



JAMES ISLAND PUBLIC SERVICE DISTRICT

WASTEWATER COLLECTION SYSTEM

FATS, OILS & GREASE PROGRAM

Updated: 8-17-16

TABLE OF CONTENTS

		PAGE
SECTION 1.0	INTRODUCTION	2
SECTION 1.1	DEFINITIONS	2
SECTION 2.0	GENERAL REQUIREMENTS	3
SECTION 3.0	CONSTRUCTION STANDARDS	4
SECTION 3.1	NEW FOOD SERVICE ESTABLISHMENTS	4
SECTION 3.2	EXISTING FOOD SERVICE ESTABLISHMENTS	5
SECTION 3.3	NEW FOOD SERVICE ESTABLISHMENTS IN EXISTING BUILDINGS	7
SECTION 4.0	OPERATION AND MAINTENANCE	7
SECTION 5.0	ADMINISTRATIVE PROCEDURES	8
SECTION 5.1	ENFORCEMENT	8
SECTION 6.0	CORRESPONDENCES	9
APPENDIX A	APPLICATION TO INSTALL GREASE INTERCEPTOR	10
APPENDIX B	GREASE TRAP INTERCEPTOR MAINTENANCE LOG	11
APPENDIX C	GREASE TRAP CONSTRUCTION DRAWING	12
APPENDIX D	GREASE INTERCEPTOR CERTIFICATION (FORM A)	13
APPENDIX E	GREASE INTERCEPTOR SIZING WORKSHEET	17
APPENDIX F	RECOMMENDED RATINGS FOR COMMERCIAL “UNDER-THE-COUNTER” PACKAGE UNIT GREASE TRAPS	18
APPENDIX G	INSTALLATION CHECK LIST	20

SECTION 1.0 INTRODUCTION

Wastewater discharges containing high concentrations of oil and grease from food service facilities are one of the main causes of blockages and overflows in the District's wastewater collection system. Overflows of wastewater into the storm water collection system and natural bodies of water could be greatly reduced by controlling the discharge of oil and grease into the wastewater collection system. This source of pollution is preventable by good management practices and proper maintenance at food service facilities. To address this issue the District has developed an oil and grease management program.

The objectives of the Fats, Oil and Grease Management Program are:

1. Eliminate wastewater system overflows.
2. Reduce the amount of oil and grease discharged into the wastewater collection system.
3. Reduce maintenance costs of the wastewater collection system.
4. Improve operation of the wastewater collection system.

SECTION 1.1 DEFINITIONS

1.1.1 Approved: Describing a method or design acceptable to the District.

1.1.2 Customer: The person responsible for payment of wastewater service used at a specific location, and further defined as that person who signed the application requesting that service be made available at the specific location and thereby agreeing to pay for all usage of such service occurring at the location.

1.1.3 District: James Island Public Service District

1.1.4 Food Service Establishment: Any establishment which prepares, and/or packages food or beverages for sale or consumption, on or off-Site, with the exception of private residences, including but not limited to food courts, food manufacturers, food packagers, restaurants, grocery stores, bakeries, lounges, hospitals, hotels, nursing homes, churches, and schools.

1.1.5 Grease: A liquid or solid material, composed primarily of fats and oils from animal or vegetable sources.

1.1.6 Grease Hauler: A person who collects the contents of a grease interceptor/trap and transports it to an approved recycling or disposal facility.

1.1.7 Grease Interceptor: A device, usually located underground and outside of a food service facility. It is designed to collect, contain, and remove food wastes and grease from the waste stream while allowing the remaining wastewater to be discharged to the wastewater collection system by gravity.

1.1.8 Grease Trap: A device, usually located inside the building and under a sink of a food service facility designed to collect, contain, and remove food wastes and grease from the waste stream while allowing the remaining wastewater to be discharged to the wastewater collection system by gravity.

1.1.9 Oil/Water Separator: A device designed to remove oil (petroleum based) from the waste stream while allowing the remaining wastewater to be discharged to the wastewater collection system by gravity.

SECTION 2.0 GENERAL REQUIREMENTS

The following administrative, operational, and other general requirements are applicable to all food service establishments, new or existing.

- A. All food service establishments in the District's wastewater service area shall have grease handling facilities approved by the District. Establishments whose grease handling facilities are not in accordance with this program shall be given a compliance schedule with a deadline not to exceed three months from the initial notification date.
- B. All food service establishment grease handling facilities/operations shall be subject to periodic review, evaluation, and inspection by District representatives at any time. Results of inspections will be made available to facility owners with overall ratings assigned and recommendations for correction/improvement (if necessary) delineated.
- C. The facility receiving two consecutive unsatisfactory evaluations shall be subject to penalties/restrictions provided in the District's use and rate ordinance for non-conformance with the ordinance's requirements.
- D. Violations of this District Fats, Oil and Grease Management Program will be considered grounds for discontinuance of wastewater/sewer service.
- E. Food service establishments whose operations cause or allow excessive grease to discharge or accumulate in the wastewater collection are liable to the District for all costs related to the District's service calls for line blockages, line cleanings, line and pump repairs, property damages, etc. including all labor, materials, equipment, and overhead. Failure to pay all service related charges may be grounds for wastewater/sewer service discontinuance.

