

Fats, Oils, and Grease (FOG) Management



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**GREASY
BUFFOONS**



The History of FOG

- **Environmental Protection Agency (EPA)**
 - In 2004 the EPA released a report to Congress showing that 47% of all reported sewer blockages in the US were a result of FOG
 - In 2007, the EPA launched a FOG Control Program for Food Service Establishments as part of the National Pretreatment Program
 - FOG management is part of the EPA CMOM Program (Capacity, Management, Operation, Maintenance) (Sewer)



FOG Programs

- Protect Public Sewer



- Water Resource Protection



- Protect Public Health and Safety



Every Establishment is unique and requires its own FOG Management Program



Equipment



Hours



Size



Menus





THE PLAYERS!

- Board of Health
- Municipal Plumbing Inspector
- Municipal Sewer Department



The Regulations

- **Sewer Use Ordinance**
 - **EPA CMOM Program**
 - **Discharge Limits (100 MG/L)**
 - **Other (Commissioner Discretion)**
 - **Fines**
 - **Inspections**

The Regulations

- **Plumbing Code 248 CMR 10.09 Interceptors, Separators and Holding Tanks**
- **The following fixtures need to be trapped under the code:**
 - pot sinks & scullery sinks with bowl depths over 10 in.**
 - dishwashers, pre-rinse sinks, soup kettles,**
 - wok stations, automatic hood washing units**
 - floor drains & floor sinks**

