



INDUSTRIAL PRETREATMENT PROGRAM

Food Service Establishment

Best Management Practices (BMPs)

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The City of Meridian owns, operates and maintains miles of wastewater collection pipe that every day deliver approximately 6-7 million gallons of raw sewage to its treatment facility (Wastewater Resource Recovery Facility) located along 5 Mile Creek. The facility processes that wastewater and discharges clean water called effluent into the creek under strict regulations and requirements imposed by a federal permit issued to the City of Meridian by the Environmental Protection Agency (EPA). In order to protect the treatment facilities and the waterway from toxic, hazardous and untreatable pollutants, the City's Industrial Pretreatment Program conduct facility inspections, sample monitoring, and educational outreach activities throughout the City to ensure compliance with Industrial Users (IUs) sewer discharge regulations.

Fats, Oil, & Grease, FOG for short, have negative impacts on our wastewater collection and treatment process systems. Blockage of the sanitary sewer system; the EPA has determined most sanitary sewer system blockages are caused from buildup of FOG in the collection system pipes, causing sewer manholes to overflow raw sewage into public streets, homes and businesses causing serious public health safety conditions. High concentration levels of FOG in wastewater damage mechanical lift station pumping equipment and complicate treatment processes located at the Wastewater Resource Recovery Facility.

PURPOSE

The development and implementation of Best Management Practices (BMPs) for Food Service Establishments is recognized by the EPA as an effective and flexible tool to limit the discharge of undesirable pollutants such as grease to the sanitary sewer collection system and Wastewater Resource Recovery Facility.

Ensuring that your grease abatement equipment is installed, properly maintained and most importantly cleaned on schedule is fundamental to avoiding blockages, backups, spills and enforcement action by federal, state or city against your business. The discharge of GREASE to the sewer system is an illegal action set forth by Meridian City Code (MCC).

1. STANDARDS

Title 9, Chapter 2 *SEWER PRETREATMENT* sets forth uniform requirements for users of the Wastewater Resource Recovery Facility for the city of Meridian and enables the city to comply with all applicable state and federal laws, including the clean water act (33 United States Code section 1251 et seq.) and the general pretreatment regulations (40 CFR, part 403).

Prohibited Discharge:

- Fats, Oil, & Grease in amounts that can or may cause an obstruction to the flow in a sewer.
- Direct introduction of enzymes, bio-additives, emulsifying agents or other similar chemicals into an interceptor to eliminate or reduce frequency of cleaning.

BEST MANAGEMENT PRACTICES

Maintenance

Standard Interceptor Vault: Clean the interceptor routinely; 60 to 90 day cleaning schedules are typical unless a facility can demonstrate a less frequent schedule is adequate. You must secure a cleaning service contract with a qualified pumping contractor, to conduct routine inspections and clean the interceptor (remove the FOG and transport to a disposal facility). You are legally responsible (liable) to ensure the proper disposal of FOG removed from your interceptor by your service provider. Interceptors must be cleaned routinely to ensure that FOG accumulation does not limit retention time and separation efficiency resulting in pass through of FOG to the sanitary sewer.

Note: The cleaning frequency is a function of the type of food service establishment, size of the interceptor, and the volume of kitchen cleanup wastewater flow discharged by the establishment.

Electro-mechanical automatic trap: Removes FOG collected inside the unit into a separate container; empty FOG collection container daily. Clean the solids strainer basket daily. Clean wiper blades weekly. Never remove flow restrictor from unit. Keep a cleaning log, new log sheets can be obtained from the city pretreatment office. Grease abatement equipment cleaning records are required to ensure that the proper maintenance is performed on a regular basis. Keep cleaning log sheets on site available for review by the city inspectors.

Note: Adequate maintenance ensures maximum efficiency of the grease abatement unit.

Passive Type Grease Trap is NOT ALLOWED in new building construction. A facility with an existing passive type grease traps is required to clean weekly unless the facility can demonstrate a less frequent schedule is adequate. Keep a cleaning log, log sheets can be obtained from the city pretreatment office. Grease abatement equipment cleaning records are required to ensure that the proper maintenance is performed on a regular basis. Keep cleaning log sheets on site available for review by city inspectors.