- F. At the discretion of the District, maintenance contracts and /or records of grease removal frequencies for grease handling facilities may be required to be submitted periodically to ensure routine and adequate system maintenance.
- G. In maintaining grease interceptors/traps, the customer shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain on site records of the dates and means of disposal that are subject to review by the District. Any removal and hauling of the collected material not performed by the owner's personnel must be performed by a currently licensed Grease Hauler.
- H. Any food service establishment whose effluent is suspected or perceived by the District to contain a concentration of greater than 100 mg/l of oil and grease may be required to routinely sample their grease interceptor/trap effluent, have it analyzed for oil and grease at the expense of the owner and furnish a copy of the analysis to the District.
- I. All grease interceptors/traps shall be designed, installed, and located in accordance with this program to allow for complete access for inspection and maintenance.
- J. All grease interceptors/traps must be installed by a properly licensed plumbing contractor.

SECTION 3.0 CONSTRUCTION STANDARDS

3.1 NEW FOOD SERVICE ESTABLISHMENTS

- A. All newly constructed (or newly located) food service establishments shall be required to install a grease interceptor, approved by the District. Grease interceptors shall be sized at 20 gallons per food service seat, with no interceptor less than 1000 gallons total capacity (unless such interceptors are not feasible to install).
- B. New food service establishments are to complete an initial grease interceptor/trap application (appendix A) to install a grease interceptor/trap and to submit such application with plans, specifications, plumbing diagrams, etc. to the District for review and approval.
- C. All grease interceptor/trap plans and specifications must be reviewed and approved by the District prior to installation. An approval letter will be issued by the District for each new grease interceptor/trap prior to construction and/or installation.
- D. The construction and location criteria for grease interceptors/traps shall be in accordance with Environmental Protection Agency (EPA) Guidance Document

“On- Site Wastewater Treatment and Disposal Systems” Chapter 8. Typical construction detail drawings for acceptable grease interceptors are attached to this standard (Appendix C).

- E. All grease interceptors/traps, whether singular or in series must be directly accessible from the surface and must be fitted with an extended outlet sanitary tee that terminates 6 inches to 12 inches above the tank floor. The minimum access opening dimensions shall be 18 inches X 18 inches or a minimum of 24 inches in diameter. Two access openings (inlet and outlet) to underground interceptors are required and should be removable with ease by one person. See typical detail for 1000 and 1500 gallon capacity grease interceptors.
- F. All below ground grease interceptors must be either two-chambered or individual tanks in series. If two-chambered, the dividing wall must be equipped with an extended elbow or sanitary tee terminating 6 inches to 12 inches above the tank floor. An extended outlet sanitary tee must also be provided at the outlet of the second chamber. Both chambers must be directly accessible from the surface.
- G. The above criteria (A-F) apply primarily to outdoor type (underground) grease interceptor units.
- H. Maintenance of grease interceptors/traps must include pump-out and/or cleaning as needed, with a minimum frequency of four times per year. Maintenance contracts may be require to be submitted to the District as called for in Section 3, paragraph F of this standard. The owner however is ultimately responsible for the proper maintenance of the grease interceptor/trap.
- I. For cases in which underground type grease interceptors are not feasible to install, new food service establishments will be required to install adequate and approved “under-the-counter” grease traps for use on individual fixtures, including pot sinks, mop sinks, pre rinse sinks, and other potential grease containing drains. In such cases, such units will be considered acceptable only if approved flow control fittings are provided to the grease trap inlet to prevent overloading of the grease trap and to allow for proper grease trap operation. Approved manufactures include Zurn, Rockford, Thermaco, or equal as approved by the District. District approval of flow control devices and grease trap design must be given prior to installation. Dishwashers and garbage grinders shall not be piped directly to grease interceptors/traps without District approval.

3.2 EXISTING FOOD SERVIC ESTABLISHMENTS

- A. All existing food service establishments (or renovated or expanded establishments) shall have grease handling facilities approved by the District. Food service establishments without any grease handling facilities will be given a compliance deadline not to exceed 3 months from date of notification to have approved and installed grease handling equipment in compliance with this standard. Failure to do so will be considered a violation of the District’s use and

rate ordinance and will be subject the establishment to penalties regarding wastewater/sewer service discontinuance.

- B. For cases in which outdoor units are feasible to install, construction requirements will be as specified in Section 4.0 of this standard for new food service establishments.
- C. Sizing of under-the-counter grease trap units will be in accordance with EPA recommended ratings for commercial grease traps (appendix F). The grease retention capacity rating in pounds shall be at least two times the GPM flow
- D. Rate of the type of fixture it serves.
- E. Location of under-the-counter units must be as close to the source of the wastewater as physically possible, while remaining accessible for maintenance.
- F. Wastewater from dishwashers and garbage grinders will not be discharged to grease interceptors/traps, unless approved by the District in advance.
- G. In maintaining existing grease interceptors/traps, the owner shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain records of dates and means of disposal that are subject to review by the District.
- H. If an existing food service establishment's grease handling facilities are either under designed, substandard, or poorly operated, the owner will be notified, in writing, of the required improvements and given a compliance deadline not to exceed 3 months to comply with the requirements of this standard.
- I. Exclusive use of enzymes or other grease solvents, emulsifiers, etc. in lieu of physical cleaning is not considered an acceptable grease interceptor/trap maintenance practice.
- J. Grease consuming bacteria may be considered for interim approval for grease interceptor/trap maintenance, provided approval is obtained from the District and providing that this control method is considered effective and satisfactory to the District. Exclusive use of bacteria (in lieu of physical cleaning) is not sufficient for long term grease interceptor/trap maintenance, especially for non-biodegradable waster fractions.

