



Sanitation District No. 1 (SD1) Fats, Oils and Grease (FOG) Management Program

Waste Hauler Certification

November 1, 2011





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Wastewater and Storm Water

Waste Hauler Certification Agenda

- Power Point Presentation
- Questions from Certification Attendees
- Test
 - 10 Questions
 - Multiple Choice & True / False
- Final Questions or Comments
- Paperwork for Successful Certification



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Useful Acronyms

- FSE – Food Service Establishment
- CGE – Grease Control Equipment
 - GI – Grease Interceptor
 - GT – Grease Trap
- FOG – Fats Oils and Grease
- SSO – Sanitary Sewer Overflow



Objective of Certification Course

To prevent Sanitary Sewer Overflows (SSOs) through the training of Grease Waste Haulers to accurately identify improper Grease Control Equipment (GCE) operation and components, and to properly correct any problems found.





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Why is this Certification Program Being Created?

Sanitary Sewer Overflow (SSO) Rule

- 2001 USEPA Develops SSO Rule
- EPA Region IV (Kentucky's region) uses SSO Rule for Audits and Inspections.
- SD1 currently has approx. 1,600 miles of pipe in the 3 county service area.



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Federal and State Environmental Regulators Determined:

- SD1 needed to address nearly 2.1 billion gallons of SSO's in service area
- To achieve compliance with environmental regulators SD1 entered into:
 - **A Clean Water Act Federal Court Order**



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SD1 Clean Water Act Federal Court

- Legally binding document with Federal and Local Government to ensure compliance with the Clean Water Act
- 20 Year Plan to improve NKY waterways by addressing raw sewage overflows
- By Completion of Court Order in 2025, SD1 will have completed projects worth approx. **\$1.2 billion.**



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Key Components of SD1 Federal Court Order

- Develop a Sanitary Sewer Rehabilitation Plan
 - Sewer inspections, rehabilitation and replacement
- System-wide upgrades and expansions
- Remove improper storm water connections
- Relieve capacity issues by diverting flow to new Eastern and Western Regional Treatment Plant
- **FINALLY....Fats Oils and Grease (FOG) Program**



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How Does the Court Order Affect Waste Haulers?

January 1st 2012

- **Fats Oils & Grease (FOG) Control Program**
 - SD1 must develop and enforce a Fats Oils & Grease (FOG) Control Program to ensure that FOG accumulation does not restrict the capacity of the sewer system and contribute to Sanitary Sewer Overflows



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FOG Control Program

- Consists of 2 parts:
 - Food Service Establishment (FSE) Wastewater Discharge Permit
 - Waste Hauler Certification



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FOG Control Program FSE Discharge Permit

- Prior to 2012, all existing restaurants located in a “FOG Problem Area” will have been regulated under a SD1 FSE Discharge Permit.
- **Beginning 2012, all new** restaurants opening in SD1 service area will be regulated by a SD1 FSE Discharge Permit.



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FOG Control Program

FSE Discharge Permit

– FSE Discharge Permit will state:

- FSEs use only SD1 Certified Waste Haulers for Grease Control Equipment (GCE) pumping
- Pumping frequency of all GCE
- A fresh water source must be available for hauler to refill pumped GCE (New FSEs beginning 2012)
- A contract must exist between FSE and Certified Grease Hauler stating:
 - Pumping frequency
 - GCE annual certification checklist is required



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FOG Control Program Waste Hauler Requirements

- Annual Certification Requirements
 - Beginning 2012, any waste hauler who services GCE must be Certified through SD1.
 - All pumping events must be “**Total Pump**”
 - A contract exists between FSE and Certified Grease Hauler stating:
 - pumping frequency
 - GCE Annual Certification Checklist is completed by an SD1 Certified Waste Hauler at time of GCE pumping for FOG permitted FSEs
 - **NEW** Manifest Procedure is strictly followed



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Fog Control Program New Manifest Procedure

- Federal Court Order mandates that SD1 track all grease from its location of origin to its location of final disposal.
- See Manifest Handout.

