

# Appendix A

## Recommended Procedures for Sizing Commercial Kitchen Grease Interceptors

### A. Waste Discharge Requirements

1. Waste discharge from fixtures and equipment in establishments which may contain grease, including but not limited to, scullery sinks, pot and pan sinks, dishwashing machines, soup kettles and floor drains located in areas where grease-containing materials may exist, may be drained into the sanitary waste through the interceptor when approved by the Administrative Authority.
2. Toilets, urinals, and other similar fixtures shall not waste through the interceptor.
3. All waste shall enter the interceptor through the inlet pipe only.

### B. Design

1. Interceptors shall be constructed in accordance with the design approved by the Administrative Authority and shall have a minimum of two compartments with fittings designed for grease retention.
2. There shall be an adequate number of manholes to provide access for cleaning all areas of an interceptor; a minimum of one (1) per ten (10) feet (3.0m) of interceptor length. Manhole covers shall be gastight in construction having a minimum-opening dimension of twenty (20) inches (0.5m).
3. In areas where traffic may exist the interceptor shall be designed to have adequate reinforcement and cover.

### C. Location

1. Each grease interceptor shall be so installed and connected that it shall be at all times easily accessible for inspection, cleaning, and removal of the intercepted grease. A grease interceptor may not be installed in any part of a building where food is handled. Location of the grease interceptor shall meet the approval of the Administrative Authority.
2. Interceptors shall be placed as close as practical to the fixtures it serves.
3. Each business establishment for which a grease interceptor is required shall have an interceptor, which shall serve only that establishment.

### D. Sizing Criteria

1. Parameters: The parameters for sizing a grease interceptor are hydraulic loading and grease storage capacity, for one or more fixtures.
2. Sizing Formula: The size of the interceptor shall be determined by the following formula:

$$\begin{array}{ccccccc} \text{Number of} & & \text{Waste} & & \text{Retention} & & \text{Storage} & & \text{Interceptor Size} \\ \text{Meals} & \mathbf{X} & \text{Flow} & \mathbf{X} & & \mathbf{X} & & \mathbf{Equals} & \\ \text{Per peak Hour}^1 & & \text{Rate}^2 & & \text{Time}^3 & & \text{Factor}^4 & & \text{(Liquid Capacity)} \end{array}$$

1. Meals Served at Peak Hour
2. Waste Flow Rate
  - a. With dishwashing machine 6-gallon (22.7L) flow
  - b. Without dishwashing machine 5-gallon (18.9L) flow
  - c. Single service kitchen 2-gallon (7.6L) flow
  - d. Food waste disposer 1 gallon (3.8L) flow
3. Retention Times
 

Commercial Kitchen Waste Dishwasher	2.5 hours
Single Service Kitchen Single service	1.5 hours
4. Storage Factors
 

Fully Equipped Commercial Kitchen	8-hour operation: 1 16-hour operation: 2 24-hour operation: 3 1.5 hours
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- E. Effluent Sampling:  
An effluent sampling box on grease interceptors may be required by the Administrative Authority.
- F. Abandoned Grease Interceptors  
Abandoned grease interceptors shall be pumped and filled as required for abandoned sewers and sewage disposal facilities in Section 722.0.

**TABLE 10-2  
Grease Traps**

Total Number of Fixtures Connected	Required Rate of Flow per Minute, Gallons	Grease Retention Capacity, Pounds
1	20	40
2	25	50
3	35	70
4	50	100

**TABLE 10-2  
Grease Traps (Metric)**

Total Number of Fixtures Connected	Required Rate of Flow per Minute, Liters	Grease Retention Capacity, kg
1	76	18
2	95	22
3	132	31
4	189	45

Note: For installations with more than four (4) fixtures, the Administrative Authority may permit the use of larger grease traps designed not to exceed the parameters of Section 1011.4, but not to exceed seventy-five (75) GPM (284 liters per minute).

