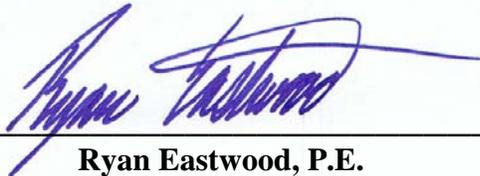


City of Ashland Fats, Oils and Grease Policy

**Version Issued:
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**Ryan Eastwood, P.E.
Director of Engineering and Utilities**



City of Ashland, Kentucky

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CITY OF ASHLAND, KENTUCKY FATS, OILS, AND GREASE POLICY

A POLICY TO REGULATE DISCHARGES OF ANIMAL AND VEGETABLE FATS, OILS, AND GREASE, FOOD WASTE, SOIL, SAND, AND LINT.

Section 1: Purpose

The purpose of this policy is to control discharges into the public sewerage collection system and wastewater treatment plant that interfere with the operations of the system, cause blockage and plugging of pipelines, interfere with normal operation of pumps and their controls, and contribute waste of a strength or form that either causes treatment difficulties or is beyond the treatment capability of the wastewater treatment plant.

This policy may be reopened by the Director of Engineering and Utilities for modification to incorporate any new or revised Federal, State or Local requirements; or in general to reflect changes required to ensure the proper administration and control of fats, oils and grease that are introduced into the City of Ashland's publicly owned treatment works.

Section 2: Definitions

Grease-Material composed primarily of fats, oil, and grease (FOG) from animal or vegetable sources. The terms fats, oil, and, grease shall be deemed as Grease by definition. Grease does not include petroleum based products.

Grease Trap-A device for separating and retaining waterborne greases and grease complexes prior to the wastewater exiting the trap and entering the sanitary sewer collection and treatment system. These devices also serve to collect settleable solids, generated by and from food preparation activities, prior to the water exiting the trap and entering the sanitary sewer collection and treatment system.

Food Service Establishments-Those facilities primarily engaged in activities of preparing, serving, or otherwise making available for consumption foodstuffs and that use one or more of the following preparation activities: cooking by frying (all methods), baking (all methods), grilling, sautéing, rotisserie cooking, broiling (all methods), boiling, blanching, roasting, toasting, or poaching. Also included are infrared heating, searing, barbecuing, and any other food preparation activity that produces a hot, non-drinkable food product in or on a receptacle that requires washing. These facilities include restaurants, cafeterias, hotels, motels, hospitals, nursing homes, schools, grocery stores, prisons, jails, churches, camps, caterers, manufacturing plants, or any other sewer users as determined by the City's Water Distribution and Sewer Collection System Superintendent (WSS) who discharge applicable waste.

User-Any person or establishment including those located outside the jurisdictional limits of the City who contributes, causes, or permits the contribution or discharge of wastewater into The City's wastewater collection or treatment system, including persons who contribute such wastewater from mobile sources, such as those who discharge hauled wastewater.

Oil/Water separator-An approved and industry standard system that is specifically designed and manufactured to separate oil from water. The system shall allow the oil to be collected and removed on a regular basis as to prevent it from being discharged into the wastewater collection system. Only oil/water separators manufactured for that specific operation will be approved. Adequate support literature from the manufacturer will be required so as to allow a proper review by the WSS or his designated official.

25% Rule-A rule governing grease trap maintenance. It requires that the depth of both bottom solids and floating oil/grease in a trap shall not equal or be greater than 25% of the total operating depth of the trap. The operating depth of a trap is the internal depth from the inlet or outlet water elevation to the bottom of the trap.

Section 3: Control Plan for (FOG) and food waste

- A. Any new construction, renovation, or expansion of Food Service Establishments shall be required to submit to The City a FOG and food waste control plan that will effectively control the discharge of undesirable materials into the wastewater collection system.
- B. Any existing Food Service facilities shall also be required to submit a FOG and food waste control plan that will effectively control the discharge of undesirable materials into the wastewater collection system. Existing facilities shall not be exempt from the requirements of this ordinance. There will be no "Grandfathering".