Manifest # _____

SD1 Hauled Waste Manifest

Instructions: Please write legibly. Complete all blanks in Part I. Enter all information for the waste generator in Part II. Sign and date the manifest in Part III. Provide the completed manifest to SD1 contact prior to disposal of waste.

Part I.

Waste Hauler: _____

Permit #: _____ Vehicle License #: _____

Driver Name (Print): _____

Waste Disposal Location: _____

Part II.

Waste Generator Name: _____

Address: _____

Date Pumped: _____ Time Pumped: _____ am/pm

Size of Tank: _____ Gallons Pumped: _____

Check One

Domestic Waste Grease Control Equipment Other (describe) _____

Part III:

I certify under penalty of law that this manifest was prepared by me and the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that the wastes covered by this manifest are not hazardous as defined by 40 CFR Part 261. I further certify that all discharged made to the POTW are being made in accordance with all federal, state and local regulations, as well as, the SD1 Waste Hauler Permit.

Signature of Transporter _____

TO BE COMPLETED BY AUTHORIZED REPRESENTATIVE AT TIME OF DISCHARGE

Representative Signature _____ Date/Time _____

of Discharge Tickets Collected (SD1 Disposals Only) _____

White – Disposal Facility

Pink – SD1

Yellow – Hauler Copy (Retain for 2 years)



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New Manifest Procedure

- Waste Haulers must fill out all sections of manifest completely.
- Upon disposal, a representative from the disposal facility must sign the manifest.
- After the waste hauler has obtained a signature, they must return a signed copy back to SD1 within 2 weeks (NA if disposed at Dry Creek).
- The waste hauler must keep a signed copy of the manifest for 2 years.
- During this 2 year retention period, manifests must be available upon request to both SD1, as well as, the FSE.
- These policies will be included in the 2012 Waste Hauler Permits.



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Fog Control Program

GCE Annual Certification Checklist

- Checklist is used to verify that all GCE is functioning properly
- This Checklist will be done at the time of pumping of the GCE
- Waste Haulers must complete the appropriate SD1 GCE checklist and return it to SD1 within 14 days
- You determine what amount to charge the FSE for this additional service.



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FOG Program Grease Control Equipment (GCE) Annual Certification Checklist

- SD1 will determine
 - The size
 - The configuration
 - Pumping frequency
- of all GCE in SD1 permitted Food Service Establishments.



