WATER AND SEWER POLICY #6
FATS,RAGS, OIL & GREASE (FROG)

Scope & Purpose:

The purpose of this policy is to prevent sewer system blockages, obstructions and overflows due to the contribution and accumulation of fats, rags, oils, and grease (FROG) from food service establishments, commercial facilities, and industrial facilities. The accumulation of FROG within the collection system (sewer lines and pumping stations) can result in the decreased carrying capacity of the sewers due to congealed, cooled grease which coats the inside of the sewer pipes and "flushable wipes" that will not decompose when exposed to water and will begin to clog the lines and pumps. Once a pipe becomes constricted, the potential for a collection system blockage increases. Collection system blockages may cause sanitary sewer overflows (SSO's). SSO's can degrade the quality of local receiving waters. FROG blockages may also cause sewers to backup into homes and businesses.

Authority:

The *Code of Ordinances, City of Lewisburg, Tennessee (hereinafter referred to as the Lewisburg Municipal Code), Title 18, Chapter 1, Sections 18-103 Definitions, 18-109 Discharge Regulations, 18-110 Enforcement* provides authority for the Lewisburg Water and Wastewater Department FROG program. In additions, the United States Environmental Protection Agency's *Capacity, Management, Operation and Maintenance* program documents contain requirements for FOG *(fats, oils, grease)* program implementation.

Definitions:

(1) Additives: Include, but not limited to, products that contain solvents, emulsifiers, surfactants, caustics, acids, enzymes, and bacteria.

(2) Exemptions: A release from the requirements to install grease control equipment (GCE). Exemptions are approved by the General Manager based on responses to questions on the Grease Control Inquiry Form.

(3) Extensive Remodeling: Modifications made to an existing FSE that increases seating capacity of is sufficient to warrant full compliance with other updated codes, such as Americans with Disabilities or the latest edition of the International Building Code.

(4) Fats, Oils, & Grease (FOG): Organic compounds derived from animal and /or plant sources. FOG may be referred to as "grease" or "greases" in this document.

(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 FSE. 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 North American Industrial Classification System (NAICS) 722515 or mobile food vendors as defined by NACIS 722330. Bed and breakfast establishments as defined by NACIS 72119.

Class 2: Limited-service restaurants (a.k.a. fast-food facilities) as defined by NACIS 722513 except fast food facilities with a food line that is heavily fried and a history of FOG discharges that interfere with the sanitary sewer system and catering as defined by NACIS 722320.

Class 3: Full-service restaurants as defined by NACIS 722511.

Class 4: Buffet and cafeteria facilities as defined by NACIS 722514.

Class 5: Institutions (schools, hospitals, prisons, etc.) as defined by NACIS 722310 but not to exclude self-run operations.

(6) Grease, Brown: Fats, oils, and grease that are discharged to the grease control equipment.

(7) Grease, Yellow: Fats, oils, and grease that have not been in contact with or contaminated from other sources such as water, wastewater, solid waste and can be readily recycled.

(8) Grease Control Equipment (GCE): A device for separating and retaining wastewater FOG prior to the wastewater exiting the FSE property and entering the sanitary sewer system. GCE includes grease traps and grease interceptors, or other devices approved by the *General Manager*

(9) Grease Interceptor: An interceptor whose rated flow exceeds 100 gallons per minute (g.p.m.) and is located outside the building.

(10) Grease Trap: An interceptor whose rated flow is 100 g.p.m. or less and is typically located inside the building.

(11) Grease Recycle Container: A container used for the storage of yellow grease for recycling.

(12) kPa - kilopascal

(13) NAICS: North American Industrial Classification System." A system of industrial classification jointly agreed upon by Canada, Mexico, and the United States. It replaces the Standard Industrial Classification (SIC) System.

(14) psig – pounds per square inch [gauge]

(15) Rags: (FROG): This refers to "flushable wipes" that will not decompose in water.

(16) Series: (Grease Interceptors Installed in Series): Grease interceptor tanks installed one after another in a row and connected by plumbing pipe.

(17) Sewer Use Ordinance (SUO): Ordinance 15-08, Title 18, Chapter 1 of the City of Lewisburg Municipal Code.

(18) Shall: is mandatory, May is permissive.

(19) Tee (influent & effluent): A T-shaped pipe attached to the horizontal influent and effluent pipes of a grease interceptor and extending downward into the trap to depths specified by design which on the influent side forces influent flow into the center of the trap and prevents floating FOG from escaping the effluent pipe.

(20) Black water: Wastewater containing human waste from sanitary fixtures such as toilets and urinals.

(21) Gray water: Refers to all other wastewater other than black water.

Pretreatment of Wastewater:

Food Service Establishments (FSEs) shall install and maintain adequately sized grease control equipment (GCE) in accordance with this policy.

Schedule for Compliance with the FROG Management Policy:

- FSEs discharging to the Lewisburg collection system are subject to the FROG Management Policy. GCE shall install, operate, maintain and repair solely at the owner/operator's expense.
- New construction of FSEs shall be in full compliance with this policy before commencing operations. FSEs undergoing extensive remodeling shall be in full compliance with this policy before recommencing operations after the remodeling work is completed.

