

GREASE HAULERS TRAINING
REGIONAL FOG PROGRAM

Hampton Roads Planning District Commission

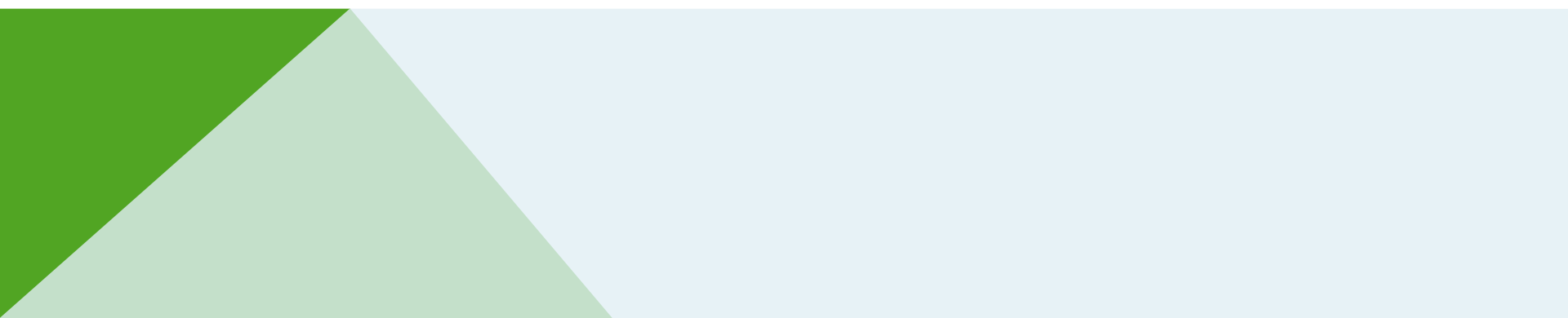


YOUR GO-TO RESOURCE FOR EVERYTHING GREEN IN HAMPTON ROADS

OBJECTIVE

To help Grease Haulers comply with the Regional Consent Order and ensure proper maintenance of grease control devices.

BACKGROUND

- In 2007, Special Orders of Consent were entered into between Virginia DEQ, HRSD and area localities to resolve Sanitary Sewer Overflows (SSOs).
 - Fats, Oils and Grease (FOG) causes or significantly contributes to two-thirds of all SSOs in our region.
 - Management, Operations and Maintenance (MOM) Programs were established to efficiently resolve SSOs.
 - FOG programs were developed with MOM principles to monitor and regulate FOG waste.
 - Food Service Establishments (FSEs) and Grease Hauler certification programs were established to teach FSE employees and Haulers about the ordinances and their responsibilities.
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WHAT IS FOG?

- Fats, Oils, and Grease
- Any combination of animal fats and/or vegetable oils that are used to prepare food, or are found in food.



THE FOG PROBLEM...

- When discharged into sewer lines, FOG accumulates and sticks to pipe walls causing blockages and backups in the sanitary sewer system.
- Significant sources of FOG are: residential homes, high-density housing complexes, and Food Service Establishments (FSEs), where cooking oil and residual food grease from dishes are improperly disposed of in drains.



WHAT IS A GREASE CONTROL DEVICE (GCD)?

- A Grease Control Device is a passive device that uses retention time and/or gravity to separate FOG and solids from kitchen wastewater.
- There are 3 types of GCDs...