Section 4: General Criteria

A. Installation requirements

All existing, proposed, or newly remodeled Food service facilities inside the City of Ashland wastewater service area shall be required to install, at the user's expense an approved, properly operated and maintained grease trap.

Under special circumstances an exemption to the installation requirements may be granted. A formal request for a grease disposal waiver must be submitted in writing to the City of Ashland Director of Engineering and Utilities (DEU). In the event that the grease disposal waiver is granted, the City reserves the right to charge a monthly grease disposal elimination fee.

B. Sanitary sewer flows

Sanitary sewer flows from toilets, urinals, lavatories, etc. shall not be discharged into the grease trap. These flows shall be conveyed separately to the sanitary sewer service lateral.

C. Floor drains

Only floor drains which discharge or have the potential to discharge grease shall be connected to a grease trap.

D. Garbage grinders/disposers

It is recommended that solid food waste products be disposed of through normal solid waste/garbage disposal means. If a grinder/disposal is used it must be connected to the grease trap. The use of grinders is discouraged since it decreases the operational capacity of the grease trap and will require an increased pumping frequency to ensure continuous and effective operation.

E. Dishwashers

Commercial dishwashers must be connected to the grease trap. Dishwashers discharge soap and hot water which can melt grease and allow it to pass through an undersized grease trap. Traps must be sized accordingly to allow enough detention time to allow water to cool and grease to solidify and float to the top of the trap. Water discharged into a grease trap with temperatures exceeding 140 degrees Fahrenheit is prohibited.

F. Location

Grease trap shall be installed outside the building upstream from the sanitary sewer service lateral connection. This will allow easy access for inspection, cleaning, and removal of the intercepted grease at any time. A grease trap may not be installed inside any part of a building without written approval by the WSS.

Section 5: Design Criteria

A. Construction

Grease traps shall be constructed in accordance with The City of Ashland standards and shall have a minimum of two compartments with fittings designed for grease retention. All grease removal devices or technologies shall be subject to the written approval of the WSS. Such approval shall be based on demonstrated removal efficiencies of the proposed technology.

B. Access

Access to grease traps shall be available at all times, to allow for their maintenance and inspection. Access to trap shall be provided by two manholes (one on each compartment) terminating at finished grade with cast iron frame and cover.

C. Load-Bearing Capacity

In areas where additional weight loads may exist, the grease trap shall be designed to have adequate load-bearing capacity. (Example: vehicular traffic in driving or parking areas)

D. Inlet and Outlet Piping

Wastewater discharging to a grease trap shall enter only through the inlet pipe of the trap. Each grease trap shall have only one inlet and one outlet pipe.

E. Grease Trap Sizing

The required size of the grease trap shall be calculated using The City of Ashland's Grease Trap Sizing Method. All grease traps shall have a capacity of not less than 1,000 gallons nor exceed a capacity of 3,000 gallons. If the calculated capacity exceeds 3,000 gallons, multiple units plumbed in series shall be installed. The DEU may grant upon written request a reduction in grease trap sizing due to feasibility of installation. Any approved reduction of grease trap sizing will also require an increased cleaning frequency directly proportional to the reduction of grease trap volume.

Section 6: Grease Trap Maintenance

A. Cleaning/Pumping

The user at the user's expense shall maintain all grease traps to assure proper operation and efficiency and maintain compliance such as not to cause pass through and violation of the City of Ashland KYPDES permit or NPDES effluent water quality standards. Maintenance of grease trap shall include the complete removal of all contents, including floating materials, wastewater, and bottom sludge and solids. This work shall be performed by a qualified and licensed hauler. Decanting or discharging of removed waste back into the trap from which it was removed or any other grease trap, for the purpose of reducing the volume to be disposed, is prohibited. This service shall also include a thorough inspection of the trap and its components. Any needed repairs shall be noted. Repairs shall be made at user's expense.

B. Cleaning/Pumping frequency

The grease trap must be pumped out completely a minimum of:

1. Once every 6 months or;
2. More frequently if the total volume of floating grease and settled solids in the trap are equal to or greater than 25% of the total trap volume (25% rule) or;
3. Anytime the grease trap effluent concentration of Total Oil and Grease exceeds 250 mg/l or;
4. As determined by the WSS, as needed to prevent carryover of grease into the sanitary sewer system.

