



City of Mt. Juliet

Public Works Department

Design Criteria for Grease interceptors

- (1) *Construction.* Interceptors must be constructed of durable, watertight materials, usually concrete, with sufficient structural load-bearing capacity for use in traffic areas. Interceptors should be designed with at least two compartments separated by a full-width baffle. The baffle should be located $2/3$ to $3/4$ from the influent wall and extend above the liquid level. Liquid depth in the trap should be at least 42 inches.
- (2) *Access.* Access for cleaning should be provided by two 24-inch diameter manholes terminating 1 inch above final grade with sealed cast iron frames and cover. Manholes should be located above the inlet and outlet tees.
- (3) *Inlets and Outlets.* Sanitary tees should be installed vertically on the inlet and outlet pipes. Tees should be not less than 4 inches in diameter. A pipe nipple with open top should be installed in the top of the tee and should terminate 6 inches below the roof of the trap. The inlet tee should have a vertical pipe drop extending 24 inches below the water surface. The outlet tee (**6 inch**) should have a vertical pipe drop extending to 12 inches off the floor bottom. The elevation of the inlet pipe should be approximately 2.5 inches above the elevation of the outlet pipe.
- (4) *Location.* Interceptors should be located just outside the restaurant or kitchen in an easily accessible location out of the way of normal traffic. However, the interceptor should not be located near the flow from rainwater down spouts or other storm water conveyances. The interceptor must not be located in flood prone areas. Outdoor installation is preferred due to accessibility.
- (5) *Prohibited Discharges.* Sanitary wastewater (black water) shall connect to the drain line downstream of the grease interceptor. Garbage grinders are not recommended. If garbage grinders are allowed, they should be connected to the grease interceptor and the size of the interceptor increased accordingly.
- (6) *Sizing.* Interceptors should be designed to provide at least 2 hours detention time at the design flow rate, modified by a loading factor that takes into account the type or location of the restaurant.
- (7) *Sampling Access.* The main parameter of concern is oil & grease. Technically the oil & grease sample must be collect in the same container it will be analyzed. Thus, their needs to be access for a person to place a one-liter, wide-mouth, glass container and retrieve a sample. For new facilities, it is recommended that a sample drop box (effluent of interceptor goes out of interceptor into a 2 ft x 1 ft x 2 ft in ground tank where the wastewater falls approximately 2 ft before it is discharged to collection system) be installed. For existing facilities, the only option is pumping sample from cleanout or effluent T; or getting a slender sample container (2.5" or less diameter) that can fit into effluent T opening. The control authority can request that a sample access point be made available for existing facility.