Gravity Grease
Interceptor

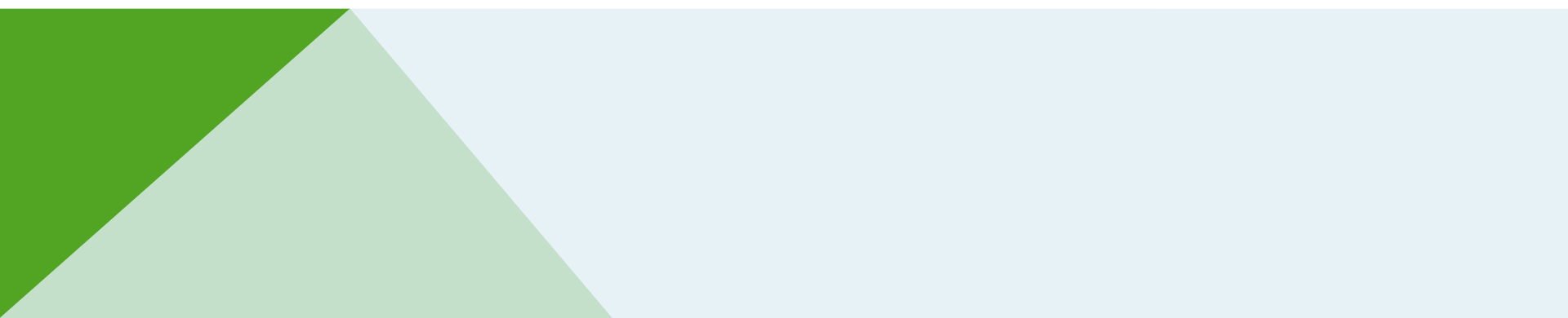


Hydromechanical
Interceptor (In-Floor
Grease Trap)



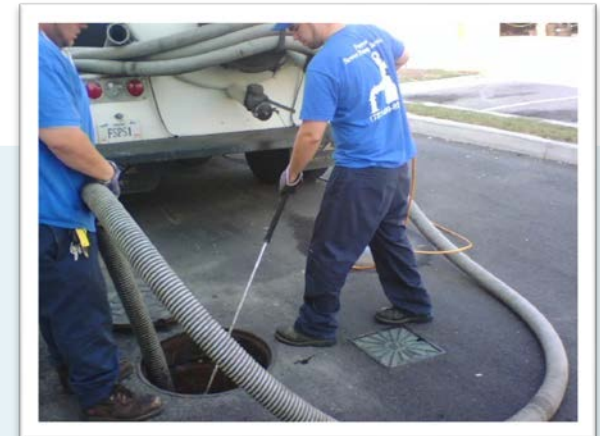
Hydromechanical
Interceptor (Under Sink
Grease Trap)

GENERAL GCD INFORMATION

- Hampton Roads localities have or are developing ordinances that require FSEs to properly dispose of FOG waste.
 - Any person cleaning GCDs must be certified under the HRPDC Regional FOG Program.
 - Any person pumping, collecting and hauling to an approved disposal facility must be permitted through that facility (i.e. HRSD).
 - GCDs shall be properly maintained at all times. A typical cleaning requires complete removal of all contents, including floating material, wastewater, and settled solids.
 - Proper and thorough documentation for grease disposal is required.
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GRAVITY GREASE INTERCEPTORS

- A Gravity Grease Interceptor must be cleaned every 90 days or when 25% or more full of FOG (whichever comes first).
- The FSE is responsible for ensuring the GCD is maintained regularly and that the maintenance is properly recorded and kept on site for 3 years.
- Remember yellow grease must not be discarded directly into the GCD. GCDs must not be used as containers for direct disposal of FOG waste.

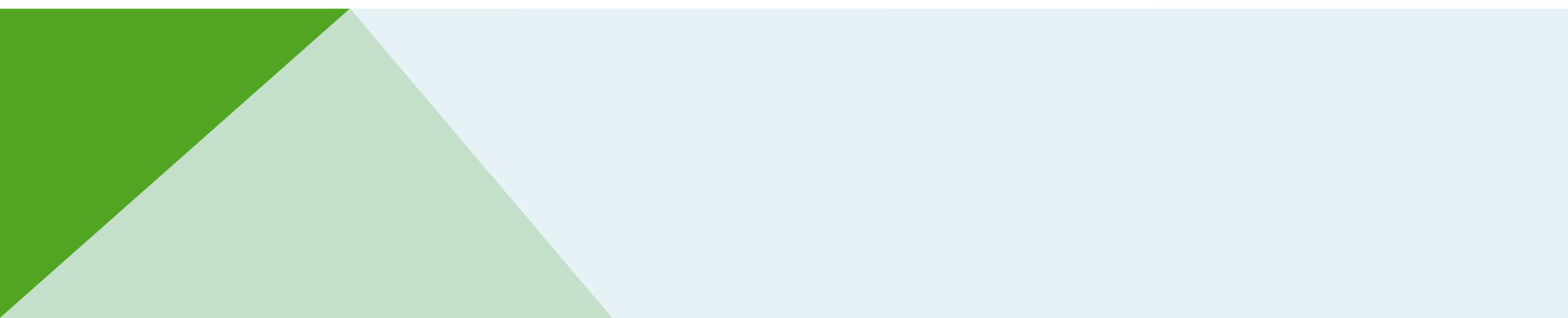


HYDRO-MECHANICAL INTERCEPTORS (GREASE TRAPS)