{Remainder of page intentionally left blank}

3.3 NEW FOOD SERVICE ESTABLISHMENTS IN EXISTING BUILDINGS

- A. Where practical, new food service establishments locating in existing buildings will be required to comply with the oil and grease management program applicable to new food service establishments. Outdoor type grease interceptors (minimum size 1000 gallons) shall be installed.
- B. Where physically impossible to install outdoor grease interceptors, under-the-counter units may be allowed as with existing food service establishments provided prior approval of unit type, size, location, etc. is obtained from the District. Flow control fittings and/or automatically cleaned units will be required in all cases. Maintenance contracts and/or clean out records will also be required.

SECTION 4.0 OPERATION AND MAINTENANCE

- A. Facilities with grease interceptors/traps may be asked to submit maintenance contracts and/or records of grease removal to the District. The District may monitor grease removal frequency to ensure adequate system maintenance.
- B. Maintenance of under-the-counter traps requires that they be thoroughly cleaned and/or pumped out a minimum of one time per week.
- C. Maintenance of exterior in ground grease interceptors must include a thorough pump out and cleaning a minimum of four times per year. Cleaning of exterior in ground grease interceptors shall be done before the grease accumulation inside the interceptor is within three feet from the bottom. When cleaning double compartment grease interceptors, both compartments must be thoroughly pumped and cleaned.
- D. The use of emulsifiers or other solvents is not considered to be an acceptable grease interceptor/trap maintenance program.
- E. In maintaining grease interceptors/traps, the owner shall be responsible for the proper removal and disposal of the accumulated material and will be required to maintain on-site records of the dates and means of disposal which are subject to review by the District. Any removal and hauling of the collected materials not performed by the owner's personnel must be performed by a currently licensed grease hauler.
- F. More frequent cleaning of grease interceptors/traps may be required if deemed necessary by the District.
- G. The owner is ultimately responsible for the proper operation and maintenance of their grease interceptor/trap.

- H. Copies of maintenance contracts and/or a maintenance log will also be required for any facility receiving two consecutive unsatisfactory evaluations.

SECTION 5.0 ADMINISTRATIVE PROCEDURES

A maintenance log for grease interceptors/traps shall be maintained on-site by the customer, including data for at least the previous 12 months. The log shall include the date, time, maintenance performed, the volume of grease removed each pump out or cleaning, and the name, signature, and contact information of the person who performed the maintenance. The customer shall provide the logs upon request during routine inspections by the District. A typical maintenance log is included in this standard (Appendix B).

5.1 ENFORCEMENT

Grease interceptors/traps shall be inspected semi-annually by the District to assure compliance with the requirements herein. The fee for the inspections shall be in accordance with the Use and Rate Ordinance. The District shall have the right to enter the premises of any non-residential facility at all reasonable times for the purpose of inspection, observation, records examinations, measurement, sampling, and testing in accordance with the provisions included herein.

A notice of violation shall be issued to a customer for failure to:

1. Obtain a grease interceptor/trap discharge permit
2. Properly maintain the grease interceptor/trap including failure to make necessary repairs
3. Maintain records on-site of pump outs/cleaning of grease interceptors/traps

Upon receiving a notice of violation, the customer shall have 14 days to complete corrective action and submit evidence of compliance to the District. Should a customer fail to properly maintain a grease interceptor/trap according to the provisions set herein the District may pursue one or more of the following actions:

1. Issue a notice of violation to the customer
2. Notify the Charleston County Health Department
3. Notify South Carolina Department of Health and Environmental Control (SCDHEC)
4. Terminate wastewater/sewer service

SECTION 6.0 CORRESPONDENCES

Address all correspondence (including completed maintenance forms) to the following address:

JAMES ISLAND PUBLIC SERVICE DISTRICT
FATS, OILS AND GREASE MANAGEMENT PROGRAM
P.O. BOX 12140
1739 SIGNAL POINT ROAD
CHARLESTON, SC 29422-2140
PHONE 843-795-9060
FAX 843-762-5252

{Remainder of page intentionally left blank}



APPLICATION TO INSTALL GREASE INTERCEPTOR

Establishment name: _____

Address: _____

Phone: _____

Name of applicant/restaurant owner: _____

Address: _____

Phone: _____

of Seats: _____

of meals served/day: _____

Days/Hrs of Operation: _____

Size of existing trap (in gallons): _____

Type of food prepared at this establishment: _____

Former use: _____

SIZE/NUMBER OF KITCHEN UNITS TO BE SERVED BY INTERCEPTOR:

<u>Size/Number</u>	<u>Type of Unit</u>	<u>Size/Number</u>	<u>Type of Unit</u>
____/____	Single compartment scullery	____/____	Hand sink
____/____	Double compartment scullery sink	____/____	Oven (ex: work order)
____/____	Triple compartment scullery sink	____/____	Other (list below)

Any sink, etc. discharging into the sanitary sewer that is used for cleaning and/or food preparation must be connected to a grease interceptor.

***NOTE* Dishwashers and Garbage Disposals shall not be tied into Grease Interceptor.**

Please state any reasons why an underground unit would be unfeasible to install:

Please submit application with plans, specifications and plumbing diagrams to the following address:

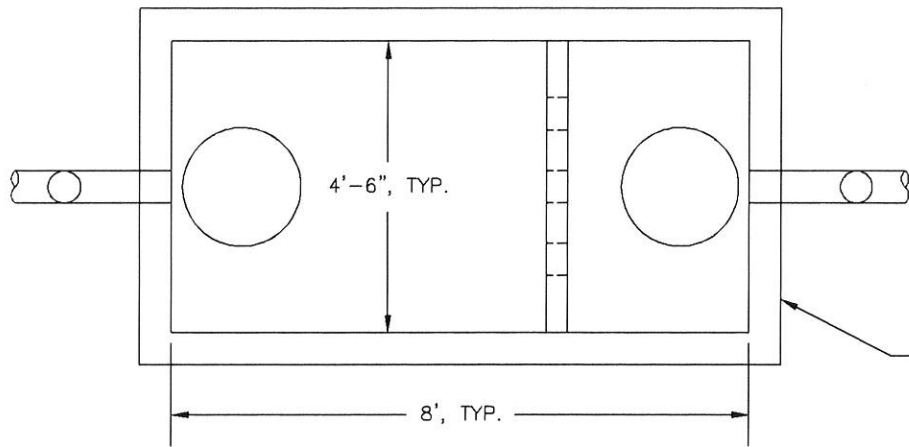
James Island Public Service District
Fats, Oils and Grease Management Program
1739 Signal Point Road
P.O. Box 12140
Charleston, South Carolina 29422-2140

Contact the Wastewater Crew Chief, Chris Pereira at (843) 762-5258 or Fax (843) 762-5252, if you should have any questions or need any additional information.

I certify that the above information is correct to the best of my knowledge. Also, I understand that I am responsible for all JIPSD fees associated with the installation of a Grease Interceptor as well as JIPSD's Grease Management Guidelines.

Signature: _____

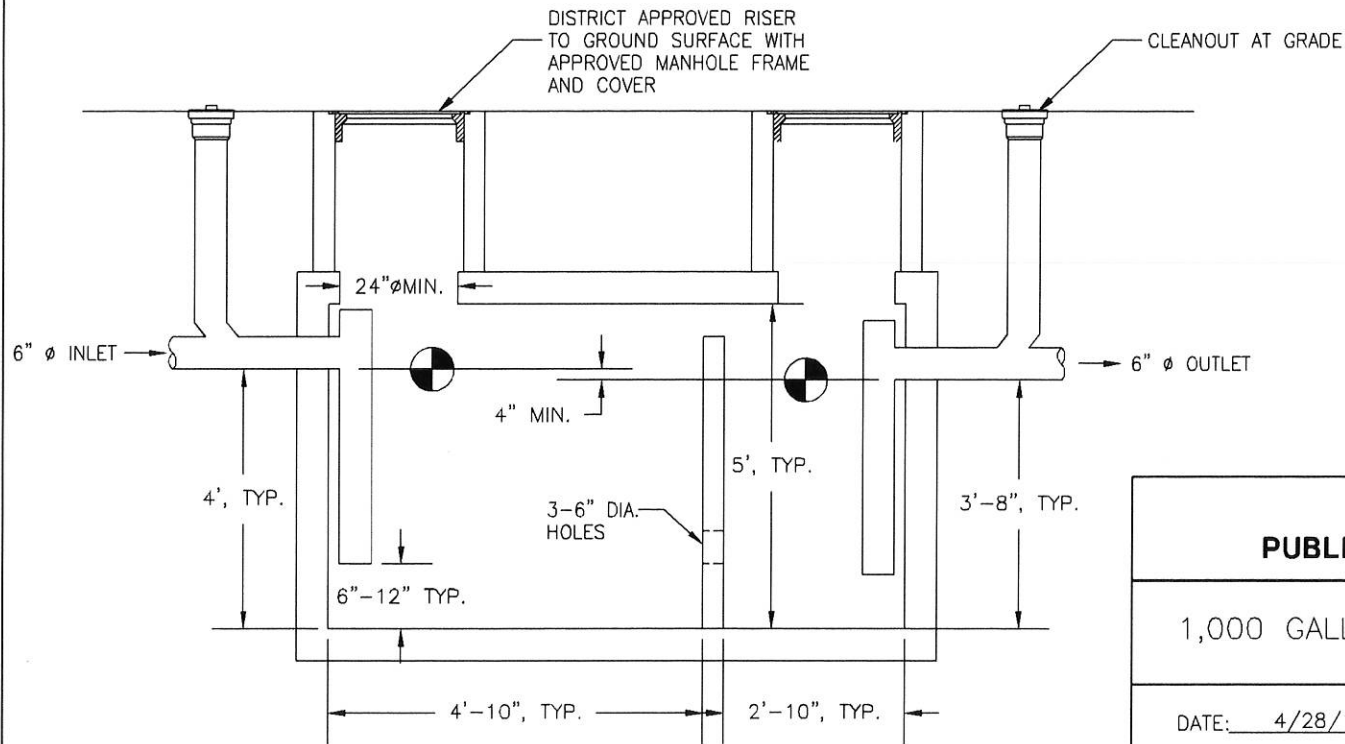
Date: _____



NOTICE:

1. SEE DISTRICT STANDARDS SECTIONS 15 FOR ADDITIONAL REQUIREMENTS.
2. GREASE TRAP MATERIALS, CONSTRUCTION, AND INSTALLATION SHALL ALSO BE IN ACCORDANCE WITH APPLICABLE SCDHEC AND LOCAL PLUMBING CODE REQUIREMENTS.

DISTRICT APPROVED
4,000 PSI CONCRETE
PRECAST GREASE TRAP
STRUCTURE



**JAMES ISLAND
PUBLIC SERVICE DISTRICT**

1,000 GALLON GREASE TRAP

DRAWING:

18

DATE: 4/28/10

DRAWN BY: GRG ASSOC.

SCALE: NTS

APPROVED BY: DJH



This certification form must be completed by a "District Certified" Grease Waste Hauler or Plumber.

GREASE INTERCEPTOR CERTIFICATION (Form A)

Every food service establishment in the James Island PSD jurisdiction must have their grease interceptor certified annually, to verify that all components of the grease control equipment are present and in good working condition. Furthermore, the certification will identify any structural problems with the grease interceptor. The completed original form must be submitted to the James Island PSD.