Upon request of the FSE owner, the DEU or his designee may reduce the cleaning/pumping frequency requirement should it be proven that this action will not cause significant maintenance problems to the City. Such a request will not be evaluated until the FSE owner can demonstrate a track record of compliance and that the current requirement is overly protective for said FSE.

C. Disposal

All waste removed from each grease trap must be disposed of at a facility approved to receive such waste in accordance with the provisions of this program. In no way shall the pumpage be returned to any private or public portion of the City's sanitary sewer collection system. All pumpage from grease traps must be tracked by a manifest, which confirms pumping, hauling, and disposal of waste. The customer must obtain and retain a copy of the original manifest from the hauler.

D. Maintenance Log

A grease trap cleaning/maintenance log indicating each pumping for the previous 24 months shall be maintained by each Food Service Establishment (FSE). This log shall include the date, time, amount pumped, hauler, and disposal site and shall be kept in a conspicuous location for inspection. Said log shall be made available to the WSS or his representative upon request.

E. Submittal of Records

Each user shall submit all cleaning and maintenance records to the WSS.

The maintenance records shall include the following information:

1. Facility name, address, contact person, and phone number
2. Company name, address, phone number, and contact name of person responsible for performing the maintenance, cleaning, pumping, or repair of grease trap.
3. Types of maintenance performed.
4. Dates maintenance was performed.
5. Date of next scheduled maintenance.
6. Copies of manifests.

The user shall be required to submit maintenance records to the WSS on a biannual basis (twice per year). Records shall be submitted by March 1st and September 1st of each year. The records shall be submitted to:

City of Ashland
Attn: Wastewater Collection
P.O. Box 1839
Ashland, KY 41101

The WSS or designees will perform periodic inspections of these facilities and shall notify the user of any additional required maintenance or repairs. Upon written notification by the WSS, the user shall be required to perform the maintenance and records of said maintenance within 14 calendar days. Upon inspection by the WSS or designees the user may be required to install, at his expense, additional controls to provide a complete system which prevents discharges of undesirable materials into the wastewater collection system.

Section 7: Additives

Any biological additive(s) placed into the grease trap or building discharge line including but not limited to, enzymes, commercially available bacteria, or other additives designed to absorb, purge, consume, treat, or otherwise eliminate fats, oils, and grease shall require written approval by the WSS prior to use. The use of such additives shall in no way be considered as a substitution to the maintenance procedures required herein. If, in the opinion of the WSS or his designee, an approved additive of the WSS fails to aid in grease control, removal or is detrimental to FOG control the right to use that additive shall be revoked.

Section 8: Chemical Treatment

Chemical treatments such as drain cleaners, acid, degreasers (other than typical dishwashing detergents) or other chemical solvents designed to dissolve or remove grease shall not be allowed to enter the grease trap.

Section 9: Sand, Soil, and Oil Interceptors

All car washes, truck washes, garages, service stations, car and truck maintenance facilities, fabricators, utility equipment shops, and other facilities (as determined by the WSS) that have sources of sand, soil, and oil shall install effective sand, soil and oil traps, interceptors, and/or oil/water separators. These systems shall be sized to effectively remove sand, soil, and oil at the expected flow rates. These systems shall be, at the user's expense, cleaned or pumped on a regular basis to prevent impact upon the wastewater collection and treatment systems. Users whose systems are deemed to be ineffective by the WSS shall be asked to change the cleaning frequency or to increase the size of the system. Owners or operators of washing facilities will be required to prevent the inflow of detergents and rainwater into the wastewater collection system. Oil/water separator installations shall be required at facilities that accumulate petroleum oils and greases and at facilities deemed necessary by the WSS. Upon written request the DEU may grant an exemption from this requirement to facilities that do not yield significant volumes of water, significant concentrations of pollutants or are otherwise very limited in their ability to cause harm to the City of Ashland's sewer system.