- Grease traps are smaller than gravity grease interceptors and are typically located inside, usually underneath the sink or in the floor.
- FSEs may have multiple grease traps; however, care should be taken to ensure that all the grease traps are maintained appropriately.
- In most localities, grease traps over 50 GPM in size should be cleaned by an approved grease hauler.
- FSE employees may clean grease traps under 50 GPM and dispose of waste in the solid waste (trash) container.
- Grease traps should be cleaned a minimum of once per week or when it is 25% full of FOG waste.



GREASE TRAP CLEANING – TOOLS & MATERIALS

- A large trash can and 2-3 trash can liners/bags (heavy duty) or sealable containers
 - Absorbent material (floor dry or clay kitty litter)
 - Proper hand tools and safety equipment for opening trap (allen wrench, screw driver, rubber gloves, etc.)
 - Tools for removing contents:
 - Scoop – for water and solids
 - Scraper (putty knife)
 - Wet/dry vacuum
 - Clean paper towels or cloth rags
 - Measuring device (small sludge judge, or clear plastic cup marked in inches, etc.)
 - Safety eyewear
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GREASE TRAP CLEANING – STEP BY STEP

- Carefully remove lid without damaging gasket
- Observe installation of internal parts to ensure proper reinstallation after cleaning
- Measure & document contents of trap in inches (total fluid depth, grease, and solids)
- Remove ALL contents of trap (by scooping or vacuuming the waste products) until grease trap is empty
- Do NOT use hot water, degreasers, or soaps to clean interior of trap
- Scrape all inside walls, baffles, and screens
- Inspect and note condition of tank, baffle, and all removable parts (schedule repairs or replacement as needed)



GREASE TRAP CLEANING – STEP BY STEP

- Make sure grease trap is properly reassembled
- Clean and reinstall rubber gasket (replace if necessary) and reposition lid on tank, ensuring screws are properly tightened
- Ensure enough absorbent material has been placed in bag to soak up all excess liquids
- Tie the bag and place in garbage (solid waste) dumpster or designated receptacle.

It is **ILLEGAL** to dump grease trap or kitchen waste into the sanitary sewer system (toilets, cleanouts, manholes, etc.), storm drains, ponds, or outdoor areas.



GREASE HAULER REQUIREMENTS

- **In most localities, Grease Haulers must have...**
 - A waste disposal truck inspection with the Virginia Health Department
 - Permit from an approved disposal facility (i.e. HRSD)
 - Successfully completed the FOG Regional Grease Hauler Training
- **To service an FSE in Hampton Roads, the grease hauler must have...**
 - FOG removal and GCD cleaning equipment
 - Disposal site information
 - Manifest documentation