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3 Categories of GCE

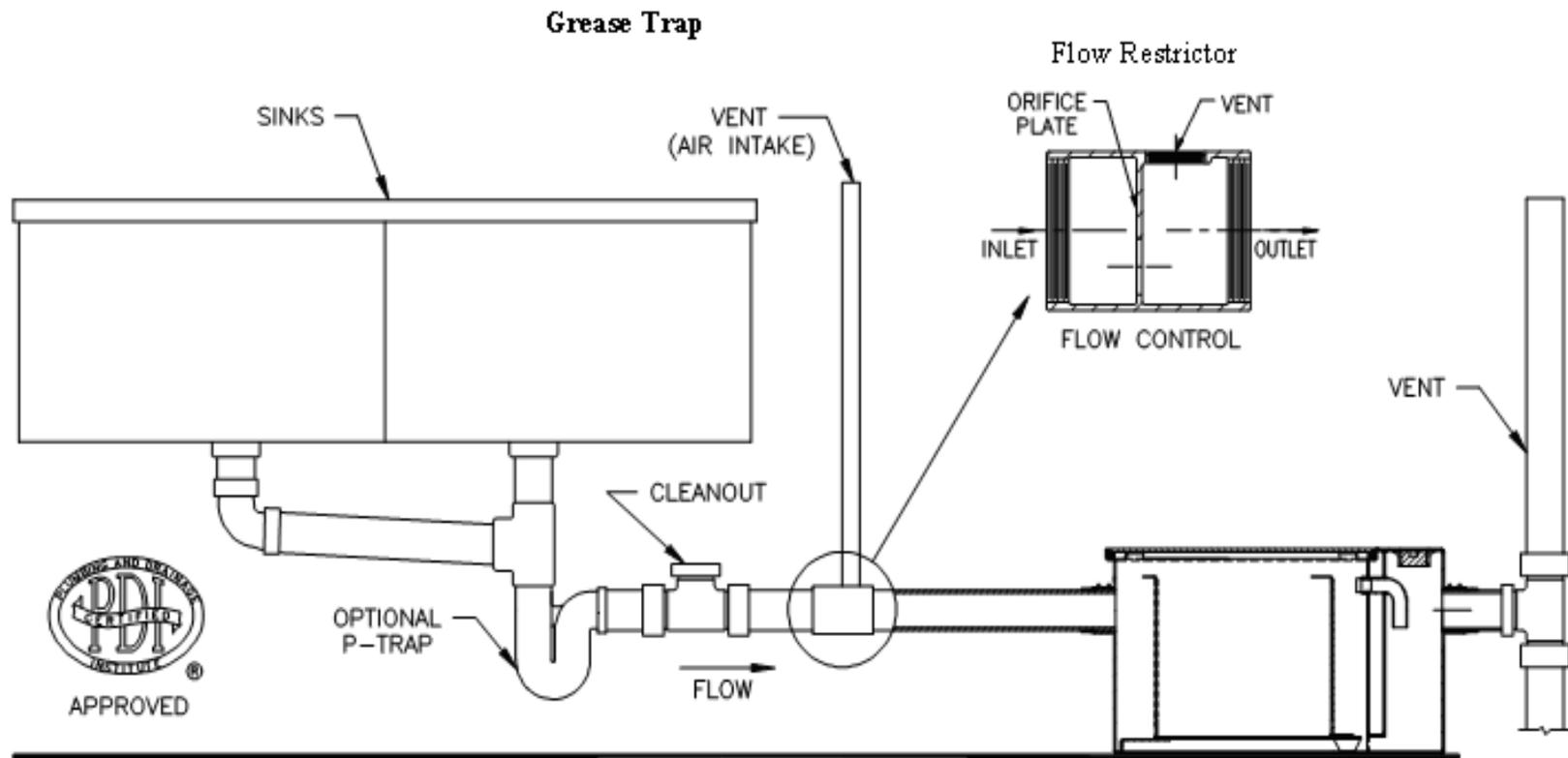
- Grease Trap (GT) “Under the Sink”
 - Located inside FSE - (may be in-ground)
- Grease Interceptor (GI)
 - Located outside in ground
 - Typically 1000 gallons or greater
- Grandfathered GCE
 - Located at FSE constructed prior to 2012
 - May not meet current SD1 R & R



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GCE Grease Trap (GT)