Facility Name: _____ Phone #: _____

Address: _____ City: _____, SC. Zip Code _____

	<u>PASS</u>	<u>FAIL*</u>
1. Interceptor completely emptied and cleaned before inspection? -----	<input type="checkbox"/>	<input type="checkbox"/>
2. There is access to all interceptor chambers for cleaning and inspections? -----	<input type="checkbox"/>	<input type="checkbox"/>
3. Influent (inlet) T is attached and extends downward at least 2/3 depth of tank? -----	<input type="checkbox"/>	<input type="checkbox"/>
4. Effluent (outlet) T is attached and extends downward to within 12" of tank bottom? -----	<input type="checkbox"/>	<input type="checkbox"/>
5. Effluent (outlet) T is made of non-collapsible material that does <u>not</u> easily flex or bend (i.e. minimum-schedule 40 PVC, etc.), and is secure, not allowing fats, oils or grease to escape around edges? -----	<input type="checkbox"/>	<input type="checkbox"/>
6. Interceptor tank does <u>Not</u> have visible holes or leaks? -----	<input type="checkbox"/>	<input type="checkbox"/>
7. Mid-wall baffle(s) is secure and operational? -----	<input type="checkbox"/>	<input type="checkbox"/>
8. Interceptor maintaining structural integrity? -----	<input type="checkbox"/>	<input type="checkbox"/>
9. No Sewer clean-out covers missing or damaged? -----	<input type="checkbox"/>	<input type="checkbox"/>

MUST COMPLETE ALL INFORMATION

*** IMPORTANT REQUIRED INFORMATION & RESPONSE:** If the answer to any of the above questions is "Fail", the equipment has failed certification. A statement of the plan of action to be taken, with date to be completed, must be provided on the other side of this form under "Response Comments" (attach additional sheets to explain corrective action if necessary):

Inspector Certification – This grease interceptor has PASSED FAILED certification.

I _____ of _____
(print name of inspector) (print company name)

certify that the above listed facility has an approximate _____ gallon capacity interceptor. I have examined the interceptor and provided the above information.

(signature) (date) (phone number)

Facility Owner/Manager Certification

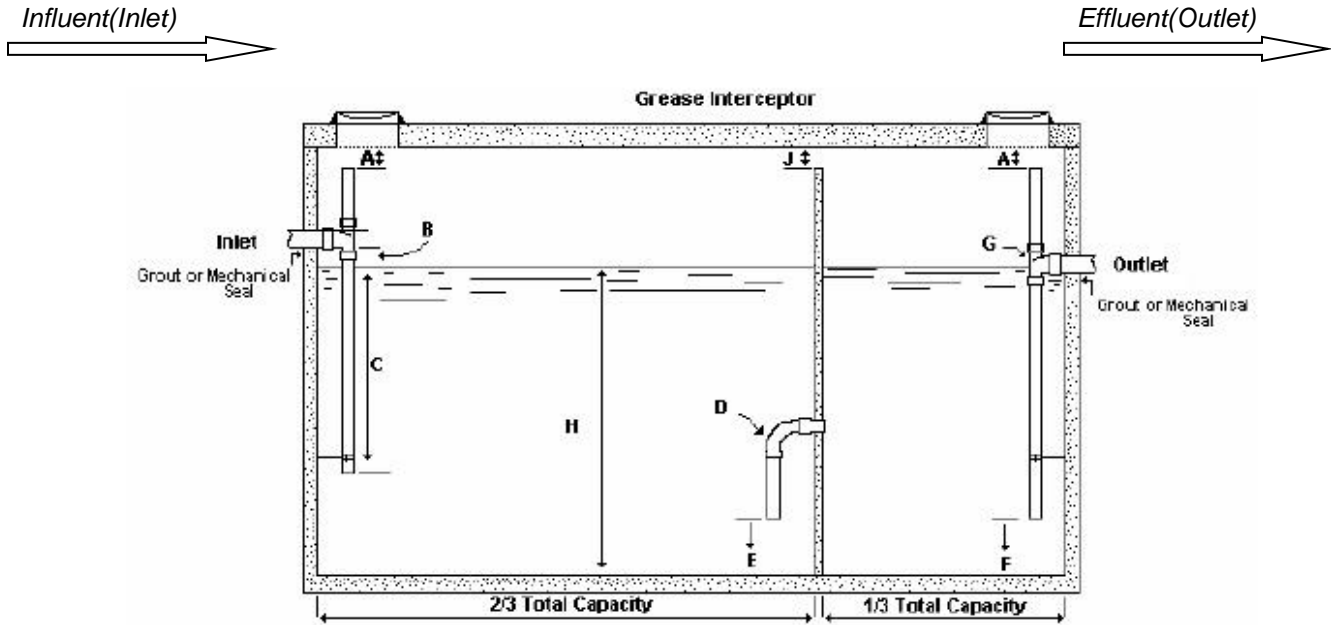
I _____ certify to the best of my knowledge the above statements to be true and correct.
(print name)

(signature) (date)

SUBMIT COMPLETED **ORIGINAL** CERTIFICATION FORM TO:

James Island PSD, Fats, Oils and Grease Program, P.O. Box 12140, Charleston, SC 29422

Grease Interceptor Diagram



- A.) Minimum 6" , but not less than pipe diameter.
- B.) Inlet pipe invert to be 2 1/2" above liquid surface.
- C.) Inlet pipe to terminate 2/3 depth of water level.
- D.) 90 degree Sweep, minimum size - 6".
- E.) 12" from floor to end of sweep.
- F.) 12" from floor to end of outlet pipe.
- G.) Outlet pipe no smaller than inlet pipe, minimum - 4".
- H.) Minimum depth of liquid capacity - 42".
- J.) Maximum distance from ceiling - 6".

