
CHAPTER 22

Grease Traps

Guidance for grease interceptor sizing and design criteria

22.01 Introduction

Information contained within this document is based on standard industry practices and guidance found in both the 1997 International Plumbing Code (IPC) Commentary and the Uniform Plumbing Code (UPC) Appendix H. Location of grease traps shall be outside the building and provide easy access for cleaning and inspection.

22.02 Applicability:

These requirements are applicable to all commercial food service establishments including those that are undergoing:

- 1) New construction.
- 2) Interior remodeling to accommodate expansion or operational modifications.
- 3) Changes of ownership/occupancy.
- 4) Any facility which may be experiencing difficulty achieving compliance with maintenance and/or wastewater discharge limitations.
- 5) Any facility going through major changes in their menu.

22.03 Sizing Requirements:

Sizing methods described herein are intended to assist in determining grease trap/interceptor sizes that will afford the County's sanitary sewer system a minimum degree of protection against grease and other obstructing materials. In approving a customer's plumbing or grease interceptor design, the County does not accept liability for the failure of a system to adequately treat wastewater to achieve effluent quality requirements required. It is the responsibility of the generator and/or contractors to insure the appropriate level of treatment necessary for compliance with wastewater regulations.

Minimum acceptable grease interceptor sizing shall be accomplished as follows.

- a) Sizing according to formulas found in Section 22.03.01 below.
- b) Where sizing formulas result in determination of a grease interceptor less than 750 gallons in capacity, this minimum size is required wherever possible.
- c) In instances where it is physically impossible to install an outside grease trap, a letter must be submitted to the Stark County General Health District stating the reasons it cannot be installed and then a general review by the Health Department will follow.
- d) In the circumstance of "single service kitchens) with no food preparation (heat/serve only) and which use only disposable paper and plastic service utensils or an approved variance, a minimum 50 gallons per minute (gpm) flow rated or 100 pound grease retention mechanical grease trap with draw off may be used. The trap must meet PDIG 101 specifications. In these instances, the

22.03.02 Examples

EXAMPLE: A 75 seat restaurant is open from 4:00 pm. until 12:00 am.
It has a dishwasher and a fully equipped commercial kitchen on a normal street.

Method #1:

(Number of meals)x(waste flow)x(retention)x(storage)= size requirement
[(75)(1)] x (6 gallons) x (2.25 hours) x (1) = 1125 gals.

Method #2

(# seats)(gal/meal)(storage factor)(hours open/2)(loading factor) = size
(75) (5) (1.7) (8/2) (0.5) = 1275 gals.

22.04 Construction/Installation:

All permitting, construction, and inspection activities must be completed in accordance with the Stark County Plumbing code. Additionally, the following specifications must be incorporated into grease interceptor design.

- a) The grease interceptor shall be constructed with a minimum of one baffle
- b) Grease interceptors are to be installed at a minimum distance of 10 ft. from sinks and dishwashers to allow for adequate cooling of the wastewater. Water temperatures must be less than 140 degrees prior to entering grease interceptor.
- c) All grease bearing waste streams should be routed through an appropriate grease interceptor, including: three-compartment sinks, pot/pan sinks, soup kettles, hand-washing sinks, dishwashers, mop sinks and floor drains. Notable exceptions: drains that receive "clear waste" only, such as from ice machines, condensate from coils and drink station may be plumbed to the sanitary system without passing through the grease interceptor with the condition that the receiving drain is a minimum of two inches above the finished floor.
- d) All concrete grease interceptors will be equipped with a minimum of one 20"inch diameter access hole, and additional access holes at the inlet and outlet sides of the tank to ease cleaning. All interceptors shall be vented.

22.05 Customer (Generator) Responsibilities:

It is the responsibility of the customer (waste generator) to insure compliance with Stark County Metropolitan Sewer District discharge limitations.

Hazardous wastes, such as acids, strong cleaners, pesticides, herbicides, paint, solvents or gasoline shall not be disposed of where they would go through grease interceptors or grit traps. Care must be taken in system design when commercial dishwashers are discharged through a grease interceptor. Dishwashers use detergents and elevated water temperatures that will melt grease. If the interceptor is either too small or too close to the commercial dishwasher, grease may pass through the interceptor and into the collection system.

Generators are responsible for maintaining grease interceptors in continuous proper working condition, by removing the oil and grease buildup in the interceptor a sufficient intervals to insure compliance with, Stark County Metropolitan Sewer District Rules and Regulations Chapter 3, Section 3.02.13. Further, generators are responsible for inspecting, repairing, replacing, or installing apparatus and equipment as necessary to ensure proper operations and function of grease interceptors and compliance with discharge limitations at all times.

The Stark County Metropolitan Sewer District and the Stark County General Health District requires grease trap/interceptor maintenance records be maintained on site for review and inspection by each agency for the life of the system.

The use of enzymes, solvents, and emulsifiers are prohibited, as they will only change the form of grease allowing it to be carried out of the trap/interceptor with the wastewater and deposited in the collection system.

End of Chapter