Section 10: Control Equipment

The equipment or facilities installed to control FOG, food waste, sand, soil, oil, and lint must be designed in accordance with the most current engineering standards, or other applicable guidelines approved by the WSS. Underground equipment shall be tightly sealed to prevent inflow of rainwater and shall be easily accessible to allow regular maintenance and inspection. Control equipment shall be maintained by the owner and/or operator of the facility as to prevent a stoppage of the wastewater collection system, and the accumulation of FOG, food waste, sand, soil, and lint in the collection lines, pump stations, and wastewater treatment plant. If the City of Ashland is required to clean out the wastewater collection lines, as a result of a stoppage resulting from poorly maintained control equipment (or lack thereof) the owner or operator shall be required to refund the labor, equipment, materials, and any overhead costs to the City including any fines incurred due to any sanitary sewer overflow due directly to the stoppage. The City retains the right to inspect and approve any and all installations of control equipment.

Section 11: Alteration of Control Methods

The City of Ashland, through the WSS, reserves the right to request additional control measures if existing control equipment is shown to be insufficient to protect the wastewater collection system and wastewater treatment plant from interference due to the discharge of FOG, sand, soil, lint, or any other undesirable materials.

Section 12: Enforcement and Penalties

Any person who violates this policy, in part or whole, shall be guilty of violation punishable under and according to Section 13 of the City of Ashland's Fats, Oils and Grease Enforcement Response Plan (listed below) and or the City of Ashland's Code of Ordinances. Each day's violation of this ordinance shall be considered a separate offense.

Section 13: FOG Enforcement Response Plan

A. Introduction

This Fats, Oils, and Grease Enforcement Response Plan [FOG ERP], Section 13 of this document is a statement of policy by the City of Ashland. It is NOT a regulation, code or statute and the City has the authority to amend this policy at any time in order to more effectively implement the City of Ashland Fats, Oils and Grease Control Policy. This plan has been developed for guidance and is not intended to create legal rights or obligations, or to limit the enforcement discretion of the Director of Engineering and Utilities, his authorized designee(s) or the City of Ashland.

This FOG Enforcement Response Plan is an effective way to ensure that the City of Ashland takes fair, consistent and equitable enforcement actions against food service establishments (FSE) for violations of the FOG Control Policy and/or the City of Ashland Sewer User and Pretreatment Ordinance. It should be noted that, even with an FOG ERP, judgment and flexibility will be needed at times in response to unusual instances of noncompliance. Some violations may require a response that deviates from the ERP depending on the particulars of the situation.

The enforcement philosophy of the City of Ashland is progressive, in that problems are addressed at the lowest level and with the least formality possible consistent with the specific violation. However, no enforcement procedure is contingent upon the completion of any “lesser” activity.

In general, enforcement actions against food service establishment (FSE) will be taken in accordance with this Enforcement Response Plan, however, the enforcement actions listed here are not exclusive and the City of Ashland reserves the right to implement other enforcement responses available to it under the Sewer User Ordinance, State or Federal law, separately or in combination with these responses.

B. Enforcement Actions Available Under the Fats, Oils and Grease Control Policy

The City of Ashland is empowered by the City of Ashland Sewer Use and (SUO) to take a wide variety of enforcement actions. The following is a list of those actions.

1. **Notice of Deficiency (NOD) and/or Notice to Correct (NTC)**- Written notice that a violation/deficiency has occurred and should be corrected. In general, NTCs are used for minor isolated violations or as an initial step leading to an escalated enforcement response. NODs/NTCs are documented and kept on file.
2. **Enforcement Meeting**- Informal meeting used to gather information concerning noncompliance, discuss steps to alleviate noncompliance and determine the commitment level of the food service establishment.
3. **Employee Training Requirement**- Used when the FOG coordinator feels that a violation has been caused by a food service establishment employees(s) lack of knowledge concerning FOG policy/SUO requirements.

