent grease from entering the system and any other factors pertaining to grease management. The District reserves the right to make determinations of GCE condition and adequacy based on review of all information regarding the GCE performance and require cleaning, maintenance, modification or replacement. All records will be available on site for review by the District for a period of 3 years.

The District may require that the FSE install monitoring or additional treatment equipment deemed necessary for compliance with this FOG Management Policy and/or the District's Sewer Use Policy.

### **XIII. Fee Option**

[RESERVED]

### **XIV. FOG Treatment, Disposal and Resource Recovery Plan**

[RESERVED.]

### **XV. Violations and Enforcement Action**

1. Enforcement action against the food service establishment shall be merited by, but is not limited to, failure to clean or pump grease control equipment, failure to maintain grease control equipment including installation of properly functioning effluent-T and baffles, failure to install grease control equipment, failure to control FOG discharge from the FSE, failure to certify the grease interceptor or trap, responsible for sewer line obstruction, responsible for a sanitary sewer overflow, and use of additives so that FOG is diluted and pushed downstream of the FSE.
2. Whenever the District determines that a grease interceptor or trap is in need of installation, pumping, repairs, maintenance, or replacement, a noncompliance notification (refer to Exhibit 5 for template form) or a notice of violation (NOV) will be issued stating the nature of the violation(s) and timeframe for corrective measures.
3. If the FSE fails to initiate action in response to a noncompliance notification or NOV, a second notice will be issued and fees may be assessed. Fees may include 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 of enforcement action as determined in the District's Food Service Establishment Enforcement Response Guide and the District's Sewer Use Policy.
4. Immediate discontinuance of water and/or wastewater service 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 to the sanitary sewer system, cause significant interference with the wastewater treatment plant, or cause the District to violate any condition of its NPDES permit. Service shall be reinstated when such conditions have been eliminated.
5. If 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 District for all labor, equipment, supplies and disposal costs incurred by District to clean the interference or blockage. The charges will be added to the FSEs water/wastewater bill. Failure to reimburse the District may result in termination of water service.

6. For all other violations not specifically mentioned above, the District will use the ***First Utility District of Knox County Food Service Establishment Enforcement Response Guide*** as a guide for enforcement action.

## APPENDIX

- Exhibit 1 – FSE Grease Control Inspection Forms
- Exhibit 2 – FSE Enforcement Response Guide
- Exhibit 3 – FSE Grease Control Equipment Inquiry
- Exhibit 4 – FUD FOG Inspection of New FSE's for GCE Approval
- Exhibit 5 – Noncompliance Notification
- Exhibit 6 – Pollution Prevention Practices
- Exhibit 7 – GCE Maintenance Record form

**EXHIBIT 1 - FSE GREASE CONTROL INSPECTION FORMS**



F.S.E GREASE CONTROL ANNUAL CERTIFICATION FORM
GREASE INTERCEPTOR FORM

Facility Name: \_\_\_\_\_ Inspection Date: \_\_\_\_\_

Facility Representative: Mr. / Ms. \_\_\_\_\_ Title: \_\_\_\_\_

Phone: \_\_\_\_\_ Owner/Regional Manager Name: \_\_\_\_\_

Facility Address: \_\_\_\_\_ Mail Address: \_\_\_\_\_
(if different)
Knoxville, TN \_\_\_\_\_

- 1. Grease Interceptor? Yes No
2. Interceptor Size(gallons) 1000 1500 2000
3. Manhole Access to Interceptor: 1 2 3 4
4. Estimated Grease Layer Depth:
5. Effluent T visible? Pass Fail
5A. Eff. T attach, 12" above bottom, & in good condition: Pass Fail
6. Influent T visible? Pass Fail
6A. Infl. T attach, extend 2/3 depth, & in good condition: Pass Fail
7. Frequency Interceptor Cleaned?
8. Complete Contents Pumped? Pass Fail
9. Is Dishwasher connected to Interceptor? Pass Fail
10. Interceptor does not have visible holes or leaks? Pass Fail
11. Mid-Wall baffle is secure and operational? Pass Fail
12. Interceptor maintaining structural integrity? Pass Fail
13. Are sewer cleanouts missing or damaged? Pass Fail
14. Grease Interceptor Hauler used:
15. Bacteria/Enzymes used: Yes No
Product Name:
16. Records of Maintenance/Cleaning Available? Pass Fail
17. Last date cleaned:
18. Best Management Practices Implemented Yes No
19. Grease Recycle Bin Yes No
20. Cleanout Covers missing or damaged? Yes No (# Cleanout covers missing: damaged: )
(Facility needs to repair missing or damaged cleanout covers immediately)

Every food service establishment in the First UD jurisdiction must have their grease interceptor annually certified to verify that all components of the grease control equipment are present and in good working condition. Furthermore, this certification will identify any structural problems with the equipment. The completed original form shall be submitted to the First UD of Knox County.