*Check with your locality for specific grease hauler requirements

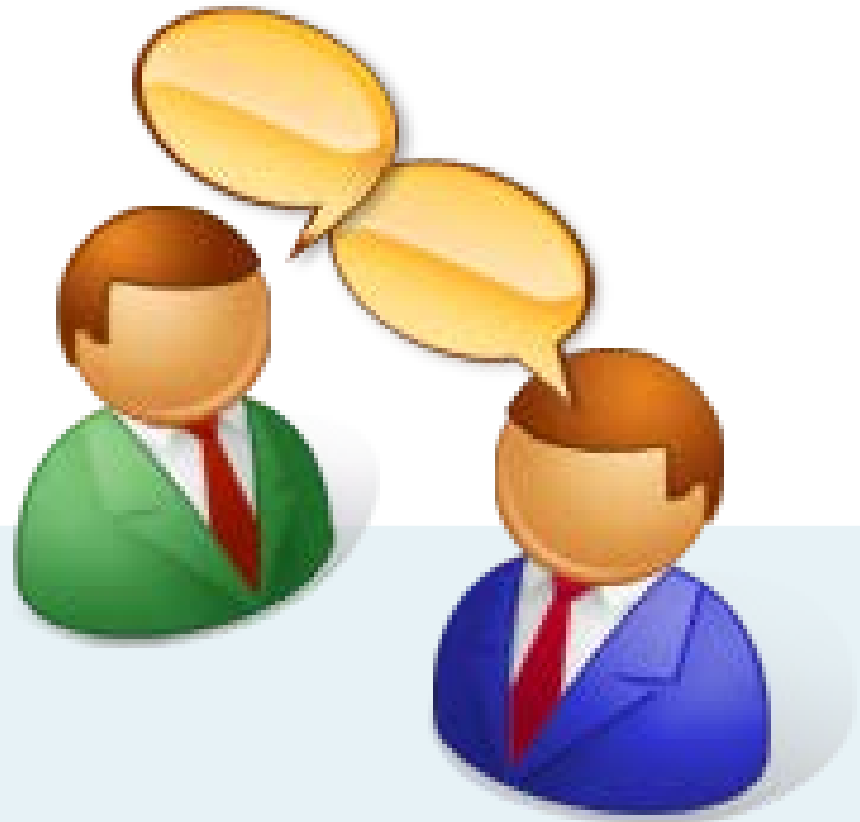
GCD SERVICE BEST MANAGEMENT PRACTICES

- The hauler and FSE should coordinate service dates and time for GCD cleanings.
- The hauler and FSE should maintain open communication regarding the GCD and GCD maintenance. *Communication items should include...*
 - GCD Structural condition and capacity.
 - Anticipation of seasonal fluctuations in FOG generation.
 - Determination of proper cleaning frequency.
 - Every 90-days for Gravity Grease Interceptors or total FOG accumulation reaches 25% (whichever comes first)
 - Every 7 days for Grease Traps or total FOG accumulation reaches 25% (whichever comes first)



GCD SERVICE BEST MANAGEMENT PRACTICES

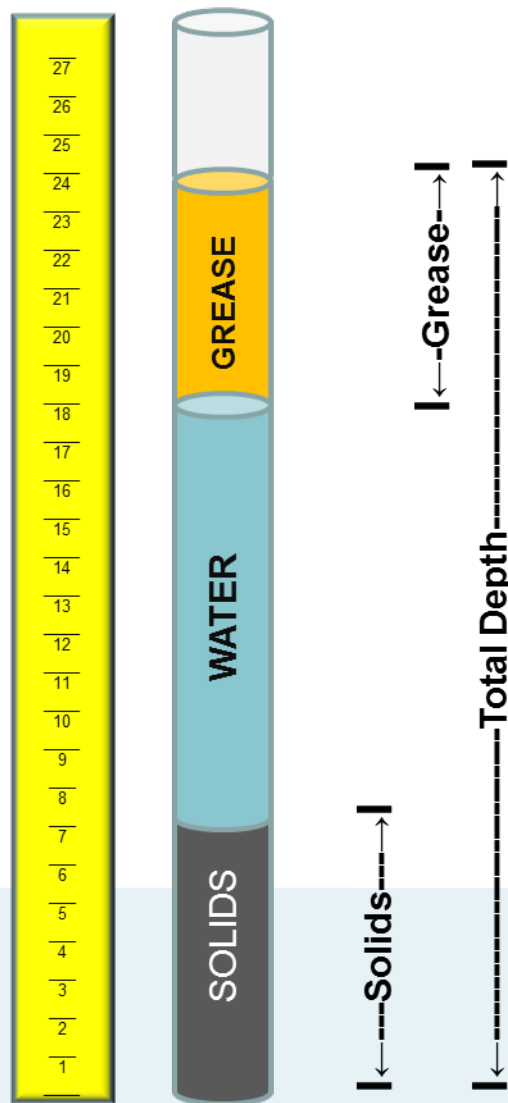
- A Sludge Judge or other appropriate measuring tool should be used to determine amount of FOG waste and settled solids prior to cleaning. If greater than 25%, the cleaning must be scheduled more frequently.



Sludge Judge Measurements for GCDs

These 3 measurements (in inches) need to be documented on the service ticket and left with the FSE.