RESPONSE COMMENTS (required if "Failed" checked, identify problem, corrective action and provide planned date of corrective action)



This certification form must be completed by a "District Certified" Grease Waste Hauler or Plumber.

GREASE INTERCEPTOR CERTIFICATION (Form A)

Every food service establishment in the James Island PSD jurisdiction must have their grease trap (under-the-sink units) certified annually, to verify that all components of the grease control equipment are present and in good working condition. The completed original certification form must be submitted to the James Island Public Service District.

Facility Name: _____ Phone #: _____

Address: _____ City: _____, SC. Zip Code _____

	<u>PASS</u>	<u>FAIL*</u>
1. Grease trap completely emptied and cleaned before inspection? -----	<input type="checkbox"/>	<input type="checkbox"/>
2. There is access to all trap chambers for cleaning? -----	<input type="checkbox"/>	<input type="checkbox"/>
3. Flow restrictor device is installed (before grease trap or at grease trap inlet)? -----	<input type="checkbox"/>	<input type="checkbox"/>
4. Flow restrictor device installation is correct (proper flow direction and orientation)? -----	<input type="checkbox"/>	<input type="checkbox"/>
5. Grease trap is vented (vent on flow restrictor)? -----	<input type="checkbox"/>	<input type="checkbox"/>
6. Grease trap has NO visible holes or leaks? -----	<input type="checkbox"/>	<input type="checkbox"/>
7. Baffle(s) (inlet, middle and outlet...depending on design) are secure and operational? -----	<input type="checkbox"/>	<input type="checkbox"/>
8. Automatic or machine dishwasher is <u>NOT</u> connected to the grease trap? -----	<input type="checkbox"/>	<input type="checkbox"/>
9. No Sewer clean-out covers missing or damaged? -----	<input type="checkbox"/>	<input type="checkbox"/>

*** IMPORTANT REQUIRED INFORMATION & RESPONSE:** If the answer to any of the above questions is "Fail", the equipment has failed certification. A statement of the plan of action to be taken, with date to be completed, must be provided on the other side of this form under "Response Comments" (attach additional sheets to explain corrective action if necessary):

Inspector Certification – This grease interceptor has PASSED FAILED certification.

I _____ of _____
(print name of inspector) (print company name)

certify that the above listed facility has a _____ **gallons per minute** / _____ **pound capacity** grease trap. I have examined the grease trap and provided the above information.

(signature) (date) (phone number)

Facility Owner/Manager Certification

I _____ certify to the best of my knowledge the above statements to be true and correct.
(print name)

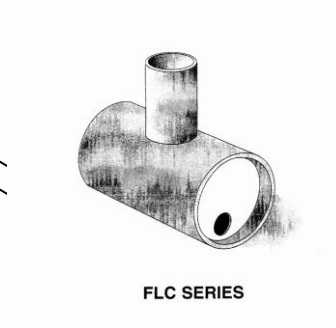
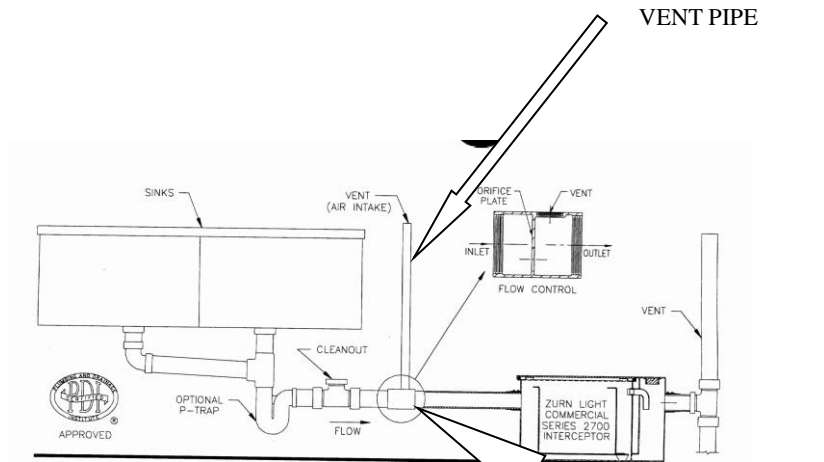
(signature) (date)

SUBMIT COMPLETED **ORIGINAL** CERTIFICATION FORM TO:

MUST COMPLETE ALL INFORMATION

James Island PSD, Fats, Oils and Grease Program, P.O. Box 12140, Charleston, SC 29422

Under the Sink Grease Trap Diagram



FLOW RESTRICTOR (Key component)

RESPONSE COMMENTS (required if "Failed" checked, identify problem, corrective action and provide planned date of corrective action)

Grease Interceptor Sizing Worksheet

The Uniform Plumbing Code Formula

Company	Calculated By	Date
Project	Location	

Follow these six simple steps to determine grease interceptor size.