IMPORTANT REQUIRED INFORMATION AND RESPONSE: If the answer to any of the above questions is "Fail", then the equipment has failed certification. A statement of the plan of action to be taken, with the date completed, must be provided on the other side of this form under the "Response Comments" (provide additional sheets as needed).

Inspector Certification - This grease interceptor has Passed Failed certification

I \_\_\_\_\_ of \_\_\_\_\_
(print name of Inspector) (print name of Company) (phone)
certify that the above listed facility have inspected the facility and accurately provided the information above.

Facility Owner / Manager Certification
I certify to the best of my knowledge the above statements are true and correct.
(print name) (signature)

Submit completed original form to: First UD of Knox Co., Attn: FOG Program, 122 Durwood Rd., Knoxville TN 37922





F.S.E GREASE CONTROL ANNUAL CERTIFICATION FORM
GREASE TRAP FORM

Facility Name: \_\_\_\_\_ Inspection Date: \_\_\_\_\_

Facility Representative: Mr. / Ms. \_\_\_\_\_ Title: \_\_\_\_\_

Phone: \_\_\_\_\_ Owner/Regional Manager Name: \_\_\_\_\_

Facility Address: \_\_\_\_\_ Knoxville, TN \_\_\_\_\_
Mail Address: \_\_\_\_\_ (if different) \_\_\_\_\_

- 1. Grease Trap? Yes No 2. Location: Under sink trap Floor trap Outside "floor" trap
3. Grease Trap flow-through rating / grease capacity Estimate: 5 gpm/ 10 lb 10 gpm/ 20 lb 15gpm/30lb 20 gpm / 40 lb 35 gpm / 70 lb 50 gpm / 100 lb Other:
4. Grease trap completely emptied and cleaned before inspection? Pass Fail
5. Is there access to all trap chambers for cleaning? Pass Fail
6. Flow restrictor device installed (before trap or at inlet)? Pass Fail
7. Flow restrictor device installation is correct (proper flow direction, orientation)? Pass Fail
8. Grease Trap vented? Vent on flow restrictor? Pass Fail
9. Grease Trap has no visible holes or leaks? Pass Fail
10. Baffles are secure and operational? Pass Fail
11. Automatic or machine dishwasher is NOT connected to the grease trap? Pass Fail
12. Frequency Trap is cleaned: \_\_\_\_\_ 13. Maintenance/Cleaning Records: Yes No
14. Grease Trap comments/location disposed of waste: \_\_\_\_\_

BMPs & outside conditions, other than grease interceptor or trap

15. Best Management Practices Implemented Yes No 16. Grease Recycle Bin Yes No

Every food service establishment in the First UD jurisdiction must have their grease trap (under sink) annually certified to verify that all components of the grease control equipment are present and in good working condition.

IMPORTANT REQUIRED INFORMATION AND RESPONSE: If the answer to any of the above questions is "Fail", then the equipment has failed certification. A statement of the plan of action to be taken, with the date completed, must be provided on the other side of this form under the "Response Comments" (provide additional sheets as needed).

Inspector Certification - This grease interceptor has Passed Failed certification

I \_\_\_\_\_ of \_\_\_\_\_ (print name of Inspector) (print name of Company) (phone)

certify that the above listed facility has a \_\_\_\_\_ gal/minute / \_\_\_\_\_ pound capacity grease trap. I have examined the grease trap and provided the above information.

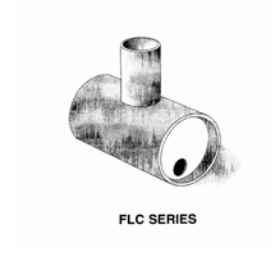
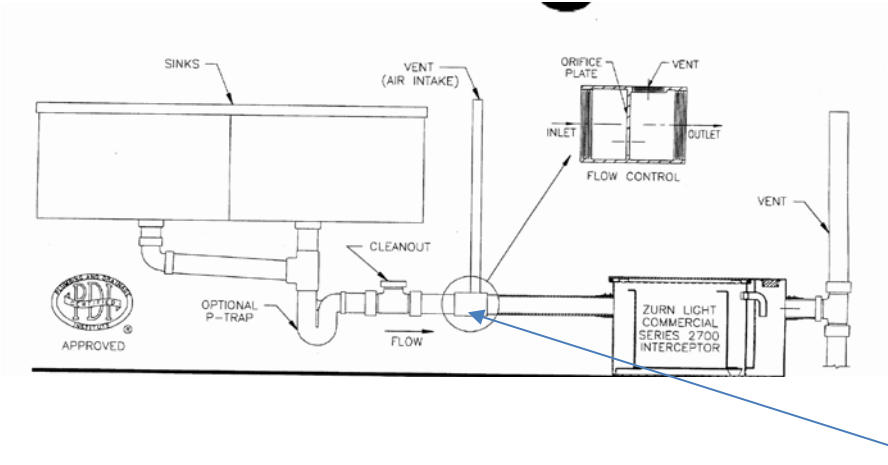
Facility Owner / Manager Certification

I certify to the best of my knowledge the above statements are true and correct.