4. **Notice of Violation (NOV)**- A NOV is a written notice to the noncompliant food service establishment that a violation has occurred. A NOV includes a statement detailing the legal authority under which the City issued the NOV, a description of the violation(s) and the date(s) the violation(s) occurred. A NOV may require a response from the food service establishment that details the causes of the violation(s), and the correction action taken to correct the violation and prevent similar violations from occurring. In general a NOV is considered to be a more serious enforcement action than a NOD/NTC.
5. **Civil Penalties**- Administrative penalty issued to a food service establishment who fails to comply with any provision of the FOG policy and/or any applicable provision of the SUO. The City of Ashland Sewer Use Ordinance authorizes penalties of up to ten thousand dollars (\$10,000.00) per day per violation.
6. **Consent Orders (CO)**- A voluntary agreement with a non-compliant food service establishment that includes specific acts to be taken by the discharger to correct the noncompliance within a time period also specified in the order. COs may incorporate schedules of compliance (SOC), administrative penalties and/or termination of service. Such documents shall have the same force and effect as administrative orders and shall be judicially enforceable.
7. **Administrative Orders (AO)**- Administrative Orders (AOs) are enforcement documents that direct food service establishments to undertake and/or to cease specified activities by specified deadlines. The terms of an AO may or may not be negotiated with food service establishments. AOs may incorporate compliance schedules, administrative penalties and/or termination of service.
8. **Payment of Remediation/Clean-Up Costs and or Cost Recovery**- Notice to pay to the City of Ashland costs associated with the clean-up or decontamination of a site after the discharge of clean-up or decontamination of a site after the discharge of substances into the sanitary sewer, storm sewer, surface waters and/or to the environment that cause interference, pass-through or sanitary sewer blockage. This includes clean up and decontamination of all structures/areas including residential, commercial, surface waters and the environment.

9. **Termination of Service (TOS)**- Termination of Service [TOS] is the revocation of a food service establishment's privilege to discharge wastewater from food preparation processes into the sanitary sewer system. TOS is used when the discharge from a FSE presents imminent endangerment to the health or welfare of persons, or the environment or threatens to interfere with the operation of the POTW collection system. TOS is also used as an escalating enforcement action when a noncompliant food service establishment fails to respond adequately to previous enforcement actions. TOS may be accomplished by physical severance of the FSE's connection to the collection system, issuance of an AO [Cease and Desist], which compels the FSE to immediately terminate its discharge, or a court ruling.

C. Civil Penalties

Civil penalties are in addition to assessed City reimbursement costs for:

1. Legal fees
2. Equipment repair or replacement
3. Costs associated with the clean up or decontamination of a site after the discharge of substances into the sanitary sewer, storm sewer, surface waters and/or to the environment that cause interference, pass-through or sanitary sewer blockage. This includes clean up and decontamination of all structures/areas including residential, commercial, surface waters and the environment.
4. Sampling/monitoring costs
5. Any penalties assessed to the City resulting from the subject violation.

The Director of Engineering and Utilities or authorized designee reserves the right to assess the maximum penalty for any violation.

D. Personnel Responsible for Enforcement Actions

The City of Ashland Director of Engineering and Utilities or his authorized designee is responsible for all enforcement actions.

The City Attorney may be requested to review escalated penalties prior to issuance, if the Director of Engineering and Utilities, his authorized designee or the Sewer Collection Supervisor deem it necessary.

E. Enforcement Considerations

In determining which enforcement measure(s) to use and the amount of any civil penalties, the FOG Coordinator may consider the following:

1. The degree and extent of the impact/harm to the natural resources of the State, the public health, the POTW or public or private property as a result of the violation [including effect on groundwater, surface water or air quality];
2. The duration and magnitude of the violation;
3. The cost of repairing the damage to the POTW collection system, public or private property and/or the natural resources of the State;
4. Whether the violation was committed negligently, grossly negligently, recklessly negligently, willfully or intentionally;
5. The amount of money saved, if any, by noncompliance, including the cost of continuing to discharge in noncompliance instead of stopping operations;
6. Cost incurred by the FSE in correcting the problem and FSE cooperation and good faith effort to resolve noncompliance.
7. The prior record of the FSE in complying or failing to comply with the requirements of the FOG Control Policy, the Sewer Use and Pretreatment Ordinance, or other applicable law or regulation;
8. The cost to the City [including legal fees, sampling/analytical costs, engineering/consulting fees, etc.] required, in the opinion of the City, to take necessary investigative/enforcement action, determine the nature and extent of damage, prevent further damage and repair any damage.
9. The cost to the City for any civil penalties, fines, legal costs and/or other costs associated with any enforcement action or legal action taken against the City of Ashland for Wastewater Collection System Permit violations, NPDES violations or other violations caused by the FSE violation(s).