	No of Meals Per Peak Hours	Waste Flow Rate	Retention Time	Storage Factor	Calculated Interceptor Size	Grease Interceptor
Enter Calculations Here >	<input style="width: 80px; height: 40px;" type="text"/> Step 1	<input style="width: 80px; height: 40px;" type="text"/> X	<input style="width: 80px; height: 40px;" type="text"/> X	<input style="width: 80px; height: 40px;" type="text"/> =	<input style="width: 80px; height: 40px;" type="text"/> Step 5	<input style="width: 80px; height: 40px;" type="text"/> Step 6

1	<p>Number of Meals Per Peak Hour (Recommended Formula):</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Seating Capacity</td> <td style="text-align: center;">Meal Factor</td> <td style="text-align: center;">Meals per Peak Hour</td> </tr> <tr> <td style="text-align: center;"><input style="width: 80px; height: 30px;" type="text"/></td> <td style="text-align: center;">X <input style="width: 80px; height: 30px;" type="text"/></td> <td style="text-align: center;">= <input style="width: 80px; height: 30px;" type="text"/></td> </tr> </table> <p>Establishment Type:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Fast Food (45 min)</td> <td style="text-align: right;">Meal Factor</td> <td style="text-align: right;">1.33</td> </tr> <tr> <td>Restaurant (60 min)</td> <td></td> <td style="text-align: right;">1.00</td> </tr> <tr> <td>Leisure Dining (90 min)</td> <td></td> <td style="text-align: right;">0.67</td> </tr> <tr> <td>Dinner Club (120 min)</td> <td></td> <td style="text-align: right;">0.50</td> </tr> </table>	Seating Capacity	Meal Factor	Meals per Peak Hour	<input style="width: 80px; height: 30px;" type="text"/>	X <input style="width: 80px; height: 30px;" type="text"/>	= <input style="width: 80px; height: 30px;" type="text"/>	Fast Food (45 min)	Meal Factor	1.33	Restaurant (60 min)		1.00	Leisure Dining (90 min)		0.67	Dinner Club (120 min)		0.50	<p>Notes:</p>
Seating Capacity	Meal Factor	Meals per Peak Hour																		
<input style="width: 80px; height: 30px;" type="text"/>	X <input style="width: 80px; height: 30px;" type="text"/>	= <input style="width: 80px; height: 30px;" type="text"/>																		
Fast Food (45 min)	Meal Factor	1.33																		
Restaurant (60 min)		1.00																		
Leisure Dining (90 min)		0.67																		
Dinner Club (120 min)		0.50																		

2	<p>Waste Flow Rate:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Condition</td> <td style="text-align: right;">Flow Rate</td> </tr> <tr> <td>With a Dishwashing Machine</td> <td style="text-align: right;">6 Gallons</td> </tr> <tr> <td>Without a Dishwashing Machine</td> <td style="text-align: right;">5 Gallons</td> </tr> <tr> <td>Single Service Kitchen</td> <td style="text-align: right;">2 Gallons</td> </tr> <tr> <td>Food Waste Disposer Only</td> <td style="text-align: right;">1 Gallon</td> </tr> </table>	Condition	Flow Rate	With a Dishwashing Machine	6 Gallons	Without a Dishwashing Machine	5 Gallons	Single Service Kitchen	2 Gallons	Food Waste Disposer Only	1 Gallon	<p>Notes:</p>
Condition	Flow Rate											
With a Dishwashing Machine	6 Gallons											
Without a Dishwashing Machine	5 Gallons											
Single Service Kitchen	2 Gallons											
Food Waste Disposer Only	1 Gallon											

3	<p>Retention Time</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Commercial Kitchen Waste Dishwasher</td> <td style="text-align: right;">2.5 Hours</td> </tr> <tr> <td>Single Service Kitchen Single Serving</td> <td style="text-align: right;">1.5 Hours</td> </tr> </table>	Commercial Kitchen Waste Dishwasher	2.5 Hours	Single Service Kitchen Single Serving	1.5 Hours	<p>Notes:</p>
Commercial Kitchen Waste Dishwasher	2.5 Hours					
Single Service Kitchen Single Serving	1.5 Hours					

4	<p>Storage Factor</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Kitchen Type</td> <td style="text-align: right;">Storage Factor</td> </tr> <tr> <td>Fully Equipped Commercial Hours of Operation</td> <td></td> </tr> <tr> <td>8 Hours</td> <td style="text-align: right;">1.00</td> </tr> <tr> <td>12 Hours</td> <td style="text-align: right;">1.50</td> </tr> <tr> <td>16 Hours</td> <td style="text-align: right;">2.00</td> </tr> <tr> <td>24 Hours</td> <td style="text-align: right;">3.00</td> </tr> <tr> <td>Single Service Kitchen</td> <td style="text-align: right;">1.50</td> </tr> </table>	Kitchen Type	Storage Factor	Fully Equipped Commercial Hours of Operation		8 Hours	1.00	12 Hours	1.50	16 Hours	2.00	24 Hours	3.00	Single Service Kitchen	1.50	<p>Notes:</p>
Kitchen Type	Storage Factor															
Fully Equipped Commercial Hours of Operation																
8 Hours	1.00															
12 Hours	1.50															
16 Hours	2.00															
24 Hours	3.00															
Single Service Kitchen	1.50															

5	<p>Calculate Liquid Capacity</p> <p>Multiply the values obtained from step 1, 2, 3 and 4. The result is the approximate grease interceptor size for this application</p>	<p>Notes:</p>
----------	---	----------------------

6	<p>Select Grease Interceptor</p> <p>Using the approximate required liquid capacity from step 5, select an appropriate size as recommended by the manufacturer.</p>	<p>Notes:</p>
----------	---	----------------------



RECOMMENDED RATINGS FOR COMMERCIAL “UNDER-THE-COUNTER” PACKAGE UNIT GREASE TRAPS

General Procedures:

To determine the flow rate of each sink:

1. Calculate the capacity of the sink in cubic inches:
 $\text{___ (length) x ___ (width) x ___ (depth) = ___ cu. in.}$
2. Convert the capacity from cubic inches to gallons per minute (GPM):
 $\text{___ cu. in. / 231 = ___ GPM.}$
3. Adjust for displacement:
 $\text{___ GPM x 0.75 = ___ GPM.}$
4. Result is the flow rate required to drain the sink in one minute.