\_\_\_\_\_ (print name) \_\_\_\_\_ (signature)

Submit completed original form to: First UD of Knox Co., Attn: FOG Program, 122 Durwood Rd., Knoxville TN 37922

Grease Trap Diagram



(Flow Restrictor)

RESPONSE COMMENTS (required if "failed" checked) :

Identify problem(s), corrective action, and provide planned date of corrective action.

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**EXHIBIT 2 - FSE ENFORCEMENT RESPONSE GUIDE**



# FOOD SERVICE ESTABLISHMENT

# ENFORCEMENT RESPONSE GUIDE

This Food Service Establishment Enforcement Response Guide (FSE-ERG) was developed to ensure a consistent response to all food service establishments that cause, or have the potential to cause, interference, obstruction, sanitary sewer overflows, bypasses, or stormwater inflow to the First Utility District of Knox County (District) collection system and WRRF. Food Service Establishments are nondomestic users. Also, included in this FSE-ERG is the Enforcement Response Plan for Multi-Dwelling Units – Grease Related Overflows.

## Table of Contents

Enforcement Action Definitions.....	2
Penalty Assessment.....	3
Incident/Action Chart.....	4
Multi-Family Dwelling Units Enforcement Response Plan.....	6

Generally, an isolated instance of noncompliance can be met with an informal response or a Notice of Violation (NOV). Any violations will be, subject to the District's option, responded to with an enforceable order that requires a return to compliance by a specific deadline.

**NONCOMPLIANCE NOTIFICATION (NCN)**

Generally issued by the District's Inspector, the Noncompliance Notification (NCN) is an official communication from the District to the non-compliant user that informs the user that the violation has occurred. The NCN is issued for any problems identified with the grease control equipment operation, maintenance, or components. Also, an NCN will be issued when FOG is identified in the downstream sewer lines from a food service establishment. A normal response time or due date to respond to the District is 30 days, but may have shorter response times. Failure to respond by the designated due date on a NCN, will result in the issuance of a Notice of Violation, or additional escalation in enforcement action.

**NOTICE OF VIOLATION (NOV)**

Whenever the General Manager finds that any user has violated or violating this Policy, or a wastewater permit or order issued hereunder, the General Manager or his agent may serve upon said user written notice of the violation (NOV). If required in the NOV, a written explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the District within the time frame specified, not to exceed thirty (30) days. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the Notice of Violation. Nothing in this Section shall limit the authority of the District to take any action, including emergency actions or any other enforcement action, without first issuing a Notice of Violation.

**CONSENT ORDERS (CO)**

The General Manager is hereby empowered to enter into Consent Orders, assurances of voluntary compliance, or other similar documents establishing an agreement with a user responsible for the noncompliance. Such orders will include specific action to be taken by the user to correct the noncompliance within a time period also specified by the order.

**SHOW CAUSE HEARING (SC)**

The General Manager may order any user who is in violation of or causes or contributes to violation of this FOG Management Policy or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the user specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the user show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested). Ten (10) days prior notice shall be given, if practical. Such notice may be served on any principal executive, general partner, corporate officer, site manager, or other person listed in District's records as submitted by the user as a contact. Whether or not a duly notified user appears as noticed, immediate enforcement action may be pursued.

**OTHER ENFORCEMENT ACTIONS**

The District may take any additional enforcement actions as provided in the District's Sewer Use Policy.

**PENALTY ASSESSMENT**

Assessments for damages or destruction of the facilities of the collection system and/or WRRF, and any penalties, costs, and attorney's fees incurred by the District as the result of the illegal activity, as well as the expenses involved in enforcement, will be paid by the User.

