

**Palmetto Utilities, Inc.**

**SAND, OIL, AND GREASE  
INTERCEPTOR STANDARDS**

**As of August 1, 2009**

The following is the policy statement and standards guide (Standard) of Palmetto Utilities, Inc. (PUI) for the design and installation of sand, oil, and grease interceptors. This statement contains PUI's interpretation and implementation of its rate schedule and other lawful authority.

**A. GENERAL**

1. It is the intent of this Standard to provide for specific standards for grease trap location, design, installation, construction, operation and maintenance so as to comply with the sewer use and structure. It should be noted that failure to comply with the Standard shall be considered a violation of applicable sections of the existing sewer use and rate schedule and consequently, subject to denial or discontinuance of sewer service.
2. The introduction of sand, oil, and grease into PUI's system represents the introduction of a pollutant into the system that has a detrimental impact on system integrity. By properly controlling the introduction of these pollutants through the use of interceptors and traps, the system integrity is maintained and operation and maintenance for these issues are minimized. Without this Standard and customer compliance with this Standard, the likelihood of overflows is increased, operation and maintenance costs are significantly increased, and the system operates less efficiently.
3. This Standard may be revised from time-to-time as PUI deems appropriate and in PUI's sole discretion.

**B. DEFINITIONS**

1. Food Service Establishment.

Any commercial facility discharging kitchen or food preparation wastewaters, including but not limited to restaurants, motels, hotels, cafeterias, hospitals, schools, bars, etc., any meat and/or fish processor, and any other facility which, in PUI's opinion, would require a grease trap installation by virtue of its operation. Such definition normally includes any establishment which is required to have a South Carolina Department of Health and Environmental Control (SCDHEC) food service license.

2. Grease Trap/Grease Interceptor.

A grease interceptor is a device which serves to trap and retain within its confines all suspended or semi-solid grease which may have passed through sinks, drains, or other fixtures. The retained grease is then kept from entering the service line which connects the business to the main connector sewer. Ultimately and on a timely basis, the grease must be removed by the owner/operator of the business

and disposed of in a satisfactory fashion. This may be by the owner/operator or by professionals who contract this type of work.

3. Oil Separator.

An oil separator is a device which serves to trap and retain oils or other flammable liquid to prohibit the introduction of same into the sewer system by accident or otherwise.

4. Sand Interceptor.

A sand interceptor is a device which is designed to trap sand and other solids and prohibit its entry into the sewer system.

5. Neutralizing Device.

A neutralizing device is a tank or manufactured device installed to dilute or neutralize acids or corrosive liquids prior to discharge onto collector lines. Such devices shall be automatically provided with a sufficient intake of diluting water or neutralizing medium, so as to make its contents non-injurious before being discharged into the collection system.

C. GENERAL REQUIREMENTS

The following administrative, operational, and other general requirements are applicable to all food service establishments, new or existing. Particular requirements for grease trap/interceptor construction, specifically pertaining to both new and existing food service establishments, can be found in Section D of this Standard.

1. ALL FOOD SERVICE ESTABLISHMENTS IN THE PUI SERVICE AREA SHALL HAVE GREASE-HANDLING FACILITIES APPROVED BY PUI. Establishments whose grease handling facilities are not in accordance with this Standard shall be given a compliance schedule with a deadline not to exceed eight (8) weeks from initial notification date.
2. All food service establishment grease handling facilities/operations shall be subject to periodic review, evaluations, and inspections by PUI 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. A PUI REPRESENTATIVE MUST BE PRESENT AT ALL PUMP-OUT OPERATIONS.
3. VIOLATIONS OF THIS STANDARD WILL BE CONSIDERED GROUNDS FOR DISCONTINUANCE OF SEWER SERVICE. PUI HAS THE RIGHT TO TERMINATE A CUSTOMER'S SERVICE WITHOUT NOTICE.



4. Food service establishments whose operations cause or allow excessive grease to discharge or accumulate in the sewer collection system are liable to PUI for all costs related to PUI 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 also be grounds for sewer service discontinuance.
5. PUI will recommend to the Owner(s) the frequency of the grease removal. It will be the responsibility of the Owner to contract the grease removal provider and ensure that the provider is removing the grease based on the recommended frequency.