For illustrative purposes only

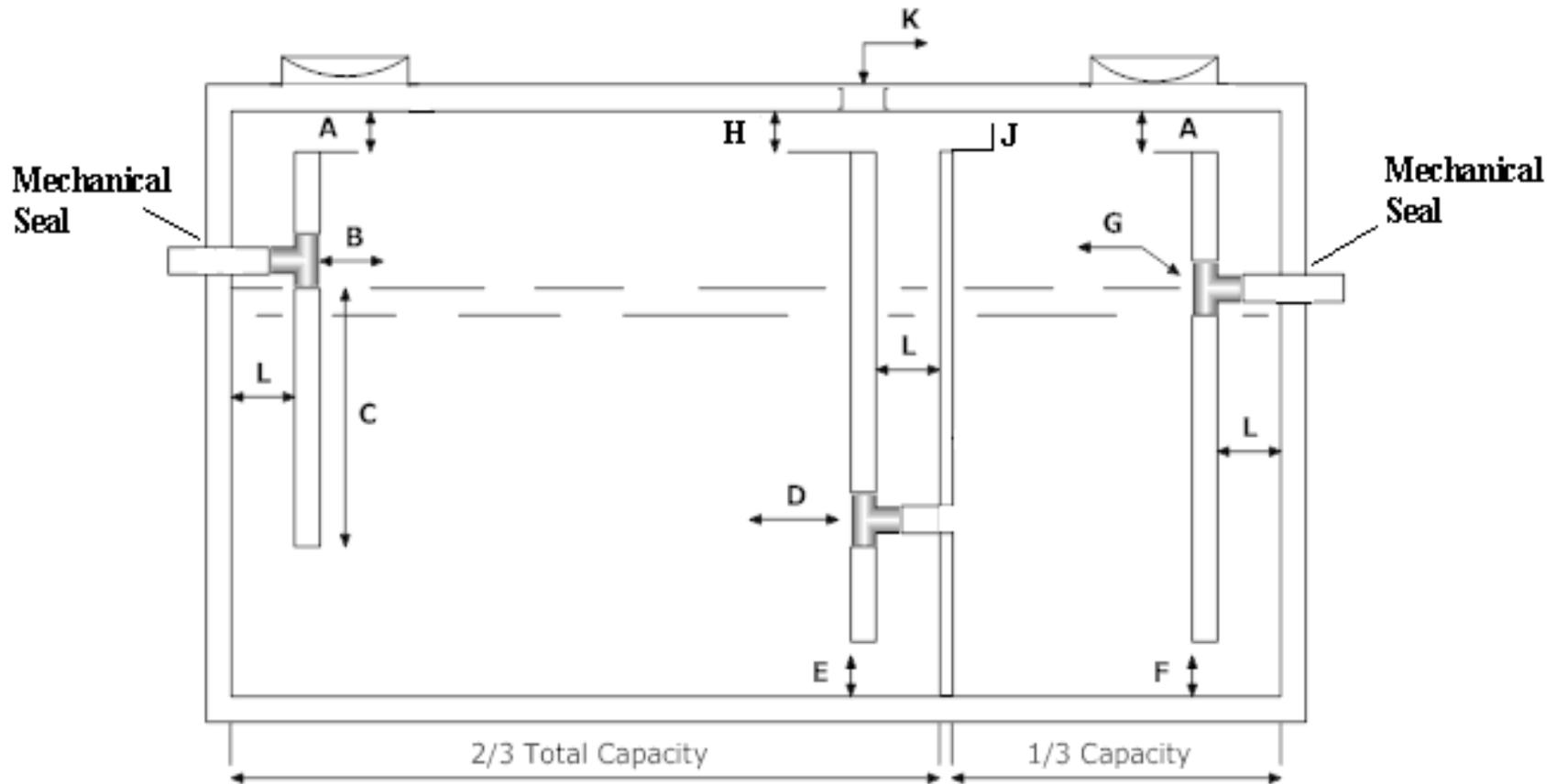


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GCE Grease Interceptor (GI)

