



HAMILTON COUNTY WATER
&
WASTEWATER TREATMENT AUTHORITY

Fats, Oils & Grease Management Policy
(FOG Program)

Authorization Date:

January 19, 2012

Scope & Purpose:

To prevent sanitary and combined sewer system blockages, obstructions and overflows due to the contribution and accumulation of fats, oils and grease from food service establishments, and other non-residential facilities where food is prepared or served.

The WWTA goal is to improve sewer service by reducing the impact of grease. This goal will be achieved through two related programs.

A. Preventative Maintenance Program

The WWTA “field control” program, through which identified grease “problem areas” are routinely cleaned and inspected. The WWTA is responsible for the “field control” of grease through its normal collection system operations.

B. Grease Control Program

The WWTA “source control” program, through which food service facilities are required to capture and properly dispose of the grease generated by their operation.

The focus of this document is the Fats, Oils & Grease Management Policy, including the proper sizing, installation and maintenance of grease interceptors and grease traps. The administrative and inspection requirements are established as well.

Through the cooperative efforts of food service establishments with the WWTA the goal of improved sewer service through proper grease control can be achieved.

Definitions:

1. Fats, Oils & Grease (FOG): Organic polar compounds derived from animal and/or plant sources. FOG may be referred to as “grease” in this section.
2. 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 con-sidered a FSE at the discretion of the Board. 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 722213, Mobile Vendors as defined by NAICS 722330

Note: NAICS 722213 Snack and Nonalcoholic Beverage Bars

This U.S. industry comprises establishments primarily engaged in (1) preparing and/or serving a specialty snack, such as ice cream, frozen yogurt, cookies, or popcorn or (2) serving nonalcoholic beverages, such as coffee, juices, or sodas for consumption on or near the premises. These establishments may carry and sell a combination of snack, nonalcoholic beverage, and other related products (e.g., coffee beans, mugs, coffee makers) but generally promote and sell a unique snack or nonalcoholic beverage.

Selling a specialty snack (e.g., ice cream, frozen yogurt, candy, cookies) or nonalcoholic beverages, for consumption on or near the premises--are classified in U.S. Industry [722213](#), Snack and Nonalcoholic Beverage Bars;

Illustrative Examples:

- Beverage bars
- Carryout service doughnut shops with on-premises baking
- Carryout service bagel shops with on-premises baking
- Carryout service pretzel shops with on-premises baking
- Carryout service cookie shops with on-premises banking
- Ice cream parlors

Note: NAICS 722330 Mobile Food Services

This industry comprises establishments primarily engaged in preparing and serving meals and snacks for immediate consumption from motorized vehicles or non-motorized carts. The establishment is the central location from which the caterer route is serviced, not each vehicle or cart. Included in this industry are establishments primarily engaged in providing food services from vehicles, such as hot dog carts, and ice cream trucks.

Preparing and serving meals and snacks for immediate consumption from motorized vehicles or non-motorized carts--are classified in Industry [722330](#), Mobile Food Services;

Class 2: Limited Service Restaurants (a.k.a. Fast Food Facilities) as defined by NAICS 722211 and Caterers as defined by NAICS 722320

Note: NAICS 722211 Limited-Service Restaurants

This U.S. industry comprises establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered to the customers' location. Some establishments in this industry may provide these food services in combination with selling alcoholic beverages.

Illustrative Examples:

- Delicatessen restaurants
- Pizza delivery shops
- Family restaurants, limited service
- Takeout eating places
- Fast-food restaurants
- Takeout sandwich shops

Note: NAICS 722320 Caterers

This industry comprises establishments primarily engaged in providing single event-based food services.

These establishments generally have equipment and vehicles to transport meals and snacks to events and/or

Prepare food at an off-premise site. Banquet halls with catering staff are included in this industry.

Illustrative Examples:

- Events catered by establishments in this industry are graduation parties, wedding receptions,
- Business or retirement luncheons, and trade shows.
- Establishments primarily engaged in preparing and serving meals and snacks for immediate consumption from motorized vehicles or
- Non-motorized carts--are classified in Industry 722330, Mobile Food Services;

Class 3: Full Service Restaurants as defined by NAICS 722110

Note: NAICS 722110 Full-Service Restaurants

This industry comprises establishments primarily engaged in providing food services to patrons who order and are served while seated (i.e., waiter/waitress services) and pay after eating. These establishments may provide this type of food services to patrons in combination with selling alcoholic beverages, providing carry out services, or presenting live non-theatrical entertainment.

Providing food services to patrons who order and are served while seated and pay after eating--are classified in Industry [722110](#), Full-Service Restaurants;

Class 4: Buffet and Cafeteria Facilities as defined by NAICS 722212

Note: NAICS 722212 Cafeterias, Grill Buffets, and Buffets

This industry comprises establishments; known as cafeterias, buffets, or grill buffets, primarily engaged in preparing and serving meals for immediate consumption using cafeteria-style or buffet serving equipment, such as steam tables, refrigerated areas, display grills, and self-service nonalcoholic beverage dispensing equipment. Patrons select from food and drink items on display in a continuous cafeteria line or from buffet stations.