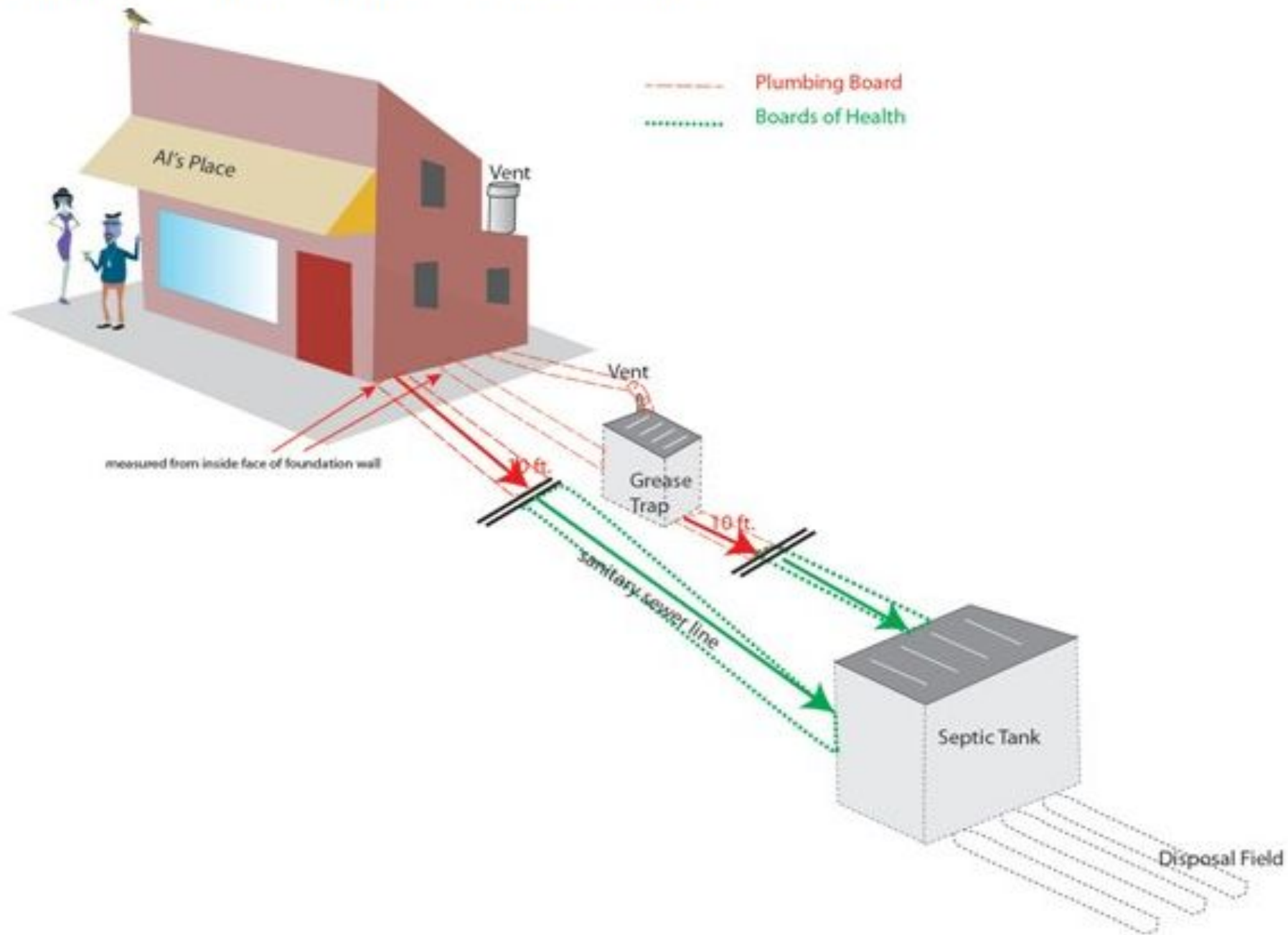


The Regulations

- Plumbing Code 248 CMR 10.09 Interceptors, Separators and Holding Tanks
 - **Size Calculations, Unit Requirements, & Installation Requirements**
 - **External interceptors are a dedicated system**
 - **Cast iron pipe**
 - **Venting**

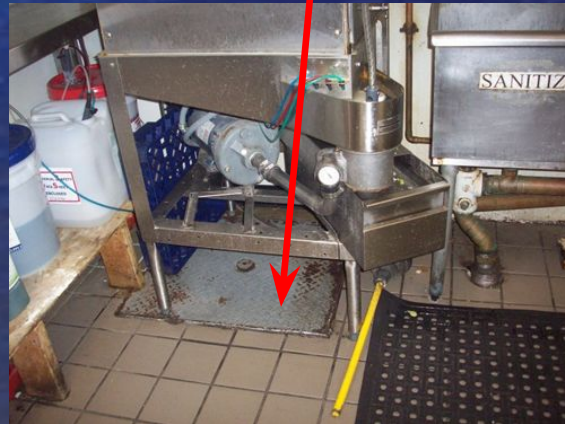
Units and other equipment must be approved by the Board of Plumbers and Gasfitters

Diagram of commercial grease trap oversight



- Readily Accessible

- Direct access without the necessity of removing or moving any panel, door, lock or similar obstruction



- Fog Signage

IMPORTANT: This grease trap/interceptor shall be inspected and thoroughly cleaned on a regular and frequent basis. Failure to do so could result in damage to the piping system, and the municipal or private drainage system(s).

The Plumbing Code may change in 2024

The Regulations



Board of Health – FDA Food Code 2009

- **Maintenance – 5-205.15 System Maintained in Good Repair**

A plumbing system shall be:

- **A) Repaired according to law and**
- **B) Maintained in good repair**

PHYSICAL FACILITIES shall be maintained in good repair.

- **Accessibility 5-402.12 Grease Trap**

- **If used, a grease trap shall be located to be easily accessible for cleaning**

FOG System - On-Site Septic Systems Title V

- Location & Design

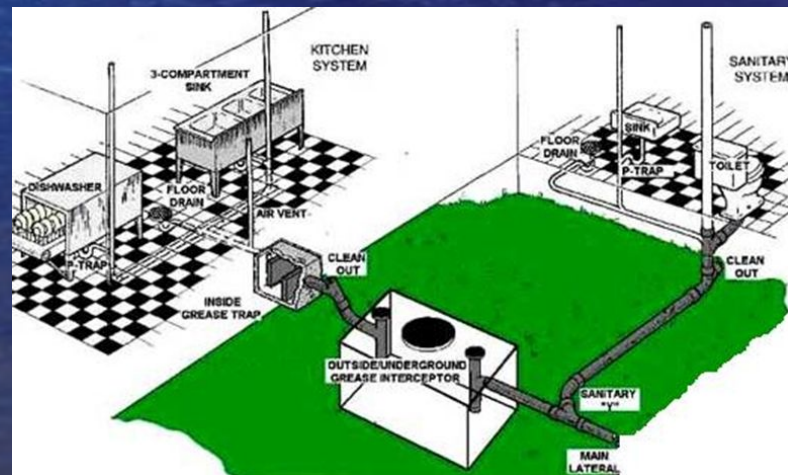
15.211 - Same setback requirements as septic tanks