1000 Gallon Grease Interceptor



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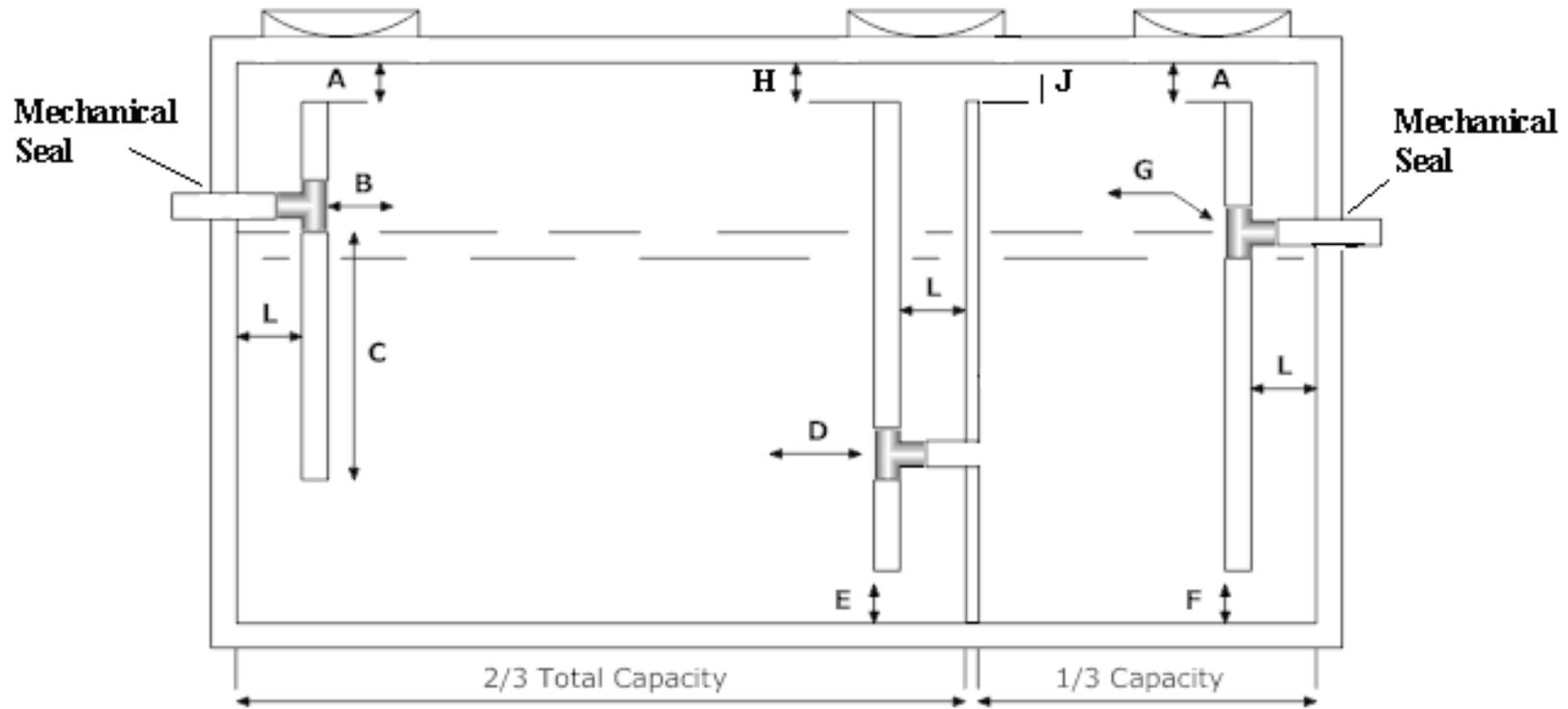


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GCE Grease Interceptor (GI)

>1000 Gallon Grease Interceptor



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Properly functioning GCE is dependent on the 3 T's

- Time
 - Flow entering the inlet chamber must have adequate time to allow FOG / Water separation
- Turbulence
 - Internal set-up is designed in a way minimize turbulence, allowing for faster FOG / Water separation
- Temperature
 - Extremely high temps may allow FOG to escape inlet chamber



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FOG Blockages in Sewers





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Grease Trap

“Under the Sink” Unit

- **Sizes – Most Common**

- 10 gpm / 20 lb Capacity
- 15 gpm / 30 lb Capacity
- 20 gpm / 40 lb Capacity
- **25 gpm / 50 lb Capacity***
- 30 gpm / 60 lb Capacity

*** 25 gpm / 50 lb
capacity GT is
SD1 minimum
acceptable size
after January 1,
2012**



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GCE Checklist Grease Trap

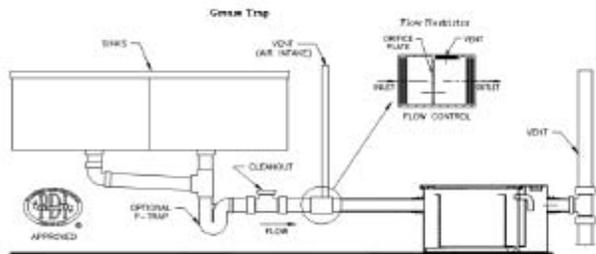


FSE Grease Trap Waste Haulers Checklist

Facility Name: _____ Facility Phone # _____

Address: _____ City: _____, KY Zip Code: _____

Piping & Baffle Design



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	<u>Yes</u>	<u>No</u>
1. Is a dishwasher connected/plumbed to the grease trap?	___	___
2. Is a flow restrictor present upstream from the GT?	___	___
3. Is a functioning orifice plate present in the flow restrictor (see diagram inset)?	___	___
4. Is the baffle wall functioning and free of defects?	___	___

Inspector Certification - This GT certification has:

I _____ of _____ certify that the above listed
(Print Name) (Name of Company)

facility has a _____ gallon capacity grease trap. I have examined the GT and provided the above information to the best of my knowledge.