Note: If the grease trap is not providing adequate protection, the City can require installation of additional grease abatement equipment.

Kitchen Operation

- Witness all grease trap or interceptor cleaning to ensure proper cleaning.
- **Do Not** put enzymes or additives directly into interceptors or traps in order to reduce your cleaning schedule.
- Train kitchen staff to scrape excess food particles and liquid grease into dry trash or a separate container. Use paper towels to wipe excess grease from utensils and work areas.
- Post FOG poster above sinks and dishwasher.
- If clean-up sink drains to a under the sink trap, lower final discharge temperature as not to melt grease and pass thru trap.
- Clean up grease spills with absorbent materials.

- Clean hood filters and kitchen floor mats, discharge wastewater to your interceptor.
- Collect used grease and oil in a proper container. Check for possible leaks, avoid overfilling the grease drums. Ensure drum lids are tight.

Measurement Criteria

All food service establishments are inspected for compliance with BMP’s on a routine basis. The observation measurement criteria to determine the amount of grease contained in a grease interceptor is provided in Table 1. All grease interceptors are measured by city pretreatment inspectors trained in the proper use of tools and techniques required to determine the volume of grease. Both chambers are measured; the largest measurement dictates the maintenance. Judgment of on-site inspector during facility compliance inspection is final. Failure to respond as directed may result in Administration Enforcement Remedies by the city as per Title 9, Chapter 2 *SEWER PRETREATMENT* City Code.

Table 1
Grease Interceptor Inspection Criteria

Hydraulic capacity (%)	Condition	Inspector Action
0-25%	Good	Check records for last date cleaned Maintain normal schedule
>25%	Poor	Advise facility to clean Revision of cleaning schedule required
>26%	Non-Compliance	Administer NOV Facility re-inspection