Failure to comply with the recommended frequency schedule may be grounds for sewer service discontinuance.

Maintenance contracts and/or records or grease removal frequencies for grease handling facilities may be required to be submitted periodically to ensure routine and adequate system maintenance.

In maintaining the grease interceptors, the Owner(s) shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain on site records of dates, and means of disposal which are subject to review by PUI.

The Owner(s) should ensure that all solids are removed when no more than 75% of the interceptor's capacity is reached.

6. Any food service establishment whose effluent is suspected or perceived by PUI to contain a concentration of greater than 100 mg/l of oil and grease may be required to routinely sample their grease trap effluent and have it analyzed for oil and grease at the expense of the Owner and furnish a copy of the analysis to PUI.
7. All grease traps/interceptors shall be designed, installed, and located in accordance with this Standard to allow for complete access to inspection, maintenance, etc.
8. All grease traps/interceptors must be installed by properly licensed contractors.
9. Should a deficiency in the maintenance of the grease trap be noted during an inspection by PUI, a citation for correction will be given to the facility. The facility must correct the deficiency within five (5) calendar days following that date.

## D. CONSTRUCTION STANDARDS

### 1. New Facilities

- a. All newly constructed (or newly located) food service establishments shall be required to install a grease interceptor, approved by PUI. Grease interceptors shall be sized at 20 gallons per food service seat with no interceptor less than 1,000 gallons total capacity.
- b. New facilities are required to complete an initial grease trap application to install a grease trap and submit such application with plans, specifications, plumbing diagrams, riser diagrams, etc. to PUI for review.
- c. All grease trap/interceptor plans and specifications must be reviewed and approved by PUI prior to installation. An approval letter for each new trap will be issued by PUI prior to construction and/or installation.
- d. The construction and location criteria for grease interceptors must be in accordance with the Environmental Protection Agency (EPA) Guidance Document, "On-site Wastewater Treatment and Disposal Systems," Chapter 8.
- e. All grease interceptors, whether singular or in series, must be directly accessible from the surface and must be fitted with an extended inlet sanitary tee that terminates 12" above the tank floor. The minimum access opening dimensions shall be 18" by 18" or a minimum of 24" in diameter. Two (2) access openings (inlet and outlet chambers) to underground traps are required and should be removable with ease by one person and accessible from the surface. All grease interceptors must have an elder valve. A typical grease trap is provided in detail as Appendix A to this Standard.
- f. Maintenance of grease traps/interceptors must include thorough pump-out and/or cleaning as needed, with a minimum frequency of six (6) times per year per Section C, Paragraph 5 of this Standard. Maintenance contracts may be required to be submitted to PUI as called for in Section C, Paragraph 5. The Owner, however, is ultimately responsible for proper maintenance of the grease trap facility(ies).
- g. No new food service facility will be allowed to initiate operations until grease handling facilities are installed and approved by PUI.
- h. 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, wok



ovens, floor drains, and other potentially grease containing drains. In such cases, units will be considered acceptable only if approved flow control fittings are provided to the grease interceptor inlet to prevent overloading of the grease trap and to allow for proper interceptor operation.

## 2. Existing Facilities

- a. All existing food service establishments (or renovated or expanded establishments) must have grease handling facilities approved by PUI. Failure to comply with this Standard will be considered a violation of the rate schedule and will subject the establishment to sewer service discontinuance.
- b. For cases in which “outdoor” units are feasible to install, construction requirements will be as specified in Section D Paragraph 1 of this Standard, i/e/ New Facilities.
- c. Sizing of “under-the-counter” grease trap units will be in accordance with (EPA) recommended ratings for commercial grease traps. The grease traps retention capacity rating in pounds shall be at least two (2) times the gpm flow rate of the type fixture which it serves.
- d. Location of “under-the-counter” units must be as close to the source of the wastewater as physically possible, while remaining accessible for maintenance.
- e. Wastewater from dishwashers and garbage grinders should not be discharged to grease traps/interceptors, unless approved by PUI