Preparing and serving meals for immediate consumption using cafeteria-style serving equipment, known as cafeterias--are classified in U.S. Industry [722212](#), Cafeterias, Grill Buffets, and Buffets;

Class 5: Institutions (Schools, Hospitals, Prisons, etc.) as defined by NAICS 722310, but not to exclude self-run operations.

Note: NAICS 722310 Food Service Contractors

This industry comprises establishments primarily engaged in providing food services at institutional, governmental, commercial, or industrial locations of others based on contractual arrangements with these types of organizations for a specified period of time. The establishments of this industry provide food services for the convenience of the contracting organization or the contracting organizations customers. The contractual arrangement of these establishments with contracting organizations may vary from type of facility operated (e.g., cafeteria, restaurant, fast-food eating place), revenue sharing, cost structure, to providing personnel. Management staff is always provided by the food service contractors.

Illustrative Examples:

- Airline food service contractors
- Food concession contractors (e.g., at sporting, entertainment, convention facilities)

Cafeteria food service contractors (e.g., at schools, hospitals, government offices).

3. (Brown) Grease: Fats, oils and grease that is discharged to the grease control equipment.
4. (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.
5. Grease Control Equipment (GCE): A device for separating and retaining wastewater FOG prior to wastewater exiting the FSE and entering the WWTA sewer system. The GCE is so constructed as to separate and trap or hold fats, oils and grease substances from entering the WWTA sanitary sewer system. Devices include grease interceptors, grease traps, or other devices approved by the Director.

6. Grease Interceptor: Grease Control Equipment identified as a large tank, usually 500 gallon to 2,000 gallon capacity, which provides FOG control for a FSE. Grease interceptors will be located outside the FSE, unless a variance request has been granted.
7. Grease Trap: Grease Control Equipment identified as an “under the sink” trap, a small container with baffles, or a floor trap. For a FSE approved to install a grease trap, the “minimum” size requirement is the equivalent of a 20-gallon per minute/ 40 pound capacity trap. All grease traps shall have a flow control restrictor and venting.
8. Grease Recycle Container: Container used for the storage of yellow grease.
9. NAICS: North American Industry Classification System. The website is found at: <http://www.census.gov/eos/www/naics>.
10. Noncompliance Notification (NCN): A notification to the user that a practice, an action, or wastewater discharge is noncompliant with regulations or policies. A NCN informs the user that an action is required of the user within a specified time period designated by the WWTAs or their designee, or the noncompliance will require the WWTAs to escalate enforcement action against the user.
11. POTW (Publicly Owned Treatment Works): A POTW is a wastewater treatment facility and its entire infrastructure that is owned by a state or municipality.
12. Series: (Grease Interceptors Installed in Series): Grease interceptor tanks are connected by sanitary sewer piping so that sewer flows from one interceptor/trap to another.
13. Parallel: (Grease Interceptors Installed in Parallel): Grease interceptor tanks are connected by sanitary sewer piping so that sewer flow is split evenly and flows through multiple interceptors/traps before returning to one single sanitary sewer 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 are recommended to be made of PVC or equivalent material, and extend to within 12” to 15” of the bottom of the interceptor.
15. (Black) Water: Wastewater containing human waste from sanitary fixtures such as toilets and urinals.
16. (Gray) Water: Refers to all other wastewater other than black water as defined in this section.

General Requirements:

1. All proposed, existing and newly remodeled Food Service Establishments (FSEs) are required to have grease control equipment (GCE) installed, maintained and operating properly, in accordance with this FOG Management Policy and WWTa Resolution No. 0310-02 Paragraph A.8 (Regarding the Fog Program). The WWTa reserves the right to require additional control measures if existing FOG control equipment is shown to be insufficient to protect the sanitary sewer system.
2. The WWTa reserves the right to evaluate sizing on an individual basis for facilities with special conditions, such as highly variable flows, high levels of grease discharge, or other unusual situations that are not adequately addressed by the sizing formula.
3. The WWTa will periodically inspect all FSEs to ensure that each facility is complying with the Fats, Oils & Grease Management Policy. The facilities' grease control practices and the adequacy of their grease control Interceptor/- equipment will be assessed. Maintenance records will also be reviewed.
4. Through preventative maintenance records or emergency calls related to grease, the WWTa will identify and target grease problem "hot spot areas" in the sanitary sewer collection system. FSEs located upstream of these problem areas and discharge their wastewater into the "problem" lines will be identified as potential contributors to the grease build-up. The WWTa shall inspect the grease interceptors of all FSEs in the vicinity of the "hot spot area", making note of maintenance records, sizing, and condition. FSEs in hot spot areas could be required to pump grease interceptors more often than the minimum frequency to ensure protection of the sewer system.
5. FSEs that are not successful in achieving compliance with the FOG Management Policy through improved housekeeping and increased maintenance and pumping on the existing grease interceptor/equipment will be required to install the necessary interceptor/equipment to bring the facility into compliance. An appropriate amount of time will be agreed upon between the WWTa and the customer.
6. All FSEs will be required to maintain records of cleaning and maintenance of GCE. GCE maintenance records shall include, at a minimum, the date of cleaning/maintenance, company or person conducting the cleaning/maintenance, volume (in gallons) of grease wastewater removed and where the grease waste was taken for disposal. A grease waste hauler completed manifest must include this information to meet this requirement.
7. GCE maintenance records must be available at the FSE premises so they can be provided to WWTa inspectors or their representative, and/or the Chattanooga Hamilton County Health Department. The FSE shall maintain GCE Maintenance records for three (3) years.
8. All FSEs are required to dispose of yellow grease in an approved container, where contents will not be discharged to any storm water grate, drain or conveyance. Yellow grease or any oils or grease, poured or discharged into the FSE sewer lines or WWTa sewer system is a violation of this policy and the WWTa's Sewer Use Rules.

