



# PLUMBING IN COMMERCIAL FOOD ESTABLISHMENTS

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Plumbers and Gasfitters Local 12*

# INTRODUCTION

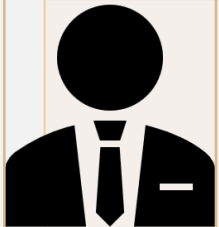
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Training Director for  
Local 12 since 2007



Trained over 300  
apprentices and 1500  
journeymen



Former Plumbing  
Board member



Master Plumber

# TOPICS

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Sanitary Piping

Water Piping/Cross Connection



# SANITARY PIPING

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Sanitary piping is all the waste and vent piping for the plumbing fixtures in the kitchen and bars.



# GREASE INTERCEPTOR

Why do we need an interceptor?

Interceptors collect the fats, oils and grease from food preparation to pretreat the waste before it enters the plumbing system.



# PRE TREATMENT SYSTEMS



Large, pre-cast concrete grease traps

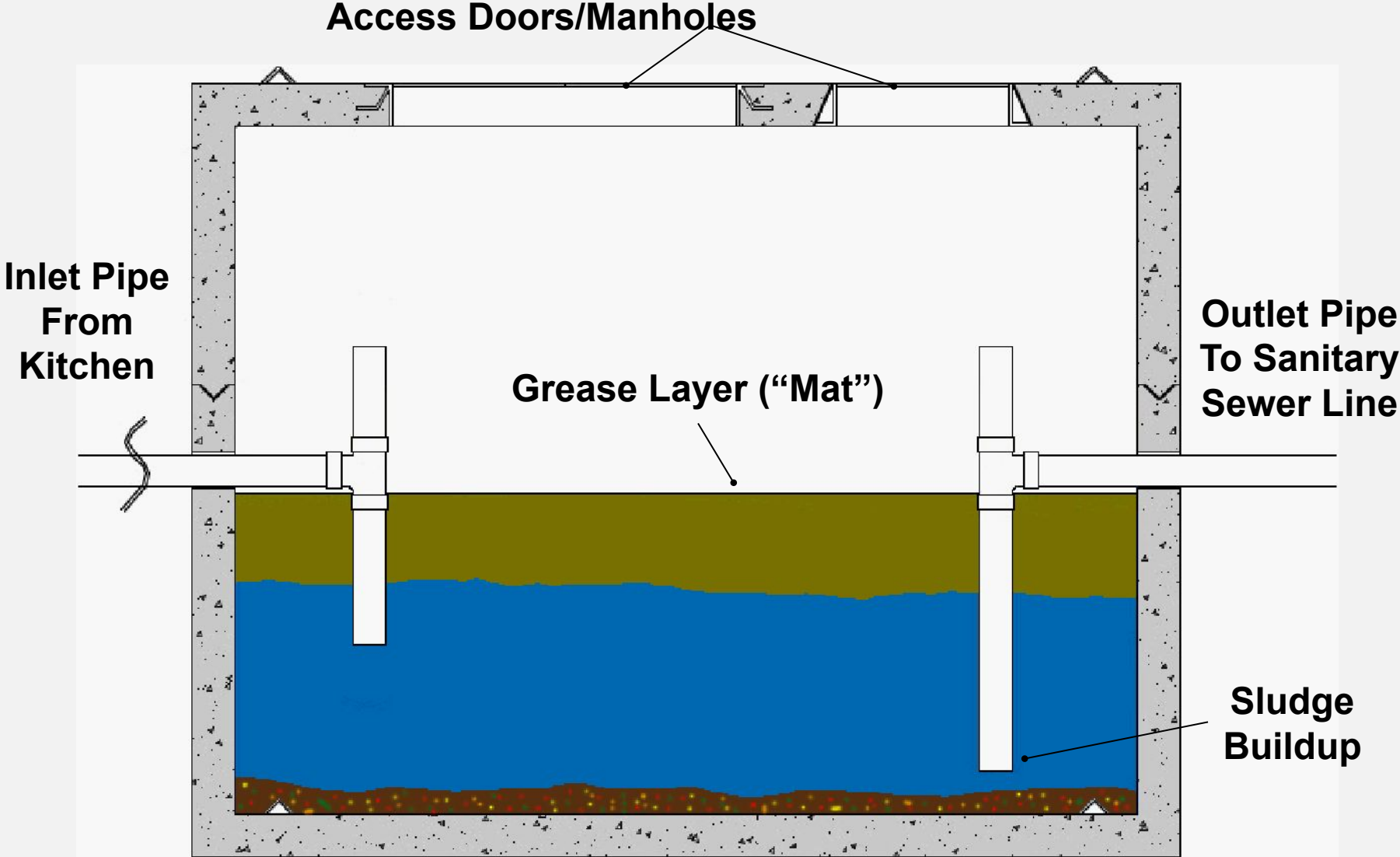


Passive, hand-scooped grease traps

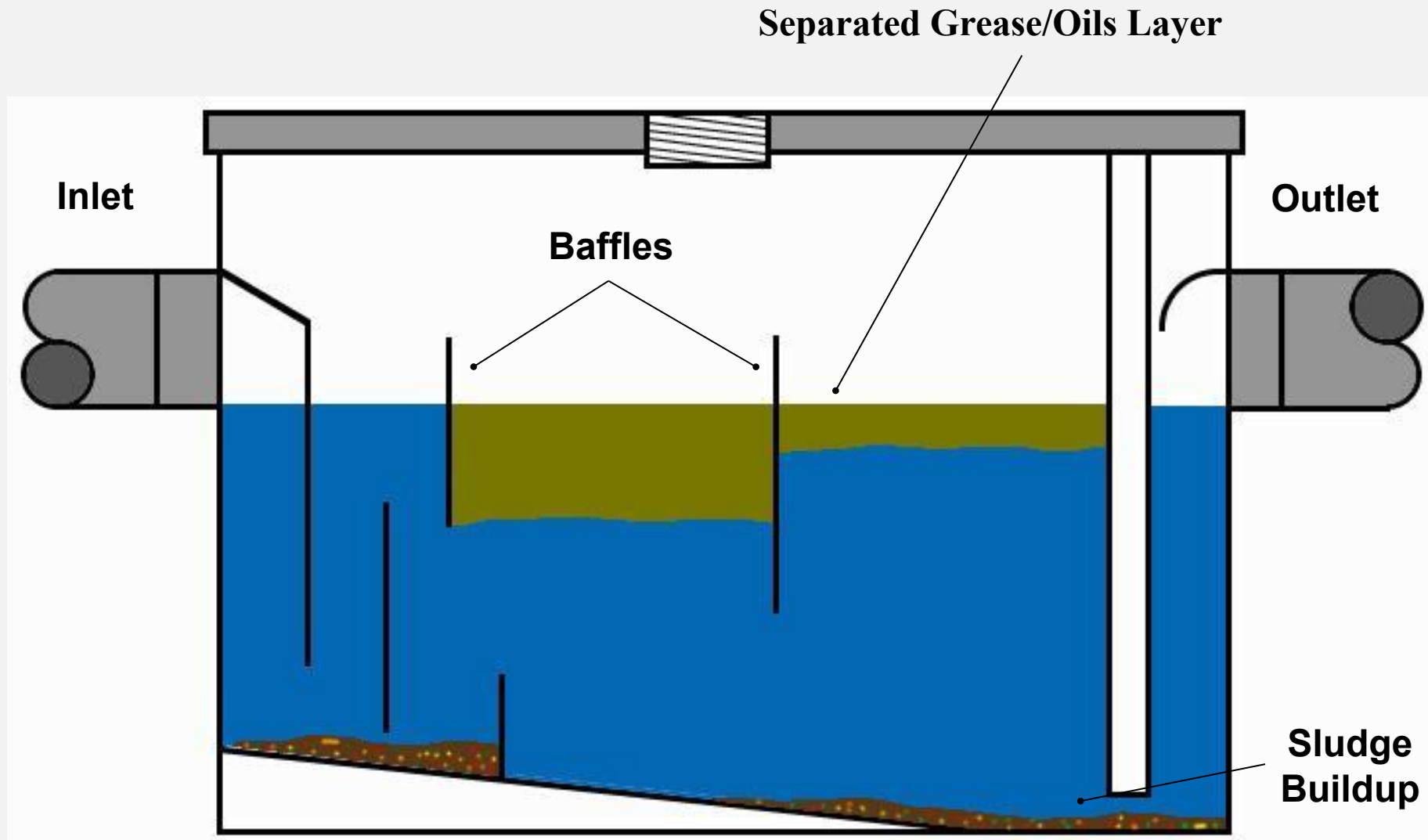


Automatic removal systems