## Section 1011.4 – 1013.0 Traps

1011.4 Each grease trap required by this section shall have an approved rate of flow which is not less than that given in Table 10-2 for the total number of connected fixtures. The total capacity in gallons (liters) of fixtures discharging into any such grease trap shall not exceed two and one-half (2 ½) times the certified gpm (liters per minute) flow rate of the grease trap as per Table 10-2.

Any grease trap installed with the inlet more than four (4) feet (1.2 m) lower in elevation than the outlet of any fixture discharging into such grease trap shall have an approved rate of flow which is not less than fifty (50) percent greater than that given in Table 10-2. Not more than four (4) separate fixtures shall be connected to or discharged into any one (1) grease trap.

For the purpose of this section, the term “fixture” shall mean and include each plumbing fixture, appliance, apparatus, or other equipment required to be connected to or discharged into a grease trap by any provision of this section.

1011.5 Each fixture discharging into a grease trap shall be individually trapped and vented in an approved manner. An approved type grease trap may be used as a fixture trap for a single fixture when the horizontal distance between the fixture outlet and the grease trap does not exceed four (4) feet (1.2m) and the vertical tailpipe or drain does not exceed two and one-half (2 ½) feet (0.8m).

1011.6 Grease traps shall be maintained in efficient operating condition by periodic removal of the accumulated grease. No such collected grease shall be introduced into any drainage piping, or public or private sewer.

1011.7 No water-jacketed grease trap or grease interceptor shall be approved or installed.

1011.8 Each grease trap shall have an approved water seal of not less than two (2) inches (50.8 mm) in depth or the diameter of its outlet, whichever is greater.

1011.9 Waste in excess of one hundred-forty (140)°F, (60)°C shall not discharge into a grease trap.

1012.0 Grease Interceptors for Commercial Kitchens  
When grease interceptors are required, a recommended sizing criteria is provided in Appendix A.

1013.0 Food Waste Disposal and Dishwasher Prohibited  
Unless specifically required or permitted by the Administrative Authority, no food waste disposal unit or dishwasher shall be connected to or discharge into any grease trap.

Note: Each interceptor (clarifier) shall be properly vented.

1008.5 Location  
Each interceptor (clarifier) cover shall be readily accessible for servicing and maintaining the interceptor (clarifier) in working and operating condition. The use of ladders or the removal of bulky equipment in order to service interceptors (clarifiers) shall constitute a violation of accessibility. Location of all interceptors (clarifiers) shall be shown on the approved building plan.

1009.0 Slaughter Houses, Packing Establishments, etc.  
Every fish, fowl, and animal slaughter house or establishment and every fish, fowl, and meat packing or curing establishment and every soap factory, tallow rendering, fat rendering and hide curing establishment, or any other establishment from which considerable amounts of grease are likely to be discharged into any plumbing system, sewer system, or private sewage disposal system, shall be connected to and shall drain or discharge into a grease interceptor (clarifier) of an approved design for this use.

## 1010.0 Grease Traps

- 1011.1 When, in the judgment of the Administrative Authority, waste pretreatment is required, an approved type grease trap complying with the provisions of this section shall be installed in the waste line leading from sinks, drains, and other fixtures or equipment in establishments such as restaurants, cafes, lunch counters, cafeterias, bars and clubs, hotel, hospital, sanitarium, factory or school kitchens, or other establishments where grease may be introduced into the drainage or sewage system in quantities that can effect line stoppage or hinder sewage treatment or private sewage disposal. A grease trap is not required for individual dwelling units or for any private living quarters.
- 1011.2 No grease trap shall be installed which has an approved rate of flow of more than fifty-five (55) gallons per minute (3.5 L/s), nor less than twenty (2) gallons per minute (1.2 L/s), except when specially approved by the Administrative Authority.
- 1011.3 Each plumbing fixture or piece of equipment connected to a grease trap shall be provided with an approved type flow control or restricting device installed in a readily accessible and visible location in the tailpiece or drain outlet of each such fixture. Flow control devices shall be so designed that the flow through such device or devices shall at no time be greater than the rated capacity of the grease trap. No flow control device having adjustable or removable parts shall be approved.