9. Owners of Commercial Property will be held responsible for wastewater discharges from leaseholders on their property.
10. 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 prohibited 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.
11. It shall be a violation of the WWTAs Sewer Use Rules and Regulations for Wastewater Collection Systems (WWTAs Sewer Use Rules) to push or flush the non-water portion of GCE into the sanitary sewer system.

Garbage Grinders and Dishwashers: The WWTAs requires that solid food waste products be disposed of through normal solid waste/garbage disposal procedures. No waste from garbage grinders shall be discharged into the WWTAs sewers except for private garbage grinders used in a single family dwelling. The Director may issue a permit for a garbage grinder where no other alternative exists for solid waste collection and then only where applicable fees therefore are paid. Commercial dishwasher connections are required to be connected to a properly sized interceptor. Dishwashers discharge hot water and soap, which can melt grease stored in an undersized/overburdened interceptor.

Melted grease may then pass through the interceptor into the customer's service line and public sewer system, where the grease hardens and causes line clogs.

New Food Service Establishment, Upgrading of Existing Food Service Establishment or Change of Ownership of Existing Food Service Establishment Requirement: Any new FSE, upgrading of an existing FSE or change of ownership of existing FSE will be required to install and maintain a grease interceptor. Food service establishments in one of these categories must submit a FOG plan to the WWTAs for approval. The FOG plan 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, type of food to be served and plans for the grease interceptor di-mensions and location. The WWTA will review the FOG plan, grease in-terceptor sizing, and approve or make changes as necessary to aid in the protection of FOG discharged from the FSE.

New construction of FSEs shall have separate sanitary (restroom) and grease waste lines. The grease waste lines shall be plumbed to an appropriately sized GCE. No sanitary wastewater or stormwater shall be plumbed to the GCE.

New Multi-Unit Facilities: New strip malls or strip centers must have two separate sewer line connections at each unit within the strip mall or strip center. One sewer line will be for sanitary wastewater and one sewer line will be for the kitchen area or potential kitchen area, of each unit. The kitchen area, or potential area, sewer line will be connected to floor drains in the specified kitchen area, and will connect, or be able to connect, to other food service establishment kitchen fixtures, such as 3 compartment sink, 2 compartment sink, pre-rinse sink, mop sink and hand wash sink.

New multi-unit facility, or new “strip mall” facility owners shall contact the WWTA 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 will identify “stub-out” locations to accommodate a minimum 1,000 gallon grease interceptor for each unit of the multi-unit facility. New multi-unit facility or new “strip mall” facility owners shall consider suitable physical property space and sewer gradient that will be conducive to the installation of an exterior, in-ground grease interceptor when determining the building location.

FSEs located in a new multi-unit facility shall have a minimum of a 1,000 gallon grease interceptor installed, unless that FSE is approved to have a grease trap, or if it is de-termined by the WWTA that no GCE is required. Sanitary wastewater or black water cannot be connected to GCE.

Variance to Grease Interceptor Installation: At the discretion of the Board, some FSEs may receive a variance from the requirements outlined in this document. The Variance Committee will hear requests for variance during their regularly scheduled meeting. The request must be submitted to the WWTA 10 days prior to the Variance Committee Meeting.

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

Grease Control Equipment Sizing:

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

- Class 1:** Deli, Ice Cream Shops, Beverage Bars, Mobil Food Vendors – 20 gpm/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

To calculate the appropriate size GCE, the following EPA design formula may be used:

1. Restaurants (Class 2,3 & 4)

$(D) \times (GL) \times (ST) \times (HR/2) \times (LF) = \text{Size of Grease Interceptor, gallons, where:}$

D = Number of seats in dining area

GL = Gallons of wastewater per meal, normally 5 gallons

ST = Storage capacity factor --- minimum of 1.7

HR = Number of hours open

LF = Loading factor -----

1.25	interstate freeways
1.0	other freeways
1.0	recreational areas
0.8	main highways
0.5	other highways

2. Hospitals, nursing homes, other type commercial kitchens with varied seating capacity (Class 5):

$(M) \times (GL) \times (ST) \times (LF) = \text{Size of Grease Interceptor gallons, where:}$

M = Meals per day

GL = Gallons of wastewater per meal, normally 4.5 gallons

ST = Storage capacity factor ---- minimum of 1.7

LF = Loading factor-----

1.25	garbage disposal & dishwasher
1.0	without garbage disposal
0.75	without dishwashing
0.5	without dishwashing and garbage disposal

Retention time through the grease interceptor should be at least 30 minutes to one hour.