# EXTERIOR GREASE INTERCEPTOR

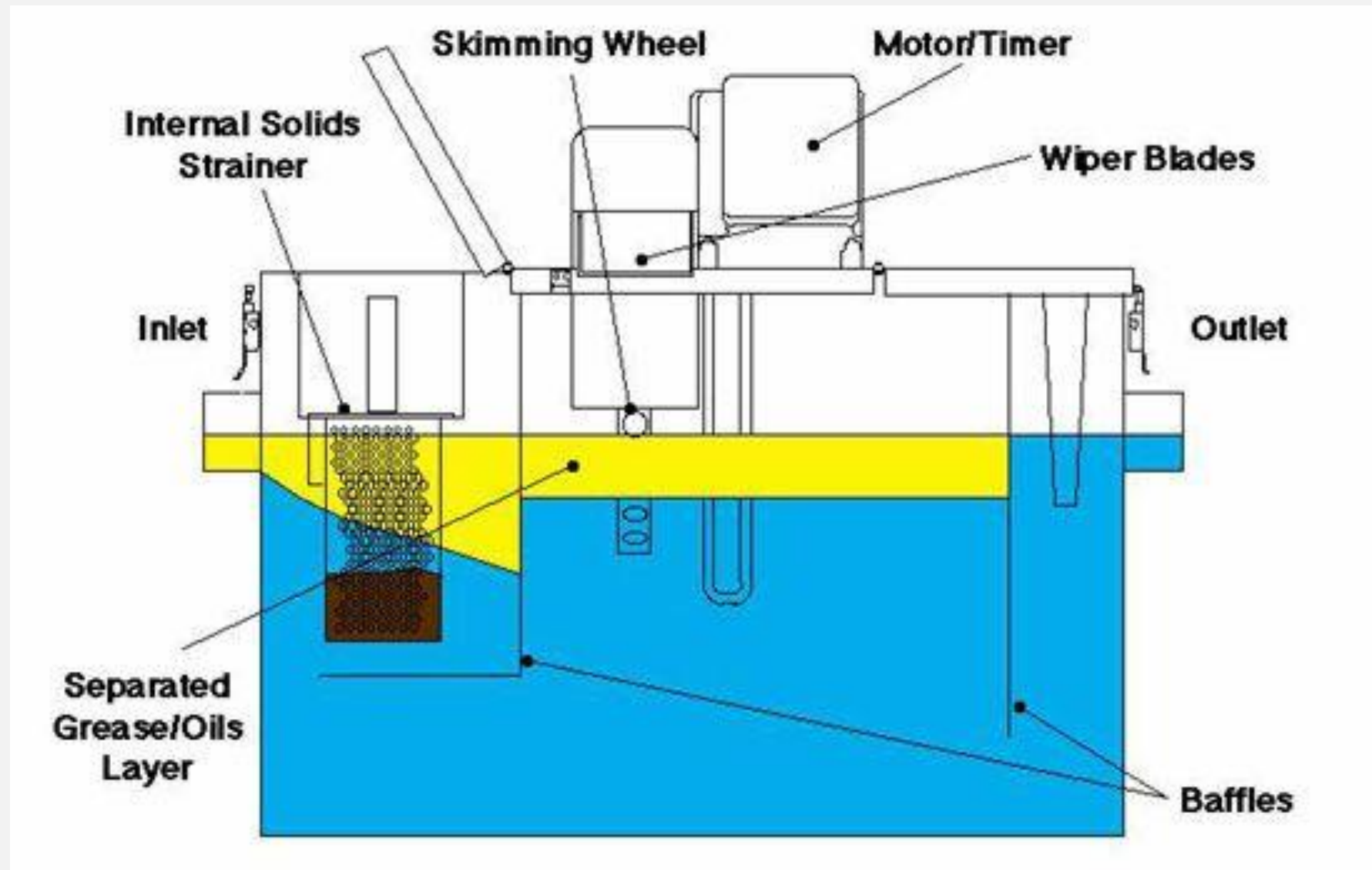


# PASSIVE GREASE INTERCEPTOR- “UNDER THE SINK”





# AUTOMATIC REMOVAL SYSTEMS- “UNDER THE SINK”



# GREASE TRAP INTERCEPTOR- PASSIVE







# FIXTURES TO BE PROTECTED BY INTERCEPTORS

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Plumbing Code