Sizing for Multiple Fixtures:

1. Determine the flow rate for each fixture to be serviced by the interceptor.
2. Add together 100% of the largest flow rate, 50% of the second largest, and 25% of all others.
3. Result is the recommended flow rate of the interceptor.

Example:

1. Fixture A: 35 GPM Flow Rate
Fixture B: 26 GPM Flow Rate
Fixture C: 18 GPM Flow Rate
Fixture D: 12 GPM Flow Rate
2. $35 \text{ GPM (A) x 100\% = 35 GPM}$
 $26 \text{ GPM (B) x 50\% = 13 GPM}$
 $30 \text{ GPM (C + D) x 25\% = 7.5 GPM}$
3. Total Flow Rate :55.5 GPM
A 50 GPM interceptor is recommended for this installation.



INSTALLATION CHECKLIST

Inspector: _____ Establishment: _____

Signature: _____ Address: _____

Date: _____ Contact Name: _____

Time Inspection Started: _____ Phone: _____

Time Inspection Completed: _____

Instructions:

1. Completely fill out general information.
2. For items that require some measurement of field data, the inspector should obtain the necessary data or information and record it under the column titled, "Field Data"
3. For all items marked in violation, note the fact that the establishment contact was notified of the violation and the contact's response.

An entry should be made for each item using the following codes:

- "C" – Compliance with the item
- "V" – Violation of the item (provide explanation in the notes)
- "NA" – Not applicable (provide explanation in the notes)
- "NC" – Not checked (provide explanation in the notes)

Number	Item Description	Compliance Status
--------	------------------	-------------------

1	Each grease trap serves not more than four (4) single compartment sinks of the same depth. The grease trap is sized by the number of fixtures discharging to it.	
2	Grease traps have a water seal of not less than two (2) inches in depth or the diameter of its outlet, whichever is greater.	
3	No food waste disposal unit or dishwasher is connected to or discharges into any grease trap.	
4	Waste from toilets and urinals do not discharge to the grease interceptor.	
5	Waste in excess of 140° F is not discharged to any grease trap. (Dishwasher with a min. temperature of 160° F is not discharged to any grease trap.)	

6	The vertical distance between the fixture outlets and grease trap weirs is as short as practical.	
7	Grease interceptor is as close as practical to the fixtures served.	
8	Each fixture connected to a grease trap is provided with an approved type flow control or restricting device installed in a readily accessible and visible location. Devices shall be designed so that the flow through the device or devices at no time exceeds the rated capacity of the grease trap or interceptor.	
9	Each fixture discharging into a grease trap or interceptor is individually trapped and vented in an approved manner.	
10	Each grease trap and interceptor is properly vented to allow air circulation throughout the entire drain system.	
11	No water jacketed grease trap or interceptor is installed.	
12	Grease interceptor is easily accessible for inspection and cleaning and access does not require the use of ladders or the removal of bulky equipment.	
13	There is a minimum of one access point into each compartment of the interceptor and no access points are greater than ten (10) feet apart. Each access opening is leak-resistant and cannot slide, rotate, or flip.	

14	Location of grease interceptor is shown on approved building plans. Drawings of interceptor are complete and show all dimensions, capacities, reinforcing and structural design calculations.	
15	Grease interceptor is not installed in any part of a building where food is handled. Location shall meet the approval of the Administrative Authority.	
16	Grease interceptor serves a single business establishment.	
17	Grease interceptor has a minimum of two compartments and three (3) inch diameter fittings designed for grease retention. The compartments shall be separated by partitions or baffles that extend at least six (6) inches above the water level. The inlet compartment shall be 2/3 of the total interceptor capacity and shall have a minimum liquid volume of 333 gallons. The length of the inlet compartment shall be longer than the inside width of the interceptor.	

18	The inlet and outlet fittings shall be a baffle tee (or similar flow device) that extends at least four (4) inches above the water level to within 12 inches of the bottom of the interceptor. The outlet tee out of a sample box shall extend at least six (6) inches below the water surface. Flow between the separate compartments is through a baffle tee or bend that extends down to within 12 inches of the bottom of the interceptor.	
19	The liquid depth shall be greater than or equal to two (2) feet six (6) inches and less than six (6) feet zero (0) inches.	
20	There shall be a minimum of nine (9) inches of open vent space above the water level to the top of the interceptor. The airspace has a minimum capacity equal to 12-1/2% of the grease interceptors' liquid volume.	
21	The grease interceptor has at least one square foot of surface area for every 45 gallons of liquid capacity.	
22	All waste enters the interceptor through the inlet pipe.	
23	Grease interceptor cover is gastight and has a minimum opening of 20 inches in diameter.	
24	Grease interceptors located in areas of pedestrian or vehicle travel are adequately designed to support the imposed loads. Review of structural calculations may be required to verify adequacy.	
25	Redwood baffles are not installed in grease interceptor.	

26	A sample box is provided on the outlet side of the grease interceptor. This is recommended and may be required by the UPC so that the Administrative Authority can periodically sample the effluent quality.	
27	Grease interceptor is permanently and legibly marked with the manufacturer's name of trademark, model number, UPC certification mark and registration (if product is listed by the International Association of Plumbing and Mechanical Officials), and any other markings required by law.	

NOTES		