The WWTA will review GCE sizing information received from the FSE's engineer, architect or contractor. The WWTA will make a decision to approve or require additional grease interceptor volume, based on the type of FSE, the number of fixture units, and additional calculations. Grease interceptor capacity should not exceed 2,000 gallons for each interceptor tank. In the

event that the grease interceptor calculated capacity needs to exceed 2,000 gallons, the FSE shall install an additional interceptor of the appropriate size. If additional interceptors are required, they shall be installed in series or parallel, as directed by the Director.

Grease interceptors that are installed in series shall be installed in such a manner to ensure positive flow between the tanks at all times. Therefore, tanks shall be installed so that the inlet invert of each successive tank shall be a minimum of 2 inches below the outlet invert of the preceding tank.

Grease Interceptor Design and Installation:

Piping Design

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

Baffles

1. The grease interceptor shall have a non-flexing (i.e. concrete, steel, etc.) baffle the full width of the interceptor, sealed to the walls and the floor, and extend from the floor to within 2 to 6" of the ceiling. The baffle shall have three (3) 4" ID wholes, allowing flow from the inlet through the outlet compartments. The top of these wholes shall be placed 12" above the floor. **See SD-MISC-2.**
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. An 8" thick concrete pad extending a minimum of 12" beyond the outside dimension of the manhole frame shall be provided. One manhole shall be located above the inlet tee hatch and the other manhole shall be located above the outlet tee hatch. A minimum of 24" of clear opening above each manhole access shall be maintained to facilitate maintenance, cleaning, pumping, and inspections.
2. Access openings shall be mechanically sealed and gas tight to contain odors and bacteria and to exclude vermin and groundwater in a manner that permits regular reuses.
3. The manholes are to be accessible for inspection by WWTA personnel.

Additional Requirements

1. **Water Tight** -- Precast concrete grease interceptors shall be constructed to be watertight. A static water test shall be conducted by the installer and timed so as to permit verification through visual inspection by regulatory agent. The water test shall consist of plugging the outlet (and the inlet if necessary) and filling the tank(s) with water to the tank top a minimum of 24 hours before the inspection. The tank shall not lose water during this test period. Certification by the plumbing contractor shall be supplied to the WWTA prior to final approval of grease control equipment,
2. **Location** -- Grease interceptors shall be installed and connected to provide easy accessibility for inspection, cleaning and removal of the intercepted grease at any time. They should be located close to the fixture(s) discharging the grease wastestream. If possible, Grease Interceptors should not be installed in "drive-thru" lanes or a parking area. Grease Interceptor manhole covers shall never be paved over or covered with dirt or any other material and/or object that would prevent access to the interceptor. A Grease Interceptor shall not be installed in any part of a building unless approved by the Board.
3. **Responsibility** -- Removal of the grease from the wastewater routed to a public or private sanitary system is the responsibility of the user/owner.
4. **Construction Material** -- Grease Interceptors shall be constructed of sound durable materials, not subject to excessive corrosion or decay and shall be water and gas tight. Each interceptor shall be structurally designed to withstand any anticipated load to be placed on the interceptor (i.e. vehicular traffic in parking or driving areas).

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

5. **Marking and Identification** -- Prefabricated gravity 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.

Grease Interceptor Cleaning/Maintenance Requirements

1. Grease Interceptor minimum size will be 500 gallon capacity, and maximum size will be 2,000 gallon capacity. If the FSE needs additional capacity, then grease interceptors will be installed in series or parallel, as directed by the Director.
2. Skimming and/or pumping of interceptor contents is prohibited. Also, decanting or discharging of removed waste back into an interceptor from which it was previously removed, or into any other interceptor for the purpose of reducing the volume to be disposed, is prohibited. This practice is classified as an unpermitted discharge of a pollutant into the Publicly Owned Treatment Works (POTW) and, is a violation of the WWTA's Sewer Use Rules and federal Clean Water Act. In no way shall the pumpage be returned to any private or public portion of the sanitary sewer system. In addition, the following pollutants shall not be introduced into a POTW: Any trucked or hauled pollutants, except at discharge points designated by the "POTW"
3. Grease interceptors must be pumped in full when the total accumulations of surface FOG (including floating solids) and settled solids reaches twenty-five percent (25%) of the grease interceptor's overall liquid depth (25 Percent Rule) or not to exceed 3 months. At no time, shall the cleaning frequency exceed three months unless approved by the Director. Approval will be granted on a case by case situation with submittal by the FSE documenting proof demonstrating to the WWTA that the pumping frequency can be extended past the three (3) month period without any carryover of grease being discharged to the sanitary sewer system.
4. The Grease Interceptor Influent - T and Effluent - T will be inspected during cleaning and maintenance and the condition noted by the grease waste hauler's company or individual conducting the maintenance. Influent -T's and Effluent -T's that are loose, defective, or not attached must be repaired or replaced immediately.
5. Grease Interceptors must have access manholes over the Influent -T and Effluent -T for inspection and to allow efficient cleaning/maintenance. Access manholes shall 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).