**First Utility District of Knox Co Food Service Establishment Enforcement Response Guide**

<b>Incident</b>	<b>Description</b>	<b>Action Taken</b>
1	Grease Interceptor equipment failure (baffle wall collapsed, walls deteriorated, tank leaking, infiltration/inflow in tank, defective inlet / outlet tee)	
A	Initial Notification – Notification in writing by District of treatment system failure.	Issue NOV; 30-day deadline
B	Second Notification – Failure to comply with NOV.	Issue NOV; 20-day deadline
C	Final Notification – Failure to comply with NOV.	Issue NOV; 10-day deadline Discontinue Water Service
2	Grease Control Equipment – Fail to Perform Routine Maintenance (pumped or cleaned) *Interceptor has > 25% FOG and solids *Trap cleaned > monthly	
A	Initial Notification – Notification in writing by District of treatment system failure.	Issue NOV; 30-day deadline
B	Second Notification – Failure to comply with NOV.	Issue NOV; 20-day deadline
C	Final Notification – Failure to comply with NOV.	Issue NOV; 10-day deadline Discontinue Water Service
3	Facility contributing FOG to downstream manhole, pump station, or WRRF. Classify degree of impact for appropriate response:	
A	Slight FOG impact (slight coating of FOG in system, less than ¼" coverage - ½ of pipe)	Issue NOV; 30-day deadline
B	Moderate FOG impact (moderate coating FOG in system, less than ½" coverage - ½ of pipe)	Reimburse cleaning costs to District
C	Heavy FOG impact (1st incident-heavy coating FOG in system, causing obstruction and/or interference in sewer line)	Reimburse cleaning costs to District
D	Heavy FOG impact (2nd incident-heavy coating FOG in system, causing obstruction and/or interference in sewer line)	Reimburse cleaning costs to District & Discontinue Water Service
E	Heavy FOG impact (facility's discharge caused bypass or sanitary sewer overflow)	Direct Legal Action
4	Failure to install Grease Control Equipment (new FSE or upgrade of existing FSE)	
A	Initial Notification – Notification in writing by District of no treatment system	Issue NOV; 30-day deadline
B	Second Notification – Failure to comply with NOV	Issue NOV; 20-day deadline
C	Final Notification – Failure to comply with NOV.	Issue NOV; 10-day deadline Discontinue Water Service
5	Failure of new facility, or an existing facility that upgrades their facility, to notify the District, or submit <i>Grease Control Equipment Inquiry</i> information	Issue NOV; require completion of Form

Incident	Description	Action Taken
6	Failure to respond to any Notice (NCN, NOV, etc)	
A	Initial Notification – Notification in writing by District.	Issue NOV; 30-day deadline
B	Second Notification – Failure to comply with NOV.	Issue NOV; 20-day deadline
C	Final Notification – Failure to comply with NOV.	Issue NOV; 10-day deadline Discontinue Water Service
7	No records of grease control equipment maintenance or cleaning at facility	
A	1 Incident within 24 month period	Issue NOV; 30-day deadline
B	2 Incidents within 24 month period	Issue NOV; 30-day deadline
C	3 Incidents within 24 month period	Discontinue Water Service
8	Failure to allow access for District Inspector to adequately assess grease control equipment	Show Cause Hearing
9	Safety hazard at grease control equipment area (i.e. missing manhole cover, manhole cover damaged or not made of material of suitable strength)	Notify Knox County Codes Enforcement
A	Initial Notification – Notification in writing by District.	Issue NOV; 30-day deadline
B	Second Notification – Failure to comply with NOV.	Issue NOV; 20-day deadline
C	Final Notification – Failure to comply with NOV.	Issue NOV; 10-day deadline Discontinue Water Service
10	Facility in violation of numerical FOG limit	
A	Initial Notification – Notification in writing by District.	Issue NOV; 30-day deadline
B	Second Notification – Failure to comply with NOV.	Issue NOV; 20-day deadline
C	Final Notification – Failure to comply with NOV.	Issue NOV; 10-day deadline Discontinue Water Service
11	Facility using additives or chemicals that emulsify or otherwise cause FOG to be discharged to District sewer system	Issue NOV
A	Failure to Respond	Discontinue Water Service

**Abbreviations:**

FOG: Fats, oils and grease

FSE: Food Service Establishment

GCE: Grease Control Equipment

NCN: Noncompliance Notification

POTW: Publicly Owned Treatment Works

SC: Show Cause

SPS: Sewerage Pumping Station

WWTP: Wastewater Treatment Plant

## First Utility District of Knox County Enforcement Response Plan for Multi-Dwelling Units Grease-Related Sewer Overflows

The District regulates grease discharges to the sanitary sewer system. Commercial food service establishments are regulated under the District's FOG Management Policy. Grease-related overflows caused by residential customers are also a source of grease restrictions. Single family residential customers are identified and educated on proper grease disposal. The multi-dwelling units (MDUs), defined as apartments or housing provided for multiple residents, however must be addressed through the property management or owners.