(Signature) (Date)

SUBMIT ORIGINAL CERTIFICATION FORM AND RESPONSES TO:

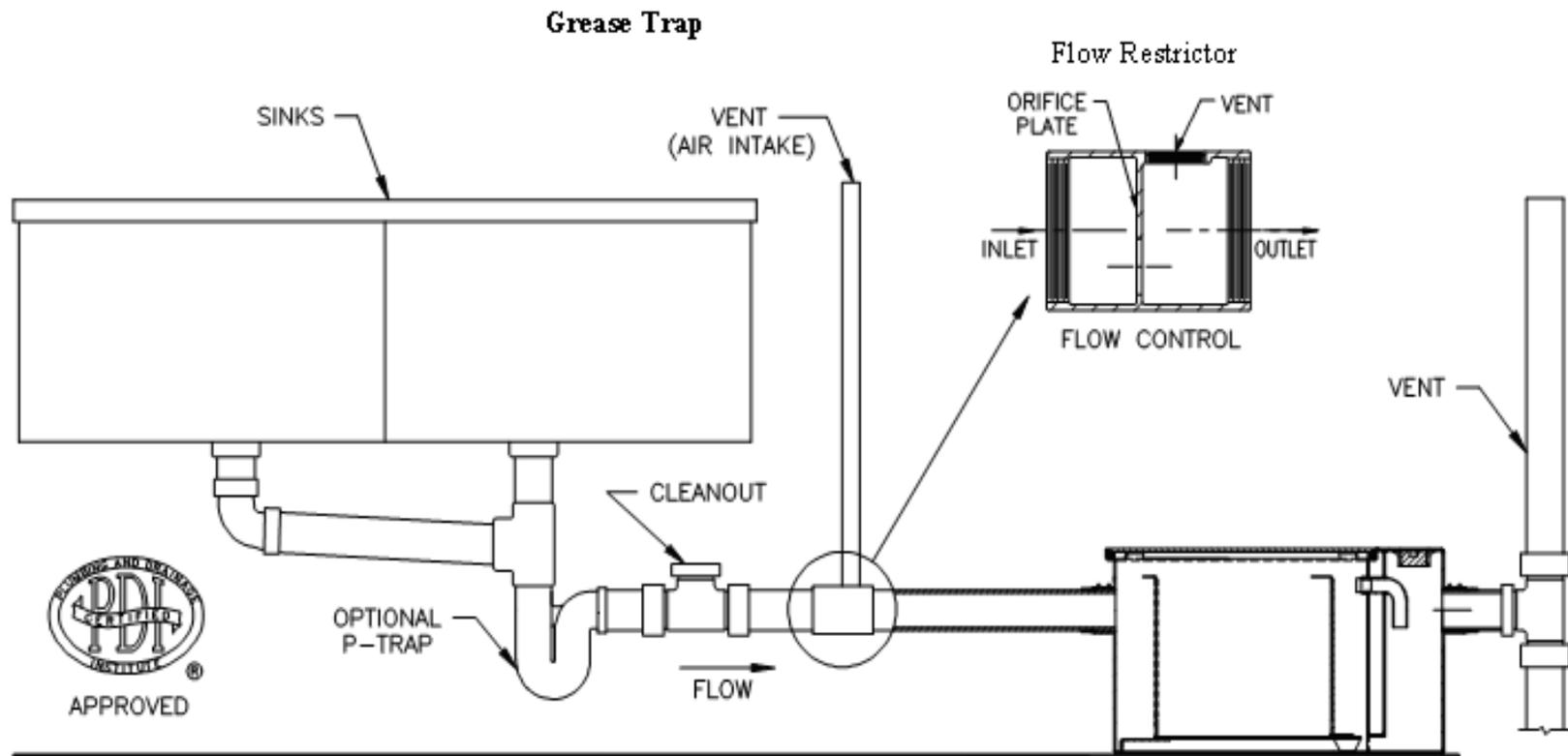
Sanitation District No. 1
Attn: Industrial Monitoring Dept.
2999 Amsterdam Rd
Villa Hills, KY 41017