- FSEs existing prior to this policy will be grandfathered until such time as extensive remodeling is performed at the FSE facility, the facility's existing GCE is deemed to be substandard size and/or design, and/or the FSE is shown to be the cause of a FOG build-up in the Lewisburg's collection system. The General Manager will make the determination of whether an FSE has caused or contributed to a blockage in the collection system, as well as what actions will be required of the FSE to return to compliance.
- Existing FSEs found to be in noncompliance with this policy that are required to install GCE will be given a deadline not to exceed six (6) months from the date of notification to install such GCE.

Exemptions from the Requirement to Install GCE:

Single service kitchens with from onsite food preparation (heat and serve only), which use only disposable service ware (utensils) will not be required to install grease control equipment. The establishment must compete and submit a Grease Control Inquiry Form to the General Manager to be considered for an exemption. High volume coffee shops will not receive an exception from the General Manager due to dairy products, additives and the pH of coffee that could cause sewer corrosion.

Flushable Wipes (Rags):

Wipes sold as "flushable" will never decompose in the collection system. The wipes will collect in the lines and equipment used to convey wastewater causing blockages, obstruction, and overflows in the collection system. All hospitals, nursing facilities, Doctors' offices, etc., shall dispose of "flushable" wipes in collection containers (trash can) and disposed of with other trash.

General Requirements:

1. GCE shall be designed and constructed in accordance with the provisions of the FROG Management Policy.
2. GCE design and construction plans shall be approved by the General Manager prior to connection to the public sewer.
3. The FSE or designee shall submit a completed Grease Control Inquiry Form and one set of FSE facility plans to the Lewisburg Water and Wastewater Department located at 100 Water Street, Lewisburg, Tennessee 37091 for review and approval.
    - The plans shall include the following sheets: a floor plan detailing kitchen prep equipment and showing how grease waste lines discharge to the GCE, plumbing sheets, and GCE specifications sheets.
    - If the plans are approved, the General Manager will contact the FSE or designee.

4. The discharge from the following fixtures shall be plumbed to the **Grease Interceptor:** all sinks (pre-rinse sink for the dishwasher, 3-compartment, 2-compartment, vegetable prep sink, mop sinks, floor sinks, etc.), floor drains in food preparation and storage areas, food waste grinders, dishwashers, and other kitchen fixtures through which grease may be discharges.

5. Only one kitchen fixture unit may be connected to an under the sink **Grease Trap**. If additional fixture units require GCE, and there is no available area to install an outdoor grease interceptor, then a separate grease trap shall be installed for each fixture unit. Fixture units that can be attached to grease traps include: *three* compartment sinks, *two* compartment sinks, pre-rinse sinks. Automatic dishwashers shall ***NOT*** be connected to an under the sink grease trap.

6. Grease Interceptor or Grease Trap Annual Certification Requirement: FSEs under the Lewisburg Water and Wastewater Departments jurisdiction ***must*** have their grease interceptor or grease trap inspected and certified annually. Certification of the interceptor or grease trap must be conducted by a certified grease waste hauler or plumber to verify that all necessary components of the grease interceptor or grease trap are properly installed and in proper working condition. If a grease interceptor or grease trap "Passes the certification requirement, then no further action is required. If a grease interceptor or grease trap "Fail" the certification requirement, then a corrective action response is required from the FSE owner or authorized representative to the General Manager *(see #7 below).* Completed certification forms {Grease Interceptor Certification (Form A) or Grease Trap Certification (Form B)} must be completed and signed by the "certified" grease waste hauler or plumber, as well as the FSE owner or authorized representative, and mailed to:

Lewisburg Water and Wastewater
Attn: FOG Control Program
P.O. Box 2787
Lewisburg, TN 37091

7. 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 General Manager. 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. This response must be received within thirty (30) days of the failed inspection.

8. FSEs with GCE shall maintain a log of the pumping/cleaning maintenance activities performed for each GCE on the premises. GCE maintenance records shall include, at a minimum, the name and address of the FSE, the date of cleaning/maintenance, the company or person conducting the cleaning/maintenance, amount or volume of grease wastewater removed.

9. GCE maintenance records shall be available at the FSE premises so they can be provided to Department employees or their representative, and/or the Public Health Department. The FSE shall maintain GCE maintenance records onsite for three (3) years.

10. Each Grease Interceptor shall, when pumped, be fully evacuated (pumped of complete contents) unless the volume is greater that the tank capacity of the pumper vehicle in which case the hauler shall arrange for additional transportation capacity so that the GCE is fully evacuated within a twenty-four (24) hour period. Partial pumping of grease interceptors is not acceptable.

11. The return of gray water back into the Grease Interceptor from which the waste was removed is prohibited.

12. Waste removal from GCE shall be disposed of at a facility permitted and authorized to receive such waste in accordance with applicable

federal, state, and local laws and regulations. Pumped waste shall not be discharged to a private or public sewer unless as permitted above.