Since the MDU owns the private sewer services, they must be held responsible for the restriction in the District's sewer collection system. The District's Sewer Use Policy Section 2.5 Prohibited Discharge Standards states:

Sec.2. A user may not contribute the following substances to any WWF:

- (c) Solid or viscous substances in amounts which will cause obstruction of the flow in the WRRF resulting in Interference, including but not limited to grease blockages.
- (p) Fats, oils, or greases of animal or vegetable origin in concentrations greater than 100 mg/l;

Therefore, the District will actively pursue repeat violators under this Policy. The Enforcement Response Plan (ERP) will proceed as follows (all offenses within a 5 year period);

- 1<sup>st</sup> Offense – Require MDU to distribute Grease Notification flyers to all present tenants and new tenants as lease is signed.
- 2<sup>nd</sup> Offense – Cost of restriction/overflow removal charged to MDU.
- 3<sup>rd</sup> Offense – Cost of restriction/overflow removal charged to MDU + \$250 Penalty.
- 4<sup>th</sup> Offense – Cost of restriction/overflow removal charged to MDU + \$500 Penalty.
- 5<sup>th</sup> Offense – Installation of treatment / control equipment to prevent a continuation of Non-compliance.

Failure to comply with the ERP will result in escalation of enforcement by the District which may include termination of services.

**EXHIBIT 3 - FSE GREASE CONTROL EQUIPMENT INQUIRY**

# First Utility District of Knox Co. Food Service Establishment - Grease Control Equipment Inquiry

1. PERMIT APPLICATION NUMBER: \_\_\_\_\_

2. New facility? Yes  No

3. Upgrade to an existing facility? Yes  No

4. If upgrade to an existing facility, is kitchen area and/or food preparation area effected? Yes  No

5. Name of Facility: \_\_\_\_\_

6. Address: \_\_\_\_\_

7. City: Knoxville State: TN 8. Zip Code: \_\_\_\_\_

9. Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

## Authorized Representative Information

10. Contact Name: (Mr) (Ms) 11. Title: \_\_\_\_\_

12. Phone #: \_\_\_\_\_ Email address: \_\_\_\_\_

## FACILITY INFORMATION

13. Available Seating: \_\_\_\_\_ 14. # of Employees: \_\_\_\_\_ 15. Approximate # of meals served/day: \_\_\_\_\_

16. Days and Hours of Operation: \_\_\_\_\_

17. Describe type of foods that will be served: \_\_\_\_\_

## 18. KITCHEN FIXTURES (mark all that apply and include number & if applicable the drain size for each one marked)

	#	drain size (inches-diameter)		#	drain size (inches-diameter)
<input type="checkbox"/> 3 Compartment Sink	_____	_____	<input type="checkbox"/> Floor sink	_____	_____
<input type="checkbox"/> 2 Compartment Sink	_____	_____	<input type="checkbox"/> Wok	_____	NA
<input type="checkbox"/> Hand Sink	_____	_____	<input type="checkbox"/> Fryer(s)	_____	NA
<input type="checkbox"/> Dishwasher	_____	_____	<input type="checkbox"/> Grill	_____	NA
<input type="checkbox"/> Mop Sink	_____	_____	<input type="checkbox"/> Stove/Oven	_____	NA
<input type="checkbox"/> Floor Drains	_____	_____	<input type="checkbox"/> Other: _____	_____	_____

19. Grease Recycle Bin/Container available?: Yes  No

20. Have reviewed Best Mgt. Practices(BMPs) for Fats,oils and grease control? Yes  No

**Grease Control Equipment** \*Refer to Instruction Cover sheet "Questions 21 through 23"

21. Type of Grease Control Equipment Proposed?  Interceptor  Undersink Trap  Floor Trap

22. Attached copy of calculations for Grease Control Equipment Sizing?  Enclosed

23. Size of proposed grease control equipment?  Other(describe): \_\_\_\_\_

500 gallons  1000 gallons  1500 gallons  2000 gallons  3000 gallons

Two Interceptors in Series: Size of Each Tank \_\_\_\_\_ gallons **or Trap size...**

20gpm/40pound  25gpm/50pound  35gpm/70pound  50gpm/100pound

**24. Attach copy of plumbing plans for kitchen area and food preparation area only.**

**25. SUBMITTAL OF FORM:** Email to: [mstamps@fudknox.org](mailto:mstamps@fudknox.org) or,

Mail to: **First Utility District of Knox Co., FOG Control Program,  
122 Durwood Rd., Knoxville, TN 37922**

**EXHIBIT 4 - FUD FOG INSPECTION OF NEW FSE'S FOR GCE APPROVAL**

**FIRST UD FOG INSPECTION of New FSEs for GCE Approval**

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

Address: \_\_\_\_\_

City: \_\_\_\_\_ Knoxville, TN \_\_\_\_\_ Zip Code: \_\_\_\_\_

\*Mailing Address if different than above: \_\_\_\_\_

Contact Person: **Mr. / Ms.** \_\_\_\_\_

Title: \_\_\_\_\_ PHONE: \_\_\_\_\_

**Date of Inspection:** \_\_\_\_\_ **Inspector Name:** \_\_\_\_\_

Facility Type:

\_\_\_ Restaurant      \_\_\_ Mobile Food Unit      \_\_\_ Retirement Ctr. / Nursing Home

\_\_\_ Quick Stop Market      \_\_\_ Grocery Store      \_\_\_ Hospital      \_\_\_ Prison

\_\_\_ Misc.(\_\_\_\_\_) *Previous FSE at location?* \_\_\_\_\_

Grease Control Equipment

**GREASE INTERCEPTOR:** \_\_\_ Yes      \_\_\_ No

\_\_\_ 1,000 gallons      \_\_\_ 1,500 gallons      \_\_\_ 2,000 gallons      \_\_\_ 3,000 gallons

\_\_\_ Other: \_\_\_\_\_ gallons

\_\_\_ Two Interceptors in series (Tank 1 size \_\_\_\_\_ gal, Tank 2 size \_\_\_\_\_ gal)

\_\_\_ Two Interceptors in parallel (Tank 1 size \_\_\_\_\_ gal, Tank 2 size \_\_\_\_\_ gal)

**GREASE TRAP:** \_\_\_ Yes      \_\_\_ No

\_\_\_ Under the Sink      \_\_\_ Indoor floor trap      \_\_\_ Outdoor floor trap

\_\_\_ 20/40,      \_\_\_ 35/70,      \_\_\_ 50/100,      or      \_\_\_ Other: \_\_\_\_\_

**GREASE CONTROL EQUIPMENT APPROVED?** \_\_\_ Yes      \_\_\_ No

Reason for not approving/conditions to be met for approval:

\_\_\_\_\_  
\_\_\_\_\_

**NEAREST DOWNSTREAM MANHOLE ID:** \_\_\_\_\_

Comments (location of GCE?, recycle bin ok?, cleanout covers ok?, outdoor mop sinks?)

\_\_\_\_\_  
\_\_\_\_\_

**EXHIBIT 5 - NONCOMPLIANCE NOTIFICATION**



Facility Contact Person: \_\_\_\_\_

First Utility District of Knox County

DATE ISSUED: \_\_\_\_\_

# Noncompliance Notification

Facility: \_\_\_\_\_ Address: \_\_\_\_\_

The following marked box(es)  indicate deficiencies or areas of concern that need to be addressed.

Grease Interceptor Effluent T not attached or not acceptable, allowing fats, oils and grease to be discharged. (replace effluent T [with PVC Sch. 40] and make sure length of T is adequate, to within 12" of bottom of interceptor tank).

Grease Interceptor Effluent T not visible or accessible for inspection. (CONTACT GREASE WASTE HAULER and CONDUCT INTERCEPTOR CERTIFICATION, need to verify during pumping of interceptor if effluent T is attached and in good condition, or will have to take action to install access opening over effluent T to ensure it is attached to prevent fats, oils and grease from being discharge. If T is not present then install immediately. Also you need access to outlet compartment so it can be cleaned properly).

Grease Interceptor mid baffle wall or side walls indicates deterioration of concrete. (inspect grease interceptor at the time the grease interceptor is completely pumped, check to ensure deterioration of concrete is not going to cause the mid baffle wall or outside walls to collapse or cause tank contents to leak out of the interceptor. Normally, the concrete thickness on most interceptors is 4", it is recommended that if deterioration of concrete is greater than 50% then the interceptor needs to be repaired or replaced.)

Grease Interceptor fats, oils and grease layer and food solids layer are greater than 25% of the capacity of the interceptor tank. (interceptor needs to be pumped immediately, provide record of pumping to First UD; get interceptor on regular schedule to be pumped, minimum of every 90 days, but some facilities may have to pump monthly to ensure grease is not discharged to sewer, or cause backups in your facility.)

Fats, oils and grease evident in downstream manhole from facility, immediate action needs to be taken. (Do grease interceptor or grease trap certification, other action may include installing new grease interceptor, implementing strict BMPs for all personnel to control grease discharges or other action)

Facility has no grease control equipment installed, or equipment inadequate. (Need to install an appropriate sized interceptor or trap, submit plans for approval to First Utility District of Knox County.)

No Records of interceptor or trap maintenance available at the facility for inspection review. (keep copy of all grease waste hauler manifests and records at the facility location, if the traps are cleaned by facility personnel then keep written record onsite of cleaning date, person doing cleaning and location the grease and food waste was disposed)

Sewer cleanout covers need to be replaced, allowing rainfall inflow to sewer system. (replace cleanout covers with sturdy, traffic bearing covers that do not break)

Fats, oils and grease on ground around recycle bin, dumpster or other area, causing stormwater impact.