Accuracy is very important and will be spot checked. Also, be sure to note any repairs or parts needed for the grease control device.



The measurements in this example are:

Solids - 7"

Grease - 6"

Total Depth - 24"

*These numbers are only an example, you will have to measure each time a GCD is cleaned.

RECORD SLUDGE JUDGE READINGS (AS ILLUSTRATED) AND A CONDITION REPORT ON EVERY SERVICE TICKET

GCD PUMPING/CLEANING AND INSPECTION PROCEDURES

- Upon arrival, the Hauler should contact FSE.
- Review the work with your customer:
 - Have they had any plumbing issues since date of last service?
 - Do previous readings indicate that a change in frequency is required?
- Measure and record the volume of settled solids and floating grease from the inlet side of the GCD prior to cleaning; if greater than 25% of the overall GCD volume, an increase in cleaning frequency is required. Hauler should note this on manifest, but FSE is responsible for authorizing the change.



GRAVITY GREASE INTERCEPTOR PUMPING/ CLEANING AND INSPECTION PROCEDURES

- Remove lid(s)
- Pump **the entire contents out of the interceptor** into an approved disposal container/truck
- Scrape or pressure wash interior of interceptor
- Perform GCD Inspection
- Complete the GCD maintenance record (manifest)



GRAVITY GREASE INTERCEPTOR PUMPING/ CLEANING AND INSPECTION PROCEDURES

After Gravity Grease Interceptor Cleaning...

- If possible, notify FSE when cleaning is complete, allowing them to perform a visual inspection and sign the manifest.
- Replace lid(s).
- Leave a copy of the signed manifest with FSE.
- Dispose of FOG waste at an approved disposal facility. FOG should **NEVER** be discharged to the sanitary sewer or stormwater system.



GRAVITY GREASE INTERCEPTOR PUMPING/ CLEANING AND INSPECTION PROCEDURES

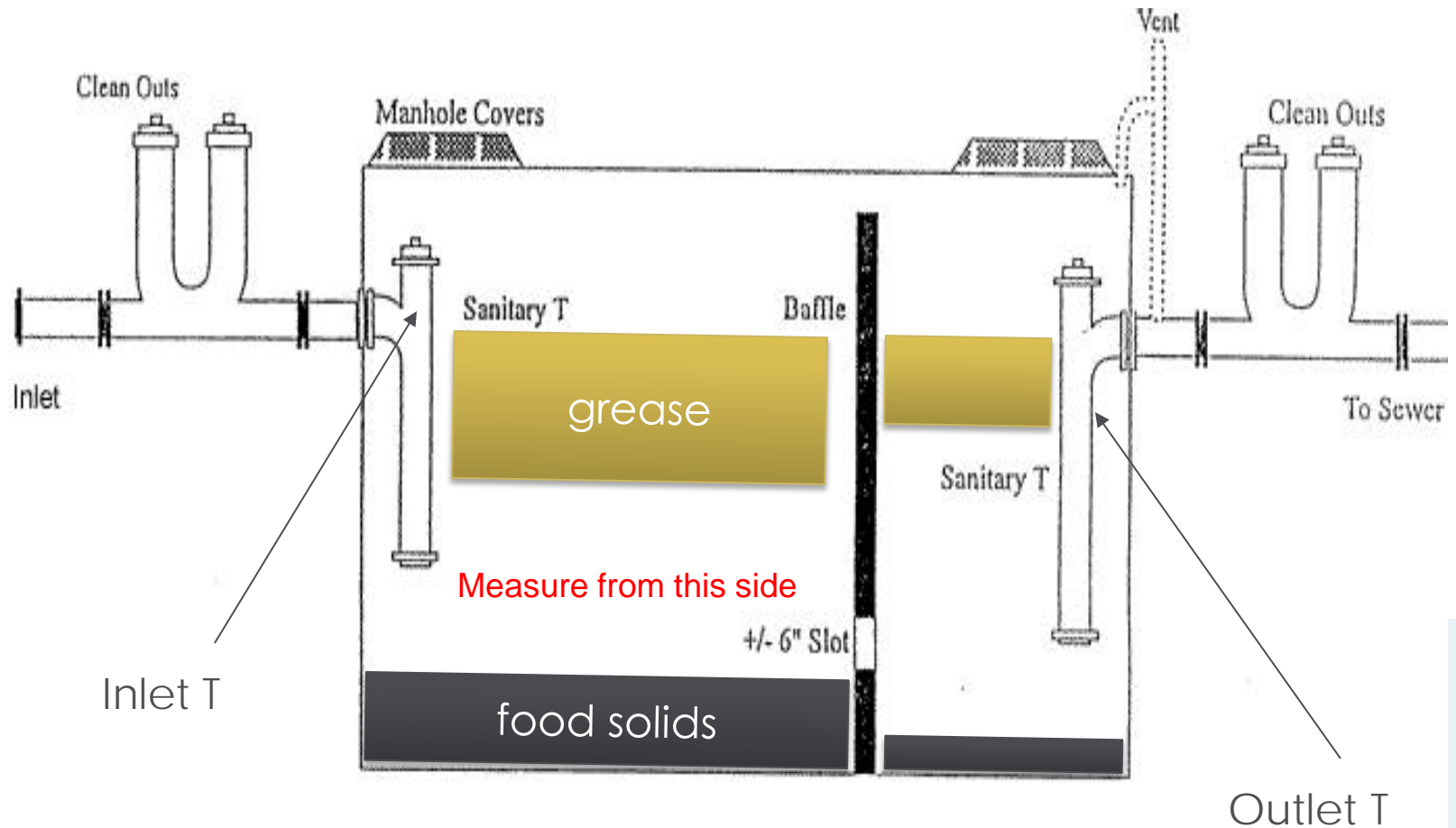
Performing the Gravity Grease Interceptor Inspection...