10. Violation(s) resulting from vandalism or the action of third-party entities
11. Deficiencies or violations occurring as a result of circumstances beyond the FSE's control as determined by the FOG Coordinator

F. Investigation of Noncompliance

The FOG Coordinator will investigate compliance with the FOG Control Policy/Sewer Use and Pretreatment Ordinance in the following ways:

1. On-site inspections of Food Service Establishments, including scheduled and unscheduled visits;
2. Review of documentation of required cleaning/maintenance of grease retention units;
3. Review of records/activities required to be documented and maintained by the User;
4. Review of procedures and implementation of Enforceable Best Management Practices outlined in FOG Control Policy;
5. Investigation of sanitary sewer overflows and spill and illegal discharges

G. Enforcement Tier Levels:

ENFORCEMENT TIER LEVELS/ACTIONS	
TIER I	Notice of Deficiency/Notice to Correct – No Civil Penalty Assessed
TIER II	Notice of Violation –with option of \$50 maximum Civil Penalty Assessed
TIER III	Notice of Violation –with option of \$100 maximum Civil Penalty Assessed
TIER IV	Notice of Violation –with option of \$500 maximum Civil Penalty Assessed
TIER V	Notice of Violation –with option of \$1,000 maximum Civil Penalty Assessed
TIER VI	Notice of Violation - with option of \$10,000 maximum Civil Penalty Assessed
TIER VII	Consent Order/Administrative Order with Stipulated Penalties
TIER VIII	C/O/A/O with Stipulated Penalties and Termination of [Sewer] Service (TOS)

Please note that Reimbursements Costs are in addition to any civil penalties assessed and may be collected retroactively should FSE Violations cause the City of Ashland to violate any permit, state or federal law.

H. Types of Violations

Minor Violation

1st Occurrence:

Inspection hindrance (equipment related)	TIER I
Failure to maintain on site records	TIER II
Failure to submit quarterly records	TIER II
Failure to pump grease trap/interceptor	TIER IV
Violation of Employee best management practice	TIER II

2nd Occurrence:

Inspection hindrance (equipment related)	TIER II
Failure to maintain on site records	TIER III
Failure to submit quarterly records	TIER III
Failure to pump grease trap/interceptor	TIER V
Violation of Employee best management practice	TIER III

3rd Occurrence:

Inspection hindrance (equipment related)	TIER III
Failure to maintain on site records	TIER IV
Failure to submit quarterly records	TIER IV
Failure to pump grease trap/interceptor	TIER VI
Violation of Employee best management practice	TIER IV

4th Occurrence & Up:

Inspection hindrance (equipment related)	TIER V
Failure to maintain on site records	TIER V
Failure to submit quarterly records	TIER V
Failure to pump grease trap/interceptor	TIER VII
Violation of Employee best management practice	TIER VI

Intermediate Violation

Failure to maintain necessary equipment (T's, grease trap/interceptor not watertight, baffles, etc.);

1 st Offense	TIER II
2 nd Offense	TIER IV
3 rd Offense	TIER VI
4 th Offense & Up	TIER VII

Denial of Right of Entry for Inspection

1 st Offense	TIER III – TIER V
2 nd Offense	TIER III-TIER VIII

Major Violation

1 st Offense	
Source of sewer blockage	TIER V
Source of blockage causing sanitary sewer overflow	TIER VI
Falsification of maintenance records	TIER V
2 nd Offense of any Major Violation	TIER V-TIER VIII

Section 14: Severability

Each section, subsection, paragraph, sentence, and clause of this policy is declared to be separable and severable.

Grease Interceptor Sizing Worksheet

The Uniform Plumbing Code Formula

Company		Calculated By		Date	
Project		Location			

Follow these six simple steps to determine grease interceptor size.