13. It shall be a violation of the Lewisburg Sewer Use Ordinance to push or flush the non-water portion of GCE into the public sewer.
14. No FSE shall discharge fats, rags, oil, and grease in concentrations that cause a violation of the Lewisburg Sewer Use Ordinance.
15. FSEs shall dispose of yellow grease in an approved container, or recycle container, and the contents shall not be discharged to any storm water grate, drain or conveyance. Yellow grease, or oils or grease, poured or discharged into the FSE sewer lines or Lewisburg sewer system is a violation of the Lewisburg Sewer Use Ordinance.
16. FSEs shall observe Best Management Practices (BMPs) for controlling the discharge of FOG from their facility. Examples of BMPs include:
    - Recycle waste cooking oil, dispose in Grease Recycle Bin or Container. Do ***NOT*** pour any grease into sinks, floor drains or mop sinks.
    - Post **"NO GREASE"** signs above all kitchen sinks to remind employees.
    - "Dry Wipe" and scrape into a trash container as much food particles and grease residue from pots, pans, and plates as possible.
    - Use Strainers in sinks drains and floor drains to prevent large food particles and containers from going into the sewer line.
    - 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 of it in a trash container. Do ***NOT*** wash oil and grease into drains.
    - 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.
    - Educate and train all employees on grease control and preventing sewer pipe clogs and sewer overflows.

Grease Control Equipment Sizing: **Minimum** acceptable size of GCE for each FSE Classification will be as follows:

Class 1: Deli, Ice Cream shops, Beverage Bars, Mobile Food Vendors – 20 gallons per minute/40-pound Grease Trap
Class 2: Limited-Service Restaurants / Caterers – 500-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 or two 1,000- gallon Grease Interceptor installed in series.

Size:

1. Grease Interceptor minimum size will be 1,000 gallons capacity, and maximum size shall be 2,000-gallon capacity. If additional capacity is required, the FSE shall install multiple interceptors in series.
2. Grease Interceptors installed in series shall be installed in such a manner to always ensure positive flow between the tanks. Therefore, tanks shall be installed so that the inlet of each successive tank shall be a minimum of two (2) inches below the outlet invert of the preceding tank.
3. Tanks installed in series shall have adaptors or gaskets or flexible transition couplings used as piping connections between grease interceptors installed in series constructed of a minimum of schedule 40 PVC.

The General Manager will review GCE sizing information received from the complete Grease Control Inquiry Form or the FSE's engineer, architect, or contractor. The General Manager 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 shall not exceed 2,000-gallons for each interceptor tank. In the event the grease interceptor calculation 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.

New Food Service Establishments, or Upgrade to Existing FSEs:

New FSEs, as well as existing facilities undergoing extensive remodeling shall install and maintain at a minimum, an approved 1,000-gallon grease interceptor located outside the FSE building. FSEs in one of the above-mentioned categories shall submit a Grease Control Inquiry Form and plumbing plans. The General Manager reviews and approves FSE plumbing plans to ensure that adequate grease control equipment is included. The submitted plumbing plans shall 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; kitchen wastewater plumbing lines, the location of GCE, and specification for the GCE. The General Manager will review the plumbing plan and 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.
- When existing building and/or building's plumbing is being renovated and the facility is an FSE, internal plumbing shall be reconstructed to separate sanitary (restroom) flow from kitchen process flow. Sanitary flow and kitchen process discharges shall be approved separately by the General Manager 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 collection system; however, the lines cannot be combined until after the GCE.

New Multi-Unit Facilities:

New multi-unit facilities, or new "strip mall" facility, owners shall contact the General Manager 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 owner shall consider suitable physical

property space and sewer gradient that will be conducive to the installation of an exterior, in-ground grease interceptor when determining the building location.

Substandard GCE:

In the event an existing FSEs GCE is deemed by the General Manager to be either undersized or substandard in design, the FSE owner(s) will be notified in writing by the General Manager of the deficiencies and required improvements and given a compliance deadline no to exceed six (6) months to comply.

Piping Design

1. The inlet and outlet piping shall have 2-way cleanout Ts installed.
2. The inlet piping shall enter the receiving chamber 2 ½" above the invert of the outlet piping.
3. On the inlet pipe, inside the receiving chamber, a sanitary T 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 T shall extend to a minimum of six (6) inch clearance from the interceptor ceiling, but not less than the inlet pipe diameter. A pipe installed in the bottom of the T shall extend to a point of 2/3 the depth of the tank. See illustration on page 5.
4. The outlet piping shall be no smaller than the inlet piping, but in no case smaller than four (4) inches ID.
5. The outlet piping shall extend to twelve (12) inches above the floor of the interceptor and shall be made of a non-collapsible material. The top of the outlet T pipe should be no less than four (4) inches above the static water line.
6. The outlet piping shall contain a T installed vertically with a pipe (nipple) installed in the top of the T to extend to a minimum of six (6) inch clearance from the interceptor ceiling, but not less than the pipe diameter, with the top open. See illustration of page 5.

Baffles

1. The inlet compartment shall be 2/3 of the total liquid capacity with the outlet compartment at 1/3 liquid capacity of the interceptor.
2. 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 six (6) inches 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 six (6) inches ID. The bottom of the sweep shall be placed in a vertical position in the inlet compartment twelve (12) inches 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 of page 5.