- Locate Inlet and Outlet Ts, ensure proper depth
- Note any visible holes or leaks in tank, corrosion
- Visually check condition of baffle(s) and location of baffle opening
- Locate and note condition of all manhole covers, lids and cleanout covers
- Record any findings on cleaning manifest and notify FSE management of any maintenance issues



GRAVITY GREASE INTERCEPTOR PUMPING/ CLEANING AND INSPECTION PROCEDURES

Generic Sample Gravity Grease Interceptor



GRAVITY GREASE INTERCEPTOR BAFFLE

FAIL

Deteriorated
Baffle



PASS



GRAVITY GREASE INTERCEPTOR OUTLET T

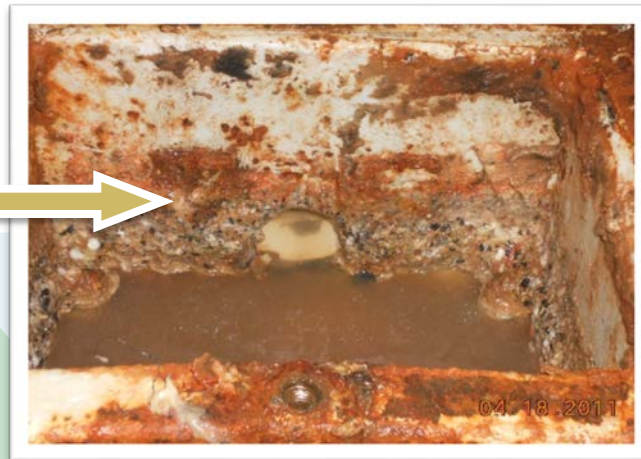
FAIL



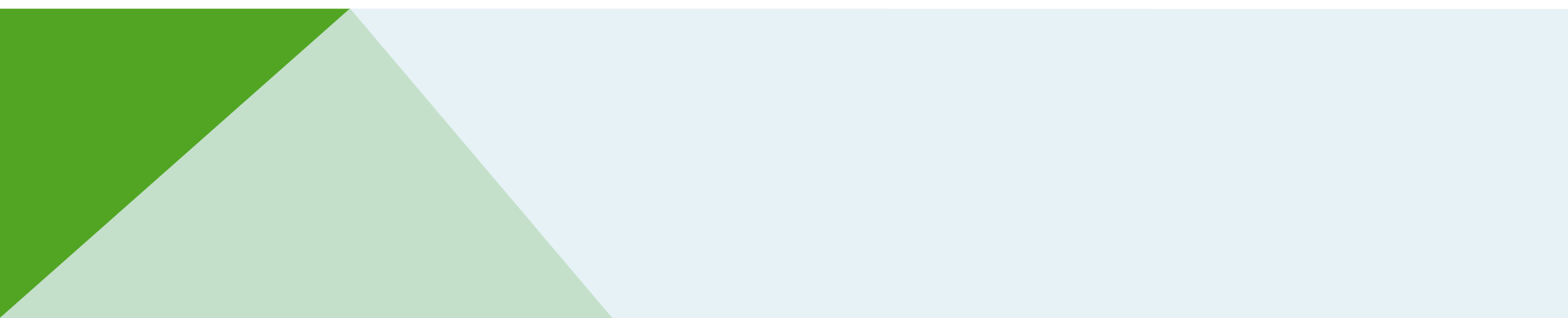
PASS



MISSING T



GENERAL CLEANING PROCEDURES

- **Decanting procedures are prohibited throughout the region.**
 - GCDs may have two or more compartments and each side must be pumped and cleaned thoroughly; if a compartment is not accessible, notify the FSE that there is a problem.
 - Once GCD is completely emptied, hydro-jetting services may be performed (recommended semi-annual service).
 - Line jetting from the FSE to the GCD can be used to remove and collect FOG buildup as a preventative maintenance measure. *(Be sure to collect contents from line jetting so it does not enter the sanitary sewer system.)*
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GCD MAINTENANCE RECORDS

Hauler Information