Grease Trap Sizing, Installation, Cleaning & Maintenance Requirements (Class 1)

1. **All** grease traps shall be installed and connected to be easily accessible for inspection, cleaning and removal of the intercepted grease at any time.
2. **All** grease traps shall have a flow control restrictor and be vented. Failure to have the flow restrictor and venting will be considered a violation.
3. All new FSEs that are allowed to install grease traps must have WWTA approval prior to starting operations.
4. Grease Trap minimum size requirement is a **20 gallon per minute/40 pound capacity trap**.
5. Grease Traps must have the Plumbing Drainage Institute certification and be installed as per manufacturer's specifications.
6. No automatic dishwasher shall be connected to an under-the-sink grease trap or floor grease trap. Dishwashers will cause hydraulic overload of the grease trap.
7. No automatic drip or feed system additives are allowed prior to entering the grease trap.
8. A single grease trap device shall be installed for each significant kitchen fixture unit (i.e. each 3 compartment sink). The WWTA must approve the number of grease traps and connections to the grease trap.
9. During cleaning of the grease trap, the flow restrictor shall be checked to ensure it is attached and operational.
10. Grease Traps shall be cleaned of complete fats, oils and grease and food solids at a minimum of once a week. If the FOG and food solids content of the grease trap are greater than 25%, then the grease trap must be cleaned as frequently as needed to prevent 25% of capacity being taken from FOG and food solids. Removal of FOG is usually accomplished by hand-dipping or scooping the collected material from the trap.
11. Grease Traps that are cleaned by a professional cleaning company may be cleaned once every thirty (30) days at the discretion of the Director.
12. 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 to an approved disposal site.
13. Grease Trap waste should not be mixed with yellow grease in the grease recycle container unless approved.

Accidental Discharge-Safeguards:

FSEs shall provide such facilities and institute such procedures as are reasonably necessary to prevent or minimize the potential for accidental discharge of fats, oils and grease into the sewage collection system. This includes implementation of "Best Management Practices" protocols.

"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. If the WWTA identifies a FSE that is using "additives" and is contributing FOG to the sanitary sewer system, or has caused any interference to the sanitary sewer system, the FSE shall immediately stop use of the "additive".
3. At no time shall additives be used just prior to under the sink traps or floor grease traps.
4. 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 sanitary sewer system or cause temporary breakdown of FOG that will later re-congeal in the downstream sanitary 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 Director and FSE must submit a full disclosure MSDS and certified sample results from the manufacturer of the product.
5. The use of approved additives will in no way be considered as a substitution to the maintenance procedures (cleaning/pumping) required herein.

Right of Entry --- Inspection and Monitoring

The WWTA, or their authorized representative, shall have the right to enter the premises of FSEs to determine whether the FSE is complying with the requirements of this policy and/or the WWTA's Sewer Use Rules. FSEs shall allow WWTA personnel, or their authorized representative, upon presentation of proper credentials, full access to all parts of the premises for the purpose of inspection, monitoring, and/or records examination. Unreasonable delays in allowing WWTA personnel access to the FSE premises shall be a violation of this policy and the WWTA's Sewer Use Rules.

The Department may require that the FSE install monitoring or additional pretreatment equipment deemed necessary for compliance with this policy and/or the WWTA's Sewer Use Ordinance.

Administrative Fee Option:

The WWTA may assess an administrative fee for inspection, monitoring, impact, and permit fees to ensure full cost recovery for the FOG Management Program.

Enforcement Action

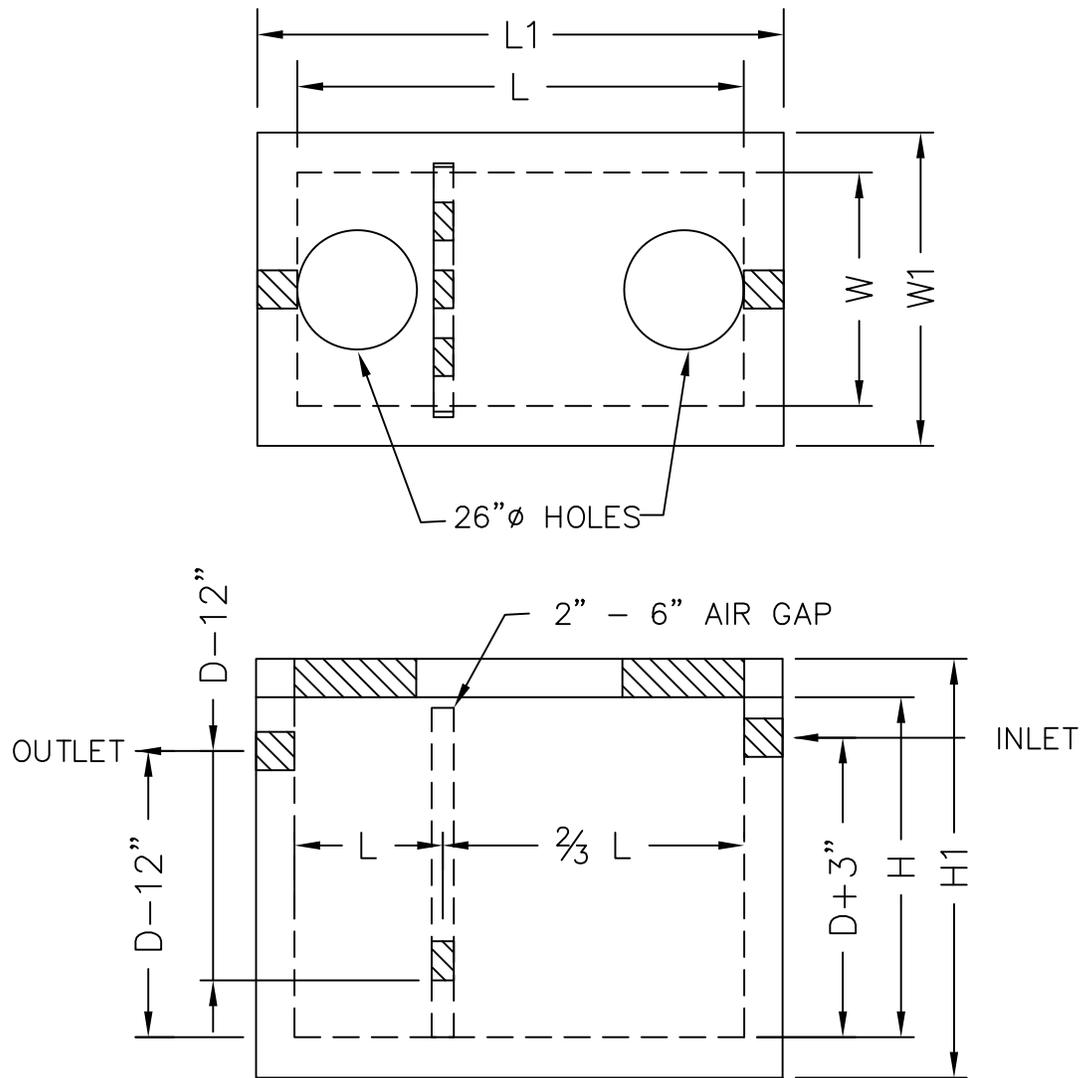
Enforcement Action against the FSE includes, but is not limited to, failure to clean or pump grease control equipment, failure to maintain grease control equipment including inspection and installation of properly functioning influent – T, effluent – T and baffles, failure to install grease control equipment,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