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GCE Grease Trap (GT)



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GCE Certification Grease Interceptor



Grease Interceptor Checklist

Facility Name: _____ Facility Phone # _____

Address: _____ City: _____, KY Zip Code: _____

Inspection Question	Yes	No
1. Inlet, Outlet and Baffle piping with 2-way T's are present and free of defects.	___	___
2. The Baffle Wall extends across full width of the Interceptor and is free of visible defects.	___	___
3. Inlet compartment of Interceptor is larger than outlet compartment.	___	___
4. Circle number of Manholes associated with Interceptor	1	2 3

Waste Hauler Certification

I _____ of _____ certify that the
(print name) (print name company)
above listed facility has a _____ gallon capacity interceptor. I have examined
the GI and certify that the information is accurate to the best of my knowledge and
ability.

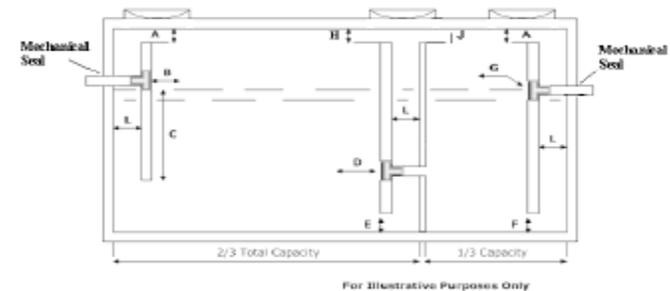
(signature) (date)

SUBMIT ORIGINAL CERTIFICATION FORM TO:
Sanitation District No. 1
Attn: Industrial Monitoring Dept.
2999 Amsterdam Rd
Villa Hills, KY 41017

See reverse side for 2012 approved Grease Interceptor Specifications.
This diagram is to be used when making repairs and upgrades to GCE.

General Set-up (May not be applicable for GCE constructed prior to 2012)

Piping & Baffle Design



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The Following Information is for Reference During GCE Repairs

- Inlet and outlet piping shall have 2-way cleanout T's located a minimum of 6" from top of GI, but not less than pipe diameter.
- Inlet piping enters receiving chamber 2 1/2" above the invert of the outlet piping.
- Inlet pipe to terminate 2/3 depth of water level.
- Baffle T piping at least equal in diameter size to inlet piping with a minimum diameter of 6".
- Bottom of baffle piping located 12" above floor.
- Bottom of outlet pipe located 12" above floor.
- Outlet pipe no smaller than inlet pipe, minimum 4".
- Top of baffle pipe terminates no lower than baffle wall.
- The inlet compartment shall be 2/3 of the total liquid capacity with the outlet compartment at 1/3 capacity.
- GI shall have a non-flexing baffle the full width of the GI, sealed to the walls and the floor and extending from the floor to within 6" of the ceiling.