No Grease Interceptor (or Grease Trap) Certification has been completed and submitted to First UD. (Certification is required annually. Contact "First UD Certified" grease waste hauler or plumber to do the Certification, and submit to First UD.)

**\*WRITTEN RESPONSE FROM FACILITY MUST BE RECEIVED BY RESPONSE DUE DATE!**

(Provide Corrective Action taken, attach additional pages/information if necessary): **Mail Response to: First Utility District of Knox Co, ATTN: FOG Program, 122 Durwood Road, Knoxville, TN 37933**

**REQUIRED: Submit Written Response with Corrective Action Taken to First Utility District of Knox County**

Facility Contact Name furnishing response: \_\_\_\_\_ Title: \_\_\_\_\_

**EXHIBIT 6 - POLLUTION PREVENTION PRACTICES**

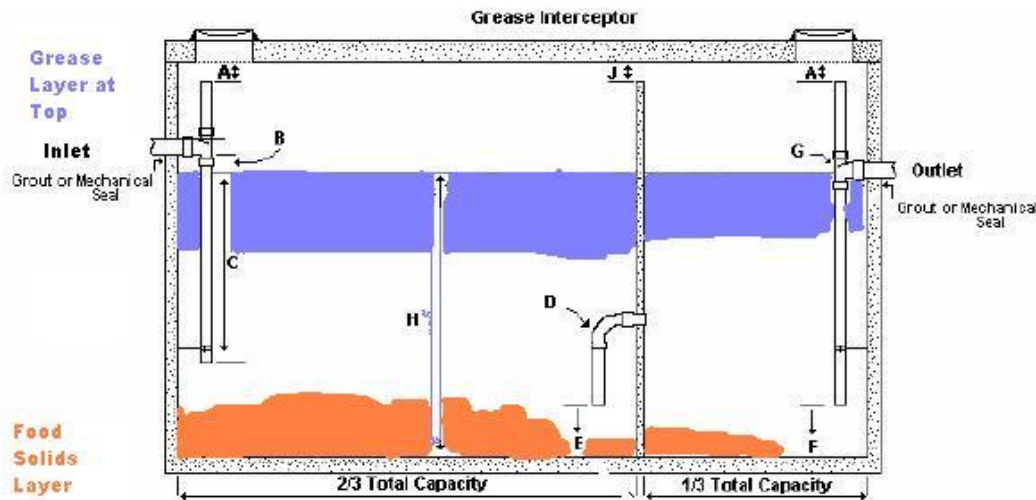


# Grease Interceptor Maintenance



Prevent sewer backups, blockages and sewer overflows by maintaining your grease interceptor!

1. Have your grease interceptor pumped or cleaned of complete contents at a minimum of every 90 days. Many restaurants will have to pump their interceptors at a frequency of every month or every 2 months to ensure the interceptor is working efficiently to remove grease.
2. Have your grease interceptor inspected to make sure that the outlet T is securely attached, made of sturdy material (Schedule 40 PVC pipe), and is the proper length (within 12 inches of the bottom of the interceptor tank). Make sure there is access to all chambers of the interceptor, and a manhole over the outlet T to allow for inspection and cleaning.
3. Keep records onsite of interceptor pumping/cleaning for inspectors to be able to review.
4. Follow the Best Management Practices (BMPs) to prevent sewer line blockages (see back of pg).



- A.) Minimum 6", but not less than pipe diameter.
- B.) Inlet pipe invert to be 2 1/2" above liquid surface.
- C.) Inlet pipe to terminate 2/3 depth of water level.
- D.) 90 degree Sweep, minimum size - 6".
- E.) 12" from floor to end of sweep.
- F.) 12" from floor to end of outlet pipe.
- G.) Outlet pipe no smaller than inlet pipe, minimum - 4".
- H.) Minimum depth of liquid capacity - 42".
- J.) Maximum distance from ceiling - 6".