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

If FSE inspections and field investigations determine that any fats, oils and grease interference or blockage in the sewer system, a sewage pumping station, or the wastewater treatment plant is caused by a particular food service establishment, then that food service establishment shall reimburse the WWTA for all labor, equipment, supplies and disposal costs incurred by the WWTA to clean and clear the WWTA's sanitary sewer line(s) of the interference or blockage. Failure to reimburse the WWTA could result in termination of sewer service.

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

If a FSE fails to pump, clean or maintain their GCE after a NOV due date, the WWTA may chose to pump/clean the GCE to prevent additional FOG problems downstream. The FSE will be charged for the cost of pumping and maintaining the FSE's GCE at a rate of 1-1/2 times the cost to the WWTA. Mechanical failure of the GCE will be considered a violation of WWTA's Sewer Use Rules pertaining to the installation and maintenance of grease control equipment and subject to the installation and maintenance of grease control equipment and subject to penalties.



GENERAL NOTES:

1. MANUFACTURED TO MEET MATERIAL REQUIREMENTS SET FORTH IN ASTM C-931.
2. MIN. CONCRETE STRENGTH 4500 PSI.
3. NO STEPS.
4. BOXES SHALL BE MANUFACTURED TO ACCOMMODATE HS-20 LIVE LOADS.
5. ONE RISER OR GRADE RING CAN BE USED TO MEET REQUIRED FINISH GRADES. SEE SD-MH-8.
6. ADDITIONAL BAFFLES CAN BE USED FOR COMBINATION GRIT AND OIL/WATER SEPARATOR.
7. OPENINGS MAY VARY TO ACCOMMODATE VARIOUS PIPE DIAMETERS.

TANK SIZE	H	H1	L	L1	W	W1	D
2000 GALLON	4.66'	5.50'	12.0'	12.8'	6.00'	6.83'	3.75'
2500 GALLON	5.66'	6.08'	12.0'	12.8'	6.00'	6.83'	4.75'
3000 GALLON	6.50'	7.33'	12.0'	12.8'	6.00'	6.83'	5.58'
3500 GALLON	4.83'	6.16'	16.0'	17.3'	8.00'	9.33'	3.75'
4000 GALLON	5.33'	6.66'	16.0'	17.3'	8.00'	9.33'	4.25'
4500 GALLON	5.83'	7.16'	16.0'	17.3'	8.00'	9.33'	4.75'
5000 GALLON	6.33'	7.66'	16.0'	17.3'	8.00'	9.33'	5.25'