# POT SINK





# SCULLERY SINK





# DISHWASHERS



# SOUP KETTLE





# PRE-RINSE SINK – NO FOOD WASTE GRINDER

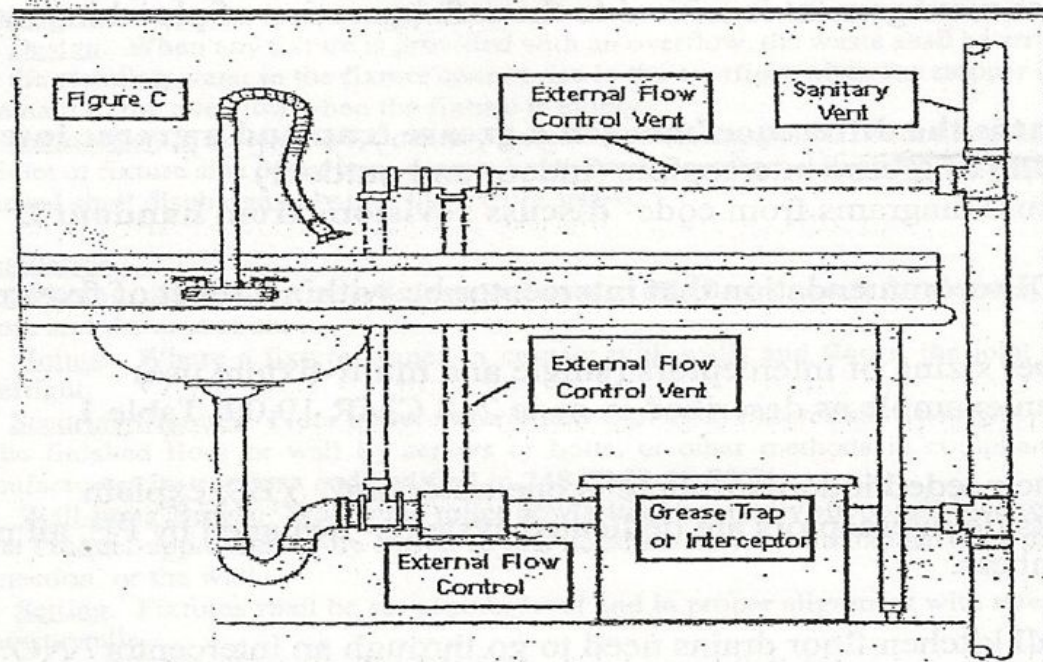


# PRE-RINSE SINK LESS DISPOSAL

## CORRECT

248 CMR: BOARD OF STATE EXAMINERS  
OF PLUMBERS AND GAS FITTERS

10.22: continued



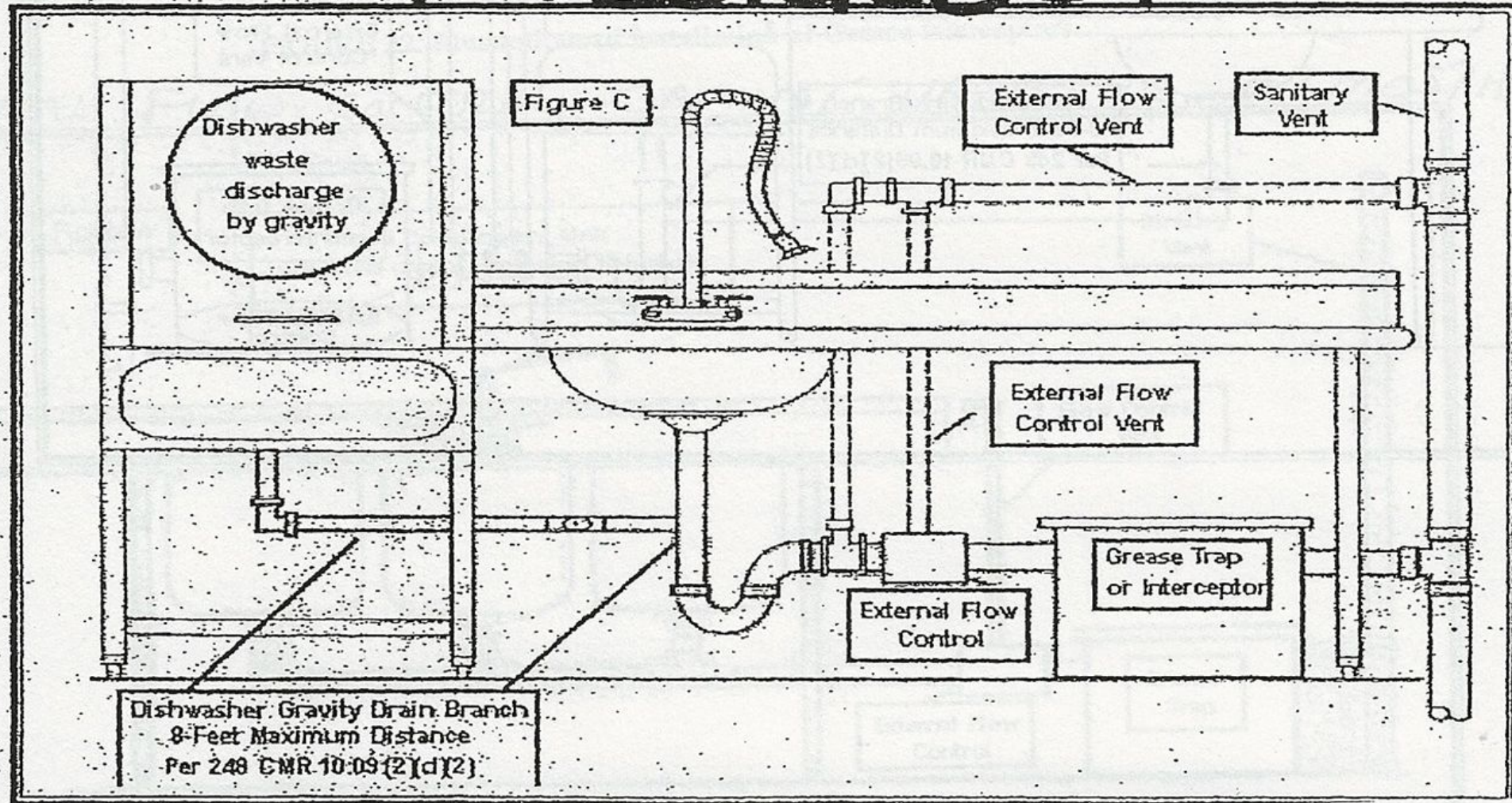
\* EXTERNAL FLOW CONTROL MUST CONNECT TO SANITARY VENT  
FIXTURE MUST BE TRAPPED AND VENTED