Grease Interceptor- surface views



# **First Utility District of Knox County**

## **Fats, Oils & Grease (FOG) Control Program**

**Educate your staff and Implement the following Best Management Practices (BMPs) to prevent sewer backups, blockages and sanitary sewer overflows. Remember to regularly maintain and clean the interceptor (minimum every 90 days)!**

### **BMPs to Control FOG Discharges to the Sanitary Sewer**

- 1. Do NOT pour any grease into sinks, floor drains or mop sinks. Recycle waste cooking oil, dispose in Grease Recycle Bin or Container.**
- 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 in trash container. Do NOT wash oil or grease into drains!**
- 6. Food grinder use is discouraged due to build up of solids in the sewer pipe. Dispose of food items in trash.**
- 7. Educate and Train all employees on grease control and preventing sewer pipe clogs and sewer overflows.**



# GREASE TRAP MAINTENANCE

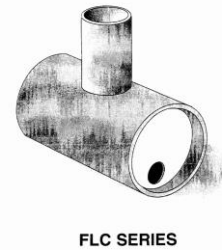
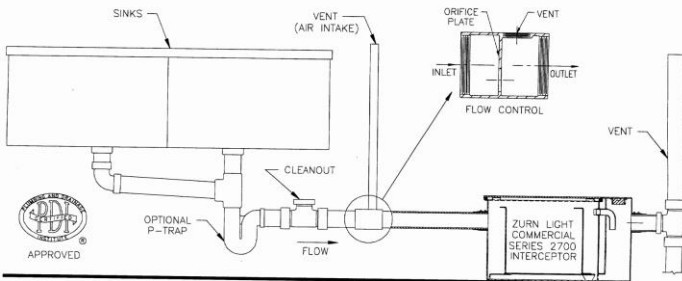
First Utility District of Knox County



**Prevent sewer backups, blockages and sewer overflows by maintaining your grease trap!**

There are two basic types of grease traps: “Under the Sink” and “Floor” traps.

- 1. Under the Sink Traps:** Remove/Clean all grease and food solids contents every 30 days, make sure the flow restrictor device is installed, and implement Best Mgt. Practices. Some facilities may need to clean their traps every 2 weeks or weekly to prevent 25% of the capacity occupied by grease and food solids. Minimum size should be 20 gallon per minute/40 lb. capacity trap. Keep records of trap cleaning, and where grease and food solids are disposed. Have trap certified annually and submit certification to the District.



Under the sink unit should be connected to the pot wash sink.

The flow restrictor device must be installed prior to the grease trap tank.



- 2. Floor Traps:** Remove/Clean all grease and food solids every 30 days, make sure there is an inlet and outlet T (or baffle) to prevent grease discharge, or a flow restrictor device is installed prior to the trap. The floor trap should have a mid-wall baffle to allow for grease separation. Some facilities may need to clean their traps every 2 weeks or weekly to prevent 25% of the capacity occupied by grease and food solids. Keep records of cleaning and where grease and food solids are disposed. Have trap certified annually and submit certification to the District.



# First Utility District of Knox County

## Fats, Oils & Grease (FOG) Control Program

Educate your staff and Implement the following Best Management Practices (BMPs) to prevent sewer backups, blockages and sanitary sewer overflows. Also, remember to regularly maintain and clean the interceptor or trap!

### BMPs to Control FOG Discharges to the Sanitary Sewer

1. Do NOT pour any grease into sinks, floor drains or mop sinks. Recycle waste cooking oil, dispose in Grease Recycle Bin or Container.
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 in trash container. Do NOT wash oil or grease into drains!
6. Food grinder use is discouraged due to build up of solids in the sewer pipe. Dispose of food items in trash.
7. Educate and Train all employees on grease control and preventing sewer pipe clogs and sewer overflows.



# STORMWATER POLLUTION PREVENTION

**Minimize the stormwater pollution impacts from your food service establishment:**

1. Do **NOT** pour oils or grease down storm grates, storm drains, sewer drains or on the ground!!!



**NO Oils or Grease !!**



**NO Oils or Grease!!**

2. **Maintain a clean area near your grease recycle bin.** Make employees aware to be extremely careful when emptying oils & grease into recycle bins. If there is a spill, clean up immediately using “DRY” clean up methods (oil absorbent material), shovel or scoop up, put in sealed container and dispose in trash. Do **NOT** use water to wash oils or grease from area.



Do **NOT** place the recycle bin near the garbage dumpster! If it is too close to the dumpster the recycle bin may be knocked over when the garbage collection truck empties the dumpster contents!

Prevent messy oil and grease spills like these, make sure recycle bin service company has regular pick up of waste oil and grease. Do not overfill recycle bin!!

3. **When Vent Hoods are cleaned, make sure the wastewater generated from the hood cleaning is not discharged outside (parking lot, storm grate, etc...).**  
**Do NOT pour mop water outside in parking lot, dispose in indoor mop sink.**



4. **Prevent rain Inflow to the Sanitary Sewer!** Repair all sewer cleanout covers, cover outdoor mop sinks, and remove gutters from discharging to any outdoor mop sink drains.

Repair or replace sewer cleanout covers!!



Cover outdoor mop sinks!! And do **NOT** allow gutters to discharge to an outdoor mop sink.

**EXHIBIT 7 - GCE MAINTENANCE RECORD FORM**



**END OF POLICY**