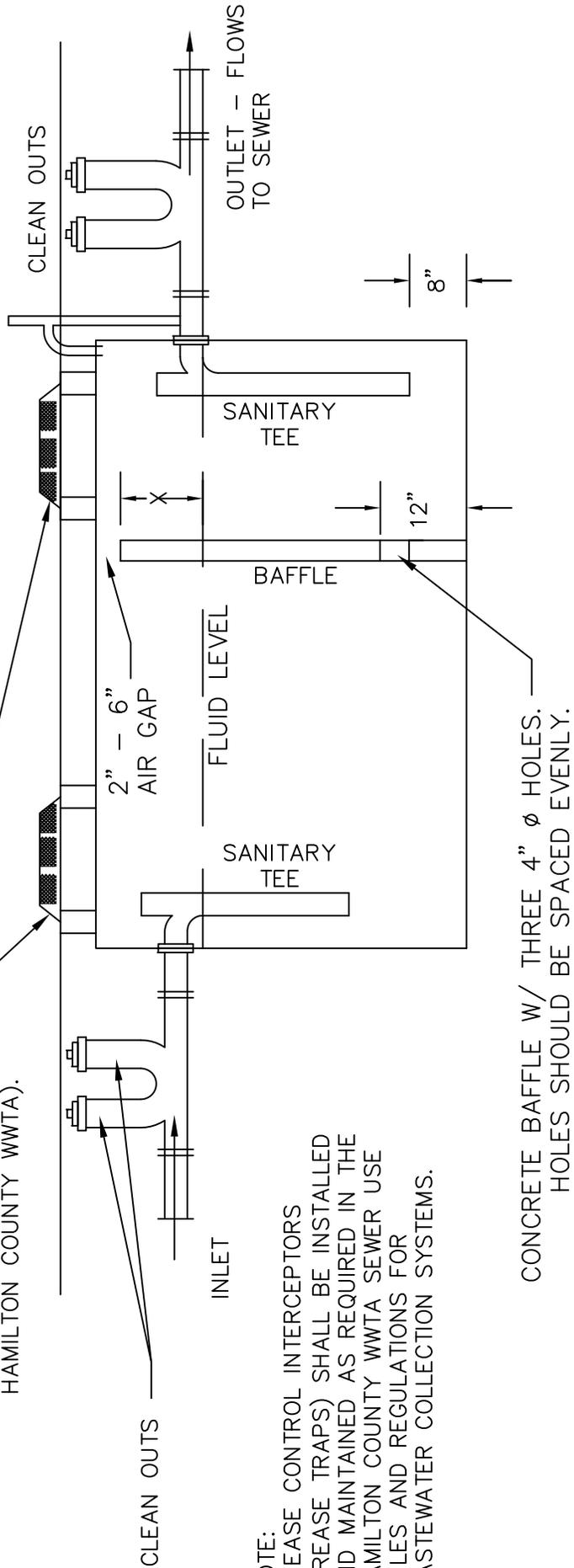
GREASE CONTROL INTERCEPTOR – PLAN

HAMILTON COUNTY WATER & WASTEWATER TREATMENT AUTHORITY

SD-MISC-1

- A. GREASE TRAPS/INTERCEPTORS SHALL BE INSTALLED IN ASSOCIATION WITH COMMERCIAL BUILDINGS, IN ACCORDANCE WITH THE HCWWTA FOG POLICY.
- B. GREASE TRAPS SHALL BE CONSTRUCTED TO ENSURE THAT BOTH THE INLET AND OUTLET ARE PROPERLY SUBMERGED TO TRAP GREASE, AND THAT THE DISTANCE BETWEEN THE INLET AND OUTLET IS SUFFICIENT TO ALLOW SEPARATION OF GREASE SO THAT GREASE SOLIDS WILL NOT ESCAPE THROUGH THE OUTLET.
- C. FLOW THAT DOES NOT REQUIRE TREATMENT OR SEPARATION SHALL NOT DISCHARGE INTO THE GREASE TRAP OR SEPARATOR.
- D. IF PROHIBITED GREASE, SAND, GRAVEL AND OTHER POLLUTANTS ENTER THE PUBLIC SEWER, THE SUPERINTENDENT WILL PERFORM SUCH MAINTENANCE AND REPAIR TO THE SEWER AND CHARGE THE COST THEREOF TO THE PROPERTY OWNER.
- E. THE DISTANCE "X" BETWEEN THE BOTTOM OF THE "AIR GAP" AND THE "FLUID LEVEL" SHOULD NOT EXCEED THE OUTLET PIPE DIAMETER.

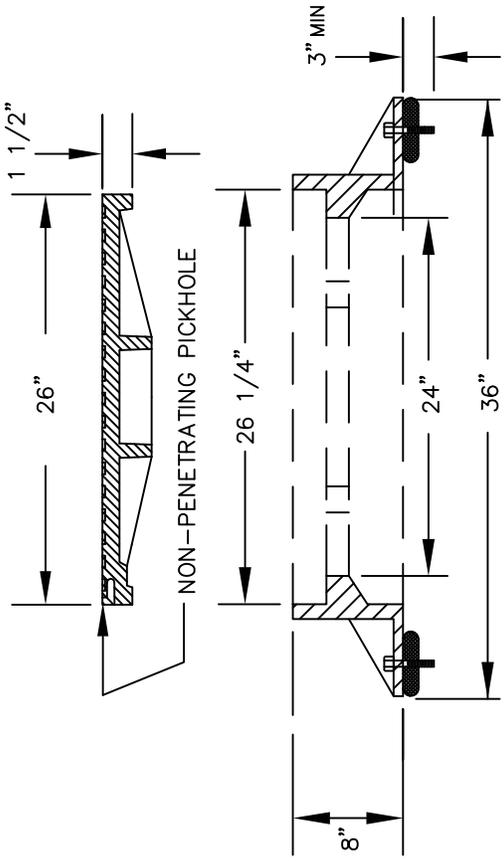
MANHOLE COVERS - INSTALLED IN ACCORDANCE WITH SD-MH-5 (NOTE EXCLUSION: LID SHOULD NOT LIST HAMILTON COUNTY WWTA).