Access Opening (Manholes)

1. Access to grease interceptors shall be provided by a minimum of one manhole per interceptor division (baffle chamber) and of twenty-four (24) inch minimum dimensions terminating one (1) inch above finished grade with cast iron frame and cover. An eight (8) inch thick concrete pad extending a minimum of twelve (12) inches 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, to provide a clear view of both the inlet and outlet T for inspection.
2. Access openings shall be mechanically sealed and gas tight to contain odors and bacteria and to exclude vermin and ground water, in a manner that permits regular re-use.
3. The manholes are to be accessible for inspection. Manhole covers shall be secure, sturdy, and able to withstand vehicle traffic and loading.

Leak Testing: GIs shall comply with one of the following:

1. Water Test – Seal the interceptor, fill with water raised to the flowline of the outlet fitting, and let stand for a minimum of one (1) hour. There shall be no visible leakage. Prefabricated concrete gravity grease interceptors shall not be rejected for damp spots due to condensation on the exterior surface.
2. Air Test – Air test procedure shall follow STI F 921 and REI RP 100 Section 3.

Note: The regulated air supply test pressure used for this test is not to be less than 3 psig (21kPa) nor more than 5 psig (35 kPa). Use only calibrated diaphragm type air pressure gauges with a zero to 10 psig dial span. Set pressure relief valve in test air supply line at 4.5 psig. (31 kPa).

- Temporarily plug, cap or seal of all tank openings to hold pressure. Install air supply piping to appropriate tank penetration with air supply piping, over pressure relief device, air isolation valve and pressure gauge. Close air isolation valve to tank and turn on air supply. Slowly open-air isolation valve to pressure primary tank. Pressure gauge should read minimum 4 psig to 5 psig maximum. Record the pressure reading. Close air isolation valve and disconnect air supply line to tank.

Note: A steady drop in pressure indicates there may be a leak in the primary tank.

- Hold primary air test for one (1) hour minimum. No leaks shall be allowed.
- If the tank(s) fail(s) to meet the testing described above, it shall be repeated with new samples. Test reports shall show total number of tanks tested, number passing, number failing, and reason for failure.

Location

1. GIs shall be located to be readily accessible for cleaning, maintenance, and inspections. GIs shall be located close to the fixture(s) discharging the greasy wastestream. GIs shall not be installed in "drive-thru" lanes or a parking area. GIs shall never be paved over.
2. GIs shall be installed at a minimum distance of ten (10) feet from sinks and dishwashers to allow adequate cooling of wastewater. The influent to GIs shall not exceed 140 degrees Fahrenheit (140°F)(60°C).

NOTE FOR FOOD GRINDERS & DISHWASHERS: Where food waste grinders and/or automatic dishwashers are installed, the GI size shall be increased by 30% of the sizing requirement. Automatic dishwashers' discharge may bypass the grease interceptor. No other kitchen fixture unit may bypass the grease interceptor, only the automatic dishwasher.

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Construction Material

1. GIs shall be constructed of sound durable materials, not subject to excessive corrosion or decay, and shall be water and gas tight. Each GI shall be structurally designed to withstand any anticipated load to be placed on the GI (i.e., vehicular traffic). Concrete is the standard material approved, however, the General Manager will consider other materials, such as fiberglass or plastic grease interceptor, if a professional engineer provides calculations and evidence that the device will meet the requirements and not be a danger to the public or environment.

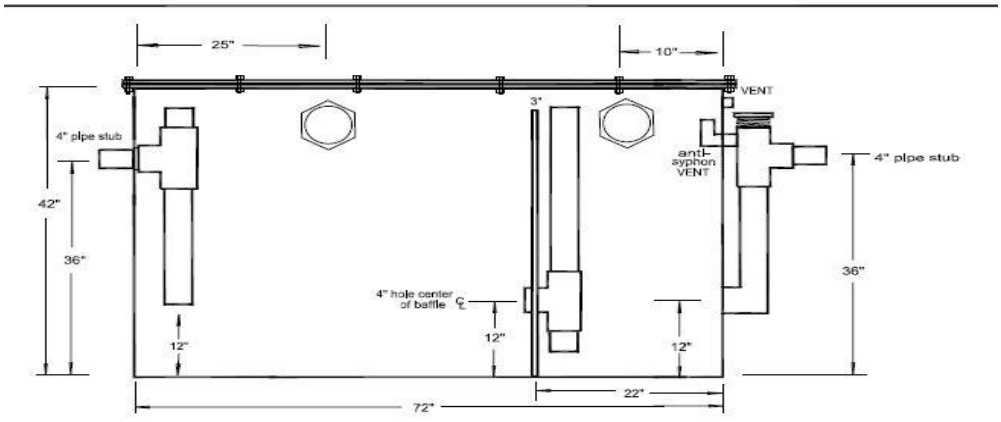
Note: Concrete materials and other grease interceptor materials shall meet the American National Standards Institute, Inc. (ANSI) and International Association of Plumbing and Mechanical Officials. (IAPMO) standards.