# DISHWASHER WITH PRE-RINSE SINK INCORRECT (NO AIR GAP)

10.22: continued

## INCORRECT

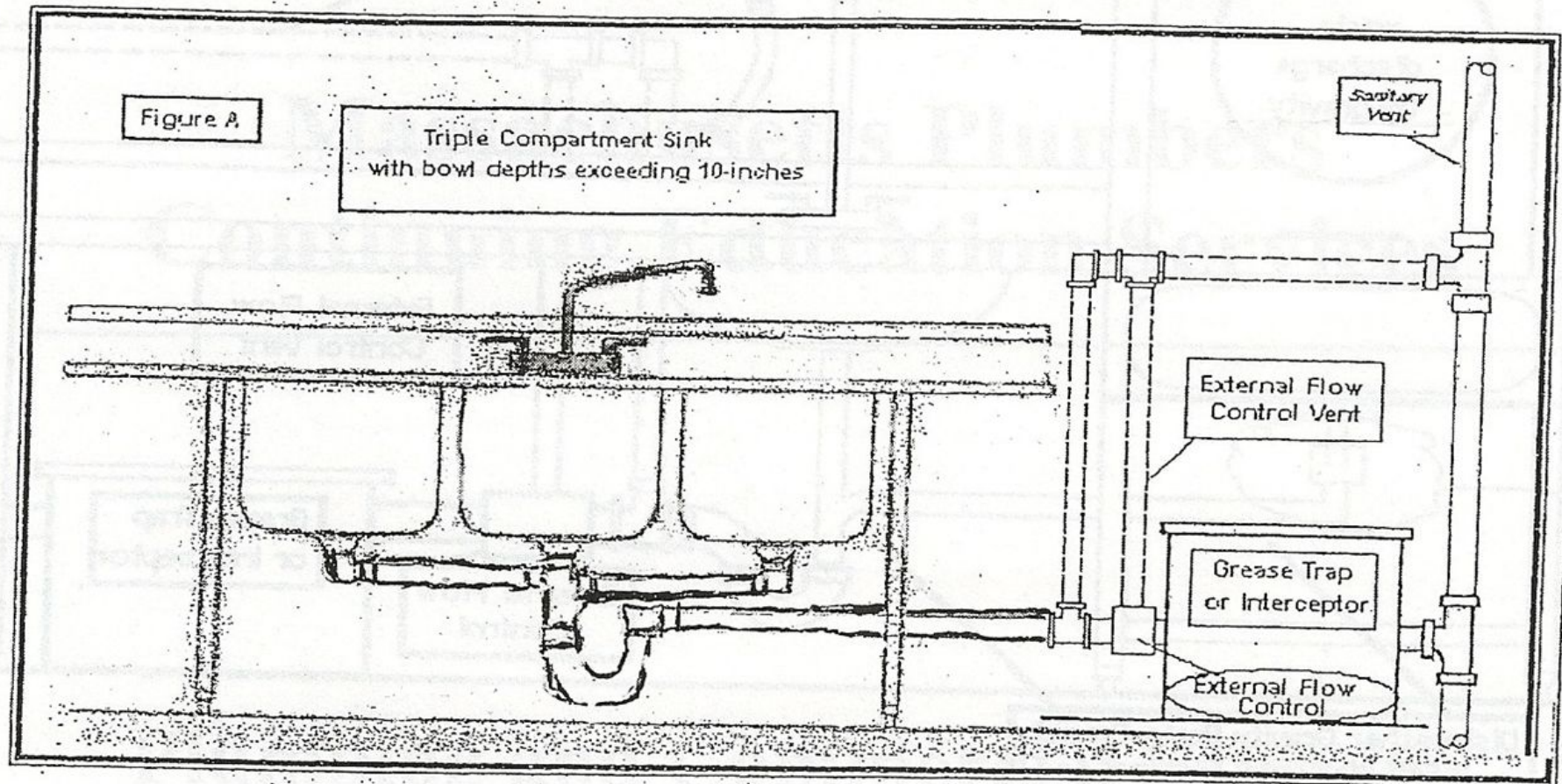




# TRIPLE SINK CORRECT

10.22: continued

FIGURE 22: Illustrations of Installation of Grease Interceptors.



# INDIRECT WASTE PIPING

# INDIRECT WASTE PIPING REQUIRED - REFRIGERATOR





# INDIRECT WASTE PIPING – WALK IN COOLER



# INDIRECT WASTE PIPING – ICE COMPARTMENT





# INDIRECT WASTE PIPING – ICE MAKING MACHINE



# INDIRECT WASTE PIPING – STEAM KETTLE





# INDIRECT WASTE PIPING – DOUBLE COMPARTMENT CULINARY/PRODUCE SINK



# AIR GAP OR AIR BREAK







# WATER PIPING

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Proper Connections and  
Cross Connections

# CROSS CONNECTION CONTROL REQUIREMENT AT DISHWASHER



# PROPER DISHWASHER PROTECTION





# COMMON KITCHEN CROSS CONNECTION



# PROPER SOAP DISPENSER PIPING







# HARD WATER

## In Food Establishments

### What is hard water?

- Hard water is caused by the water supply having a sufficient amount of minerals in it to cause a build up on or in plumbing fixtures.

### Solutions

- The most effective solution is to have the owner install a water filtration system to remove the minerals from the water coming into the establishment.





# PLUMBING INSPECTORS

- Inspectors are your partners in making sure the establishment is safe.
- When you see something that is out of the ordinary get them involved.



# QUESTIONS?

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