Enter Calculations Here >	No of Meals Per Peak Hours	Waste Flow Rate	Retention Time	Storage Factor	Calculated Interceptor Size	Grease Interceptor
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6

1	Number of Meals Per Peak Hour (Recommended Formula):	Notes:															
	<table border="0"> <tr> <td>Seating Capacity</td> <td>Meal Factor</td> <td>Meals per Peak Hour</td> </tr> <tr> <td><input type="text"/></td> <td>X <input type="text"/></td> <td>= <input type="text"/></td> </tr> </table> <table border="0"> <tr> <td>Establishment Type:</td> <td>Meal Factor</td> </tr> <tr> <td>Fast Food (45 min)</td> <td>1.33</td> </tr> <tr> <td>Restaurant (60 min)</td> <td>1.00</td> </tr> <tr> <td>Leisure Dining (90 min)</td> <td>0.67</td> </tr> <tr> <td>Dinner Club (120 min)</td> <td>0.50</td> </tr> </table>	Seating Capacity	Meal Factor	Meals per Peak Hour	<input type="text"/>	X <input type="text"/>	= <input type="text"/>	Establishment Type:	Meal Factor	Fast Food (45 min)	1.33	Restaurant (60 min)	1.00	Leisure Dining (90 min)	0.67	Dinner Club (120 min)	0.50
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2	Waste Flow Rate:	Notes:									
	<table border="0"> <tr> <td>Condition</td> <td>Flow Rate</td> </tr> <tr> <td>With a Dishwashing Machine</td> <td>6 Gallons</td> </tr> <tr> <td>Without a Dishwashing Machine</td> <td>5 Gallons</td> </tr> <tr> <td>Single Service Kitchen</td> <td>2 Gallons</td> </tr> <tr> <td>Food Waste Disposer Only</td> <td>1 Gallon</td> </tr> </table>	Condition	Flow Rate	With a Dishwashing Machine	6 Gallons	Without a Dishwashing Machine	5 Gallons	Single Service Kitchen	2 Gallons	Food Waste Disposer Only	1 Gallon
Condition	Flow Rate										
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3	Retention Time	Notes:			
	<table border="0"> <tr> <td>Commercial Kitchen Waste Dishwasher</td> <td>2.5 Hours</td> </tr> <tr> <td>Single Service Kitchen Single Serving</td> <td>1.5 Hours</td> </tr> </table>	Commercial Kitchen Waste Dishwasher	2.5 Hours	Single Service Kitchen Single Serving	1.5 Hours
Commercial Kitchen Waste Dishwasher	2.5 Hours				
Single Service Kitchen Single Serving	1.5 Hours				

4	Storage Factor	Notes:															
	<table border="0"> <tr> <td>Kitchen Type</td> <td>Storage Factor</td> </tr> <tr> <td>Fully Equipped Commercial</td> <td></td> </tr> <tr> <td>Hours of Operation</td> <td></td> </tr> <tr> <td>8 Hours</td> <td>1.00</td> </tr> <tr> <td>12 Hours</td> <td>1.50</td> </tr> <tr> <td>16 Hours</td> <td>2.00</td> </tr> <tr> <td>24 Hours</td> <td>3.00</td> </tr> <tr> <td>Single Service Kitchen</td> <td>1.50</td> </tr> </table>	Kitchen Type	Storage Factor	Fully Equipped Commercial		Hours of Operation		8 Hours	1.00	12 Hours	1.50	16 Hours	2.00	24 Hours	3.00	Single Service Kitchen	1.50
Kitchen Type	Storage Factor																
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Hours of Operation																	
8 Hours	1.00																
12 Hours	1.50																
16 Hours	2.00																
24 Hours	3.00																
Single Service Kitchen	1.50																

5	Calculate Liquid Capacity	Notes:
	Multiply the values obtained from step 1, 2, 3 and 4. The result is the approximate grease interceptor size for this application	

6	Select Grease Interceptor	Notes:
	Using the approximate required liquid capacity from step 5, select an appropriate size as recommended by the manufacturer.	