ASNI and IAPMO Concrete Materials Requirements per ANSI/IAPMO Z1001-2007 documents are:

- Concrete: Material requirements shall comply with the "Materials and Manufacture" section of ASTM C 1613 and shall have a minimum compressive strength of 4000 psi (28 MPa) at 28 days of age and shall have a maximum water concentration to cementitious ratio (w/c) of 0.45.
- Sealants: Flexible sealants employed in the manufacture of installation of tanks shall comply with ASTM C 990. Rigid (mortar) sealant or grout of tank sections shall not be permitted.
- Lifting: Lifting devices, embedded, or otherwise attached to the tank, shall comply with the requirements of ASTM C 890.
- Synthetic fiber-reinforced concrete tanks: Polypropylene or polyolefin fibers are only permitted as a secondary reinforcing material, at the manufacturer's option in precast concrete septic tanks. For purposes of this standard, secondary reinforcing material is only used to resist temperature and shrinkage effects. Only fibers of Type III conforming to the requirements of ASTM C 1116 shall be accepted.
- Steel fiber-reinforced concrete tanks: Steel fibers are only permitted as a secondary reinforcing material, at the manufacturer's option, in prefabricated septic tanks. For purposes of this standard, secondary reinforcing material is only used to resist temperature and shrinkage effects. Steel fibers shall meet the requirements of ASTM A 820.
- Fiberglass-reinforced polyester: Fiberglass reinforced polyester prefabricated gravity grease interceptors shall comply with the requirements for fiberglass – reinforced polyester septic tanks in paragraph 4.2 of ANSI/IAPMO Z1000.
- Gaskets: Gaskets shall be of a resilient material, resistant to attack by acids or alkalis that may be present in soils or sewage. The manufacturer shall specify the appropriate ASTM standards that the gasket material meets and the acids or alkalis that the material is resistant to.
- Polyethylene: Polyethylene prefabricated gravity grease interceptors shall comply with the requirements for polyethylene septic in paragraph 4.3 of ANSI/IAPMO Z1000.
- Coated steel: Interior steel tank walls shall be coated with material complying with the requirements of UL 58 and UL 1746 and manufactured per the requirements of the Steel Tank Institute (STI).

Markings and Identification:

1. Prefabricated gravity grease interceptors shall be permanently and legible marked with the following:
    - Manufacture'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
2. Marking shall appear on a plate that has been permanently attached, molded, cast, or wet set onto the interceptor, located either on the left-hand side of the inlet or on top of the interceptor near the inlet. Permanent markings shall be adequately protected from corrosion to remain permanent and readable over the life of the interceptor.
3. Each interceptor shall be accompanied by the manufacturer's installation instruction.



For illustration only

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Grease Interceptor Cleaning/Maintenance Requirements:

1. Partial pump of interceptor contents or on-site pump and treatment of interceptor contents will ***not*** be allowed due to reintroduction of fats, oils, and grease to the interceptor and pursuant to the Code of Federal Regulation 40 CFR403.5(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 designed by the POTW."

2. Grease interceptors must be pumped in full when the total accumulations of surface FOG (including floating solids) settled solids reaches twenty-five percent (25%) of the grease interceptor's overall liquid dept. This criterion is referred to as the "25 Percent Rule". At no time shall the cleaning frequency of the grease interceptor exceed 90 days unless approval by the General Manager. Some existing FSEs in Class 2 through 5 will need to consider a thirty (30) day pumping frequency or a sixty (60) day pumping frequency to meet the "25 Percent Rule" requirement.
3. **All FSEs in the Lewisburg service area must have a certified grease water hauler or plumber complete a grease interceptor certification annually.** The grease interceptor certification must be signed by the FSE owner or authorized representative. If a grease interceptor certification fails, then the FSE owner or authorized representative must provide a corrective action response to the General Manager. The corrective action response will identify the reason for the failure, what corrective action will be taken to correct the problem, and the date the corrective action will be completed.
4. Special pumping frequency approved may be granted by the General Manager, on a case-by-case basis, for unusual circumstances.
5. 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.
6. Flow restrictor shall be checked to ensure it is correctly attached and operational.
7. Grease trap waste shall be sealed or placed in a container to prevent leachate from leaking, and then disposed.
8. Grease trap waste shall not be mixed with yellow grease in the grease recycle container.

Grease Trap Design and Installation:

1. Grease traps must have the Plumbing Drainage Institute certification. The **minimum** acceptable size is rated at 20 gallons per minute per 40 pounds capacity. All grease traps shall be installed as per manufacture's specifications, which include the flow restrictor and venting prior to the discharge entering the grease trap.
2. **All** grease traps shall have a flow restrictor and vent pipe installed.
3. No dishwasher shall be connected to an under-the-sink grease trap or floor grease trap. Dishwashers will cause hydraulic overload of the grease trap.

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, rags, oils, and grease into the sewage collection system. This includes implantation of "Best Management Practices" protocols.