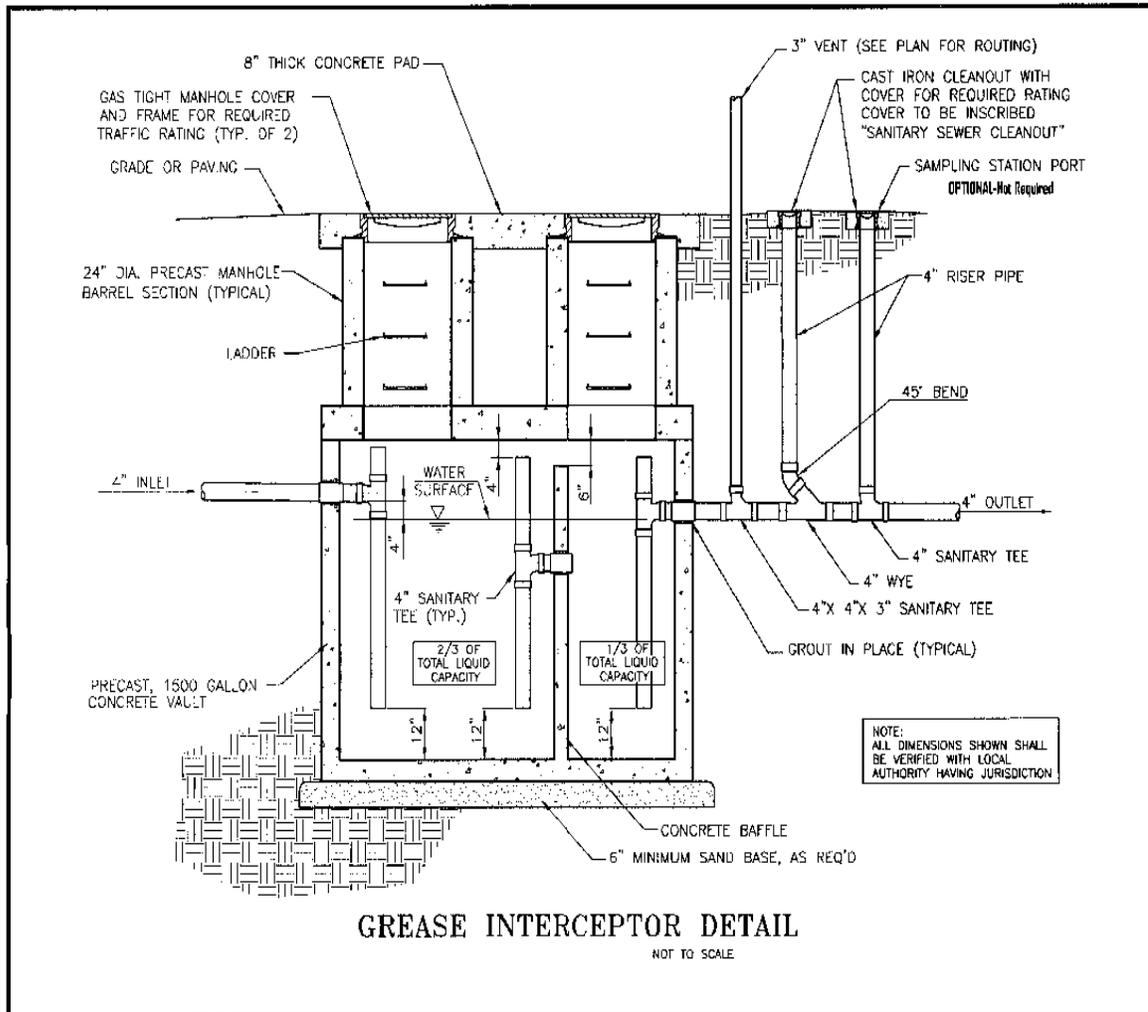
2. TECHNICAL INFORMATION

A grease interceptor is a large capacity underground double chamber vault connected to the discharge of wastewater generated only from kitchen operations. The large capacity of the vault slows down the flow rate of wastewater, allowing oil and grease to separate. Grease will float to the surface and solid material to settle to the bottom of the chamber. These vaults are required to be installed outside the building as near as possible to the source of oil/grease. Oil and grease floats on the water surface and accumulates in each chamber behind the grease retaining fittings (inlet tee and outlet tee connections figure 1) and the wall separating the compartments. The oil and grease will be removed during routine grease interceptor cleanings. Solids material in the wastewater that does not float will be deposited on the bottom of the grease interceptor and will need to be removed during routine grease interceptor cleaning. The inlet tee and outlet tee pipes extend down into the water to within 12-14 inches of the bottom of the interceptor. Because grease floats, it generally does not enter the tee pipe and is not carried into the next compartment. The tee pipes extend above the water surface to provide air

relief. Flow exits the interceptor through the outlet pipe and continues on to the sanitary sewer system.

Standard Drawing of a Grease Interceptor

Figure 1.
Grease Interceptor Detail



3. NEW CONSTRUCTION

Building Standards

All new construction commercial building and tenant improvement architectural design plans submitted to the city are reviewed and approved by city pretreatment staff. Grease abatement equipment will be required if determined necessary at that time. The city's approved standard for a FSE grease interceptor is 1500 gallon capacity (minimum), double chamber in-ground vault. Interceptors are required for high volume fast food or full menu establishments and large commercial establishments such as hotels, hospitals, factories, or school kitchens.

Automatic Grease Interceptor (AGI)

In some instances, an interior AGI (point source) may be allowed for small volume fast food or take-out FSEs with limited menus, paper plate service, no automatic dinner dishwashing, and/or minimal seating capacity. Electro-mechanical automatic unit types are the accepted standard. These are generally referred to as Automatic Grease Interceptor (AGI). All specified devices must meet local plumbing code requirements.

4. SERVICE PROVIDERS

The following independent vendors provide cleaning services for FSE in the local area.

NOTE: Service Providers are NOT endorsed by the City of Meridian.

ABC Septic Service	888-2474
Express Plumbing	941-8718
Master Rooter	888-9191
Roto Rooter	888-6869
ZZZ Sanitation	362-6100