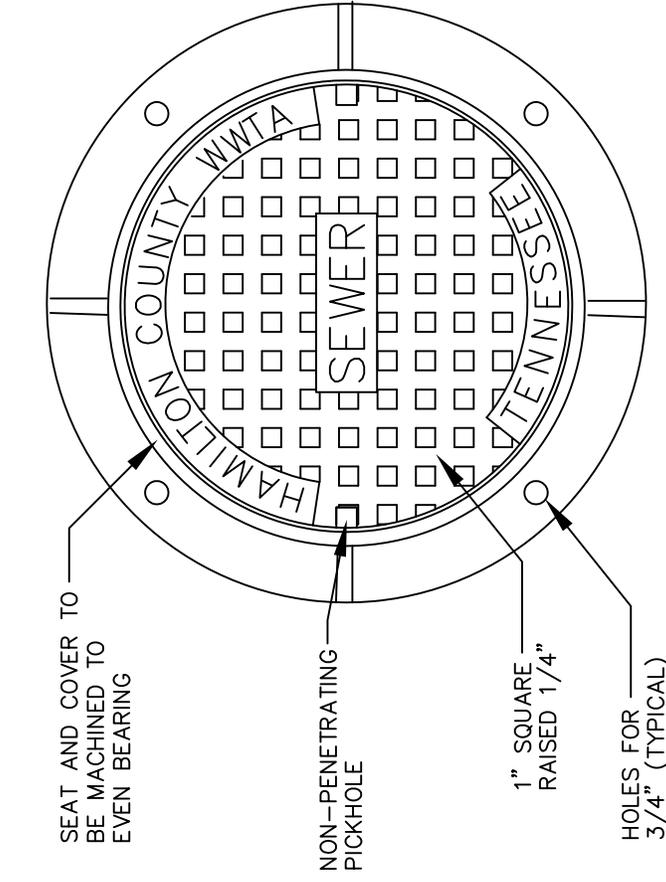
NOTE:
GREASE CONTROL INTERCEPTORS (GREASE TRAPS) SHALL BE INSTALLED AND MAINTAINED AS REQUIRED IN THE HAMILTON COUNTY WWTA SEWER USE RULES AND REGULATIONS FOR WASTEWATER COLLECTION SYSTEMS.

CONCRETE BAFFLE W/ THREE 4" ϕ HOLES.
HOLES SHOULD BE SPACED EVENLY.

GREASE CONTROL INTERCEPTOR - DETAIL



SECTION
STANDARD FRAME AND COVER



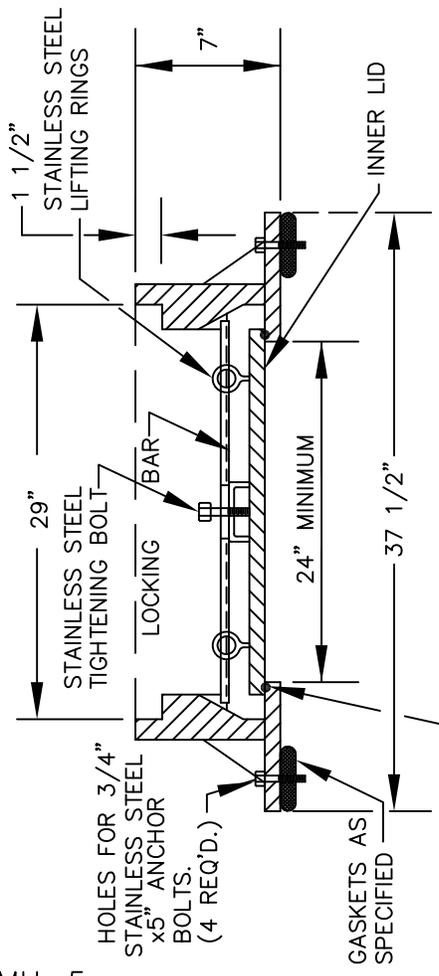
PLAN - FRAME AND COVER

ACHESON FOUNDRY (STANDARD) A-2024-81H
ACHESON FOUNDRY (WATER-TIGHT) A-2624-71H
OR APPROVED EQUAL

	SPECIFIED MINIMUM WEIGHTS		
	STANDARD	WATER-TIGHT	
COVER	165 LBS.	190 LBS.	
FRAME	185 LBS.	400 LBS.	
TOTAL	350 LBS.	590 LBS.	

NOTES

1. MANUFACTURER SHALL CERTIFY TRAFFIC BEARING CAPACITY OF FRAMES AND COVERS.
2. MANHOLES IN PAVED AREAS MAY NOT REQUIRE ANCHOR BOLTS.
3. BEARING SURFACES BETWEEN COVER AND FRAME SHALL BE MACHINED TO PREVENT ROCKING.
4. MANHOLES IN EASEMENTS REQUIRE ANCHOR BOLTS.



SECTION
WATER-TIGHT FRAME AND COVER

MANHOLE FRAME AND COVER

HAMILTON COUNTY WATER & WASTEWATER TREATMENT AUTHORITY