15.221 – Similar general construction requirements as septic tanks

15.230 – Pretreatment Units – Only Kitchen flow, outlet T's are inches off the bottom of the tank, Min 1000 Gal Tank

15.203 - Design flow: 15 gal. per seat per day for Food Service

15.351(2) – System Pumping and Routine Maintenance



Title V CMR 15.351(2)

- External grease traps should be inspected monthly and must be cleaned by a licensed septic hauler whenever the level of grease is 25% of the effective depth of the trap, or at least every three months, whichever is sooner.

25% Rule

$$\text{Depth of FOG} + \text{Depth of Solids} = \text{"X"}$$

$$\text{Depth of Interceptor} \times 0.25 = \text{"Y"}$$

If "X" is greater than "Y" the interceptor needs to be pumped

- **There are 2 main types of FOG containment:**
 - ◆ **Primary or Point Source Interceptors (Internal)**
 - ◆ **Secondary or External Interceptors**



- Interior Systems



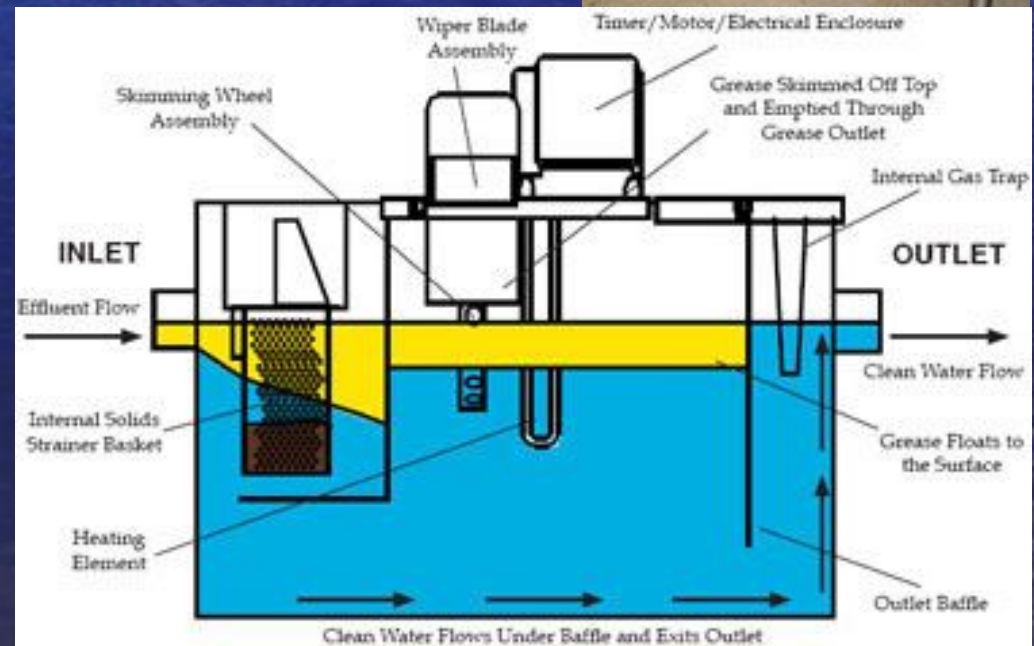
- Other Fixtures



FOG Management

FOG System Alternative Technologies

- Automatic grease recovery units
 - Solids basket
 - Timer or sensor
 - Grease collector
 - Heating element
 - Wiper blade





FOG Management

FOG System Alternative Technologies

- Polyethylene units
 - Interior (Point Source) Traps
 - Lightweight
 - Secondary Containment (Exterior)
 - Lightweight and compact
 - High capacity
 - Some less than 1000 Gal.
 - Buoyancy



Things to Look for on inspection:

- Location of components
- Proper Signage
- Accessible
- No storage on traps - locked and secured to prevent odors
- Biological or Chemical Treatments?
- Best management practices
- Daily maintenance requirements
- Logs

Food Establishment Contractors

- Hoods
- Used cooking oil
- Septic Haulers
- Plumbers and Drain Cleaners



Challenges and Considerations

- Inter-Municipal Agreements
- Program Implementation
- Dye Testing



Contact Me



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