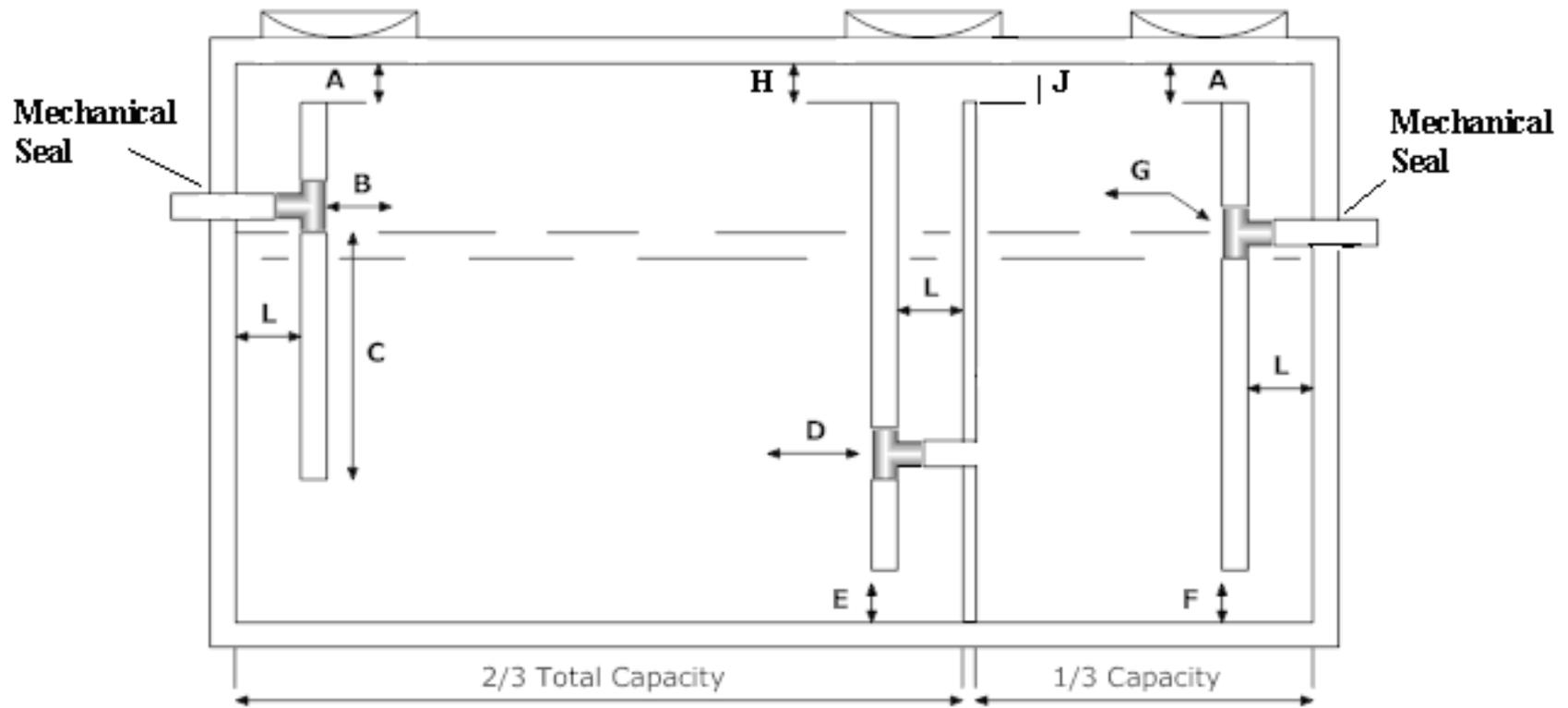


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GCE Grease Interceptor (GI)

>1000 Gallon Grease Interceptor



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GCE Certification Additional Points to Consider

- If / how much to charge FSE's for certification
- Will your company perform repairs of GCE that fails inspection
- All employees who perform repairs must install per our specifications.



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Sanitary Sewer Overflows





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Review Slide

Key Points

- Waste Hauler Certification Course
 - Course must be completed by all drivers who service GCE
- New Manifest Procedure
 - Haulers must return a signed copy of manifest to Dry Creek within two weeks of completion.
- Annual GCE Certification
 - GCE Checklist must be followed completely
 - Deviation from the checklist could result in a violation of your Hauled Waste Discharge Permit
- FSE concerns should be directed to Industrial Monitoring Dept at 859-331-6674



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Questions

- Any questions relating to:
 - Waste Hauler Responsibilities
 - FSE Responsibilities
 - Manifest Procedure
 - GCE Pumping/Annual Certification Procedure
 - Federal Court Order
 - Anything else of concern!