- Driver information (Print name, Signature, And HRPDC Hauler certification number)
- Type of waste (details on mixed waste)

FSE Information

- Name and address of FSE
- Sludge Judge measurements including total depth of contents (**not just total volume of FOG removed**)
- Condition report

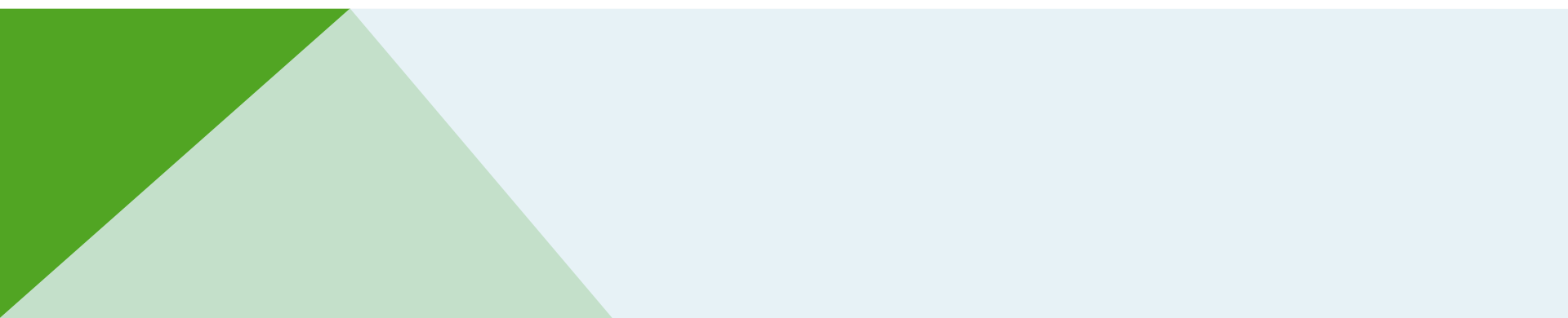
Disposal Site Information

- Disposal site
- Date and time of receiving
- Volume received
- Additional information on quality control for waste disposal

****Maintenance records must be retained for 3 years.****



GCD HAULERS TRAINING HIGHLIGHTS

- Proper documentation is critical to customer service. Your clients will not pass their FOG Inspections without your drivers' proper documentation.
 - GCDs shall be completely cleaned with all contents removed entirely.
 - All records shall be retained for a minimum of 3 years.
 - Appropriate cleaning schedules and procedures help to eliminate FOG discharge into the sanitary sewer system.
 - Hot water, acids, caustics, solvents, or emulsifying agents should NEVER be used when cleaning GCDs.
 - GCD contents should NEVER be discharged to the sanitary sewer or storm water system.
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For more information regarding the Regional FOG program,
contact...

Hampton Roads Planning District Commission
Regional FOG Program

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