"Additives" Prohibition for use as Grease Management Control:

1. If the General Manager identifies an FSE that is using "additives" and is contributing FOG to the Lewisburg sewer system, or has caused any interference to the sewer system, the FSE shall immediately stop adding the "additive".
2. At no time shall additives be used just prior to under the sink traps or floor grease traps.
3. The use of additives is prohibited with the following exceptions:
    a. Additives may be used to clean the FSE drain lines but only in such quantities that it will not cause fats, oils, and grease to be discharged from the grease control equipment to the sewer system or cause temporary breakdown of FOG that will later re-congeal in the downstream sewer system.
    b. If the product used can be proven to contain 100% bacteria, with no other additives. Approval of the use of the product must come from the General Manager, and the FSE must submit a full disclosure Safety Data Sheet and certified sample results from the manufacture of the product.
4. The use of approved additives shall in no way be considered as a substitution to the maintenance procedures required per this policy.

Right of Entry – Inspection and Monitoring:

The General Manager shall have the right to enter the premises of FSEs to determine whether the FSE is complying with the requirements of this policy and/or the Lewisburg Water and Wastewater Department Sewer Use Ordinance. FSEs shall allow department personnel, upon presentation of proper credentials, full access to all parts of the premises for the purpose of inspection, monitoring, and/or records examination.

FSE Inspections, Permit Option:

The General Manager may conduct inspections of FSEs for GCE installation and maintenance, review of best management practices, and gather information regarding FOG discharge impacts. The General Manager has the right to enter the FSE's premises to determine impacts to the Lewisburg Water and Wastewater sewer system. The department will conduct any additional monitoring of the food service establishment to determine compliance with the Lewisburg Water and Wastewater Department FROG management policy.

FSE Monitoring Option:

The General Manager may conduct monitoring of the effluent from the GCE for the purpose of determining compliance with the FROG Management Policy and/or the Lewisburg Sewer Use Ordinance and/or to assess a surcharge to the FSE.

Fee Option:

The General Manager may charge inspection, monitoring, assessment, impact, and other fees to the food service establishments to get reimbursement for the FROG program costs.

Enforcement Action:

Enforcement action may result against a FSE for instances that include, but are 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 on the grease interceptor, failure to install proper grease control equipment, failure to control FROG discharge for the FSE, contributing to a sewer line blockage or obstruction, contributing to a Sanitary Sewer Overflow or Release event, allowing inflow/infiltration of stormwater for the FSE via the GCE to the sanitary sewer system and use additives in such quantities that FOG is pushed downstream of the FSE. Enforcement action will include Noncompliance Notifications, Notices of Violation (NOV, and Citations for Municipal Ordinance Violations issued to the FSE.

Noncompliance Notifications may be issued by the department, or the departments designated representative, to the FSE and will normally allow the FSE thirty (30) day for a response to the department of corrective action taken to resolve the noncompliance issue. A Notice of Violation may be sent by the department to the FSE for instances where the FSE has not responded to a Noncompliance Notification or when the FSE has caused significant problems to the sewer system. At the department's discretions, enforcement action may include termination of the customer's water service or a Citation for Municipal Ordinance Violation. A "significant problem" may include, but not limited to, causing a sanitary sewer overflow/release event, causing sewer obstruction/blockage, or causing corrosion or other damage to the sewer system.

Adopted this 20th day of February 2024

_____
Board Chairman

_____
Board Secretary

_____
Board Member

GREASE CONTROL INQUIRY FORM

Grease Control Plans for Food Service Establishments on the Lewisburg Water and Wastewater collection system. Please provide the following information.

1. Food Service Establishment Name

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2. Food Service Establishment Physical Address

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3. Food Service Establishment Contact Person

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4. Property owner name, address, and contact phone number

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5. Days and hours of Operation

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6. Seating Capacity

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7. Number of Employees

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8. Type of food Served, (please provide a copy of the menu)

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9. Kitchen fixtures; number of units and sizes (pre-rinse sink, dish washer, compartment sink, floor drains, etc.…)

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10. Type and size capacity of grease control equipment to be installed.

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11. Please provide grease control equipment specifications and details (attach plans or drawings)

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12. Kitchen plumbing plans (attach plans or drawings)

GREASE INTERCEPTOR CERTIFICATION (Form A)

Every food service establishment on the Lewisburg wastewater collection system must have their grease interceptor certified annually, to verify that all components of the grease control equipment are present and in good working condition. This inspection will identify any structural problems with the grease interceptor.

Facility Name: _____ Phone #:_____

Address: _____ City: _____, TN Zip:_____

		Pass	Fail*
1.	Interceptor was completely emptied and cleaned before inspection?	☐	☐
2.	There is access to all interceptor chambers for cleaning and inspection?	☐	☐
3.	Influent (inlet) T is attached and extends downward at least 2/3 dept of tank?	☐	☐
4.	Effluent (outlet) T is attached and extends downward to within 12" of the tank bottom?	☐	☐
5.	Effluent (outlet) T is made of non-collapsible material that does not easily flex or bend (i.e., minimum schedule 40 PVC, etc.), and is secure, not allowing fats, oils, or grease to escape around edges?	☐	☐
6.	Interceptor tank does Not have visible holes or leaks?	☐	☐
7.	Mid-wall baffle(s) is (are) secure and operational?	☐	☐
8.	Interceptor is maintaining structural integrity?	☐	☐
9.	No sewer clean-out covers are missing or damaged?	☐	☐

*IMPORTANT REQUIRED INFORMATION & RESPONSE: If the answer to any of the above questions is "Fail", the equipment has failed certification. A statement of the plan of action to be taken shall be provided and received within days of failing. (use page 10)

Inspector Certification – This grease interceptor has PASSED ☐ FAILED certification. ☐

I _____of_____
(print name of inspector) *(print name of company)*
Certify that the above listed facility has an approximate _____ gallon capacity interceptor. I have examined the interceptor and provided the above information.

_____ _____ _____
(signature of inspector) *(date)* *(phone number)*

Facility Owner/Manager Certification

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

_____ _____ _____
(signature of owner/manager) *(date)* *(phone number)*

*SUBMIT **ORIGINAL** CERTIFICATION FORM TO:*
Lewisburg Water and Wastewater, Pretreatment Coordinator, 100 Water Street, Lewisburg, TN 37091

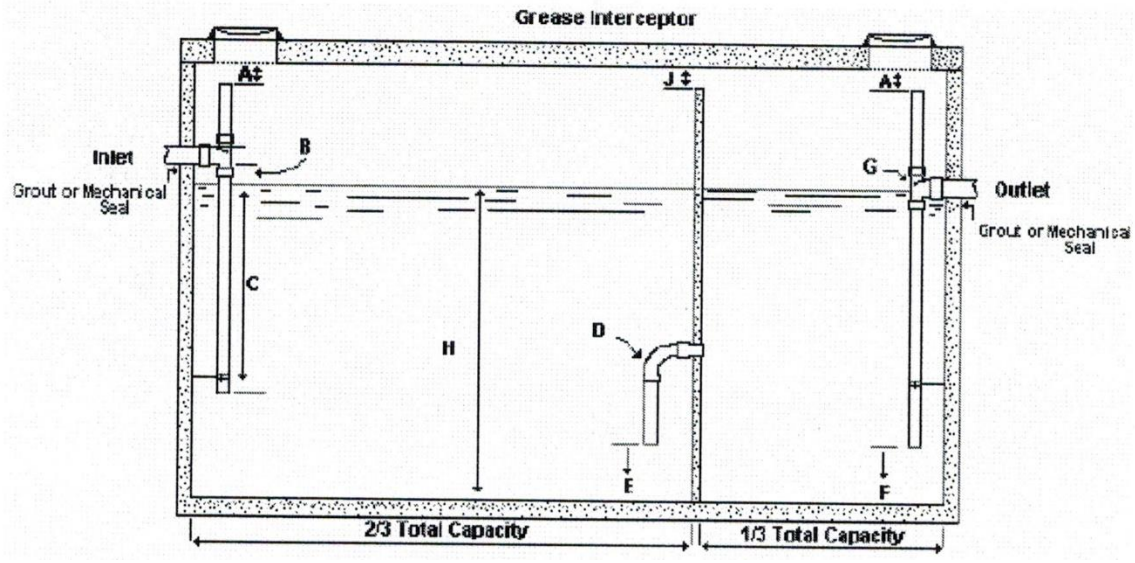
MUST COMPLETE ALL INFORMATION

WATER AND SEWER POLICY #6
FATS,RAGS, OIL & GREASE (FROG)

Grease Interceptor Diagram

Influent(Inlet)

Effluent(Outlet)



For illustration only

A.) Minimun 6", but not less than pipe diameter
B.) Inlet pipe invert to be 2 ½" above liquid service
C.) Inlet pipe to terminate 2/3 depth of water level
D.) 98 degree sweep, minimum size - 6"
E.) 12" from floor to end of sweep
F.) 12" from floor to end f outlet
G.) Outlet pipe no samller than inlet pipe, minimum - 4"
H.) Minimum depth of liwuid calicity - 42"
J.) Maximum distance from ceiling - 6"

RESPONSE COMMENTS BELOW (required if "Fail" checked, identify problem, corrective action and provide date of corrective action to be completed)

GREASE TRAP CERTIFICATION (Form B)

Every food service establishment on the Lewisburg wastewater collection system must have their grease trap (under-the-sink-units) certified annually, to verify that all components of the grease control equipment are present and in good working condition.

Facility Name: _____ Phone #:_____

Address: _____ City: _____, TN Zip:_____

		Pass	Fail*
1.	Grease trap was completely emptied and cleaned before inspection?	☐	☐
2.	There is access to all trap chambers for cleaning and inspection?	☐	☐
3.	Flow restrictor device is installed (before grease trap or at grease trap inlet)?	☐	☐
4.	Flow restrictor device installation is correct (proper flow direction and orientation)?	☐	☐
5.	Grease trap is vented (vent on flow restrictor)?	☐	☐
6.	Grease trap has No visible holes or leaks?	☐	☐
7.	Baffle(s) (inlet, middle and outlet…depending on design) are secure and operational?	☐	☐
8.	Automatic or machine dishwasher is NOT connected to the grease trap?	☐	☐
9.	No sewer clean-out covers missing or damaged?	☐	☐

*IMPROTANT REQUIRED INFORMATION & RESPONSE: If the answer to any of the above questions is "Fail", the equipment has failed certification. A statement of the plan of action to be taken shall be provided and received within days of failing. (use page 12)

Inspector Certification – This grease interceptor has PASSED ☐ FAILED ☐ certification.

I _____of_____
(print name of inspector) *(print name of company)*
certify that the above listed facility has an approximate _____ gallon per minute/_____pound capacity grease trap. I have examined the grease trap and provided the above information.

_____ _____ _____
(signature of inspector) *(date)* *(phone number)*

Facility Owner/Manager Certification

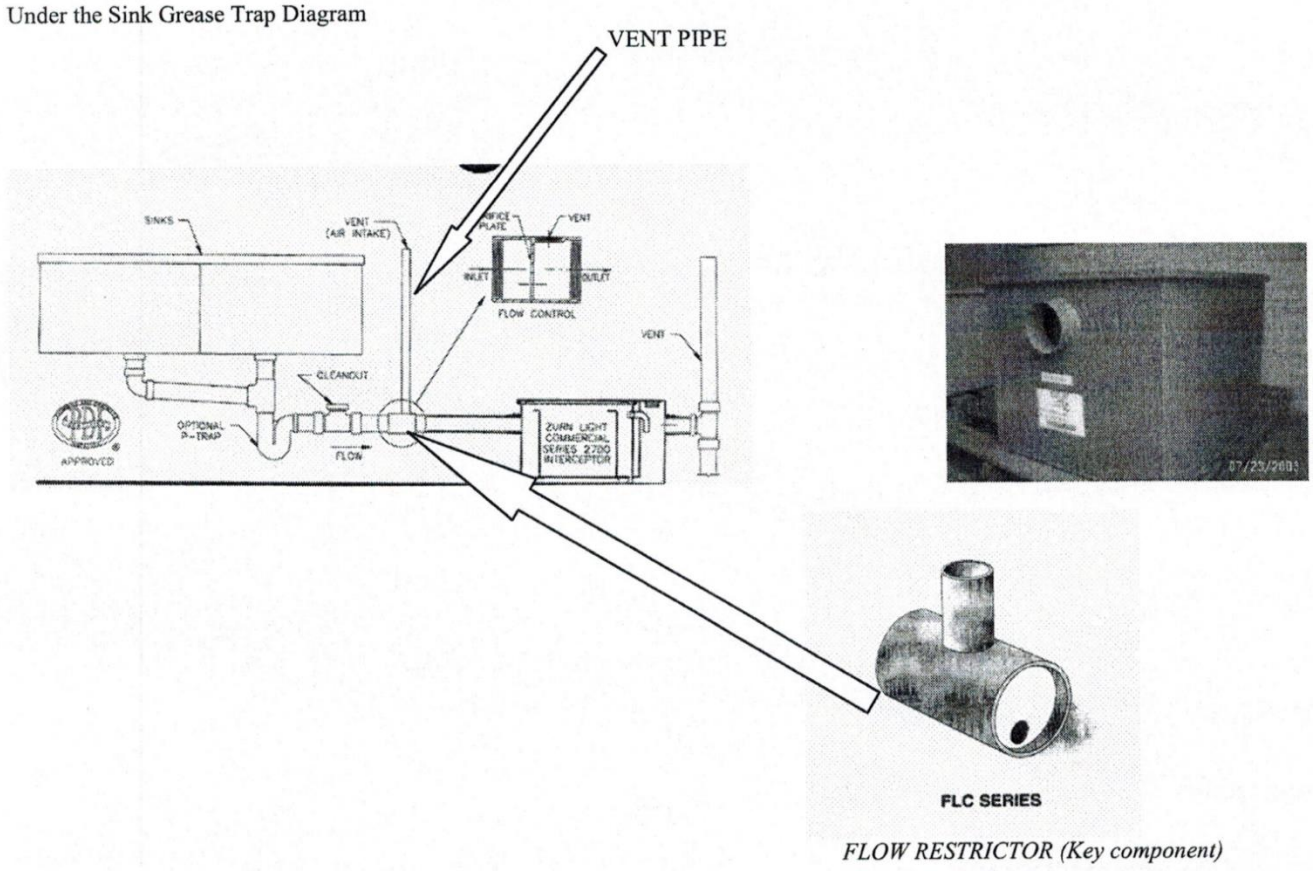
I _____ certify to the best of my knowledge the above statements to be true and correct.

_____ _____ _____
(signature of owner/manager) *(date)* *(phone number)*

*SUBMIT **ORIGINAL** CERTIFICATION FORM TO:*
Lewisburg Water and Wastewater, Pretreatment Coordinator, 100 Water Street, Lewisburg, TN 37091

MUST COMPLETE ALL INFORMATION

Under the Sink Grease Trap Diagram



FLOW RESTRICTOR (Key component)

RESPONSE COMMENTS BELOW (required if "Fail" checked, identify problem, corrective action and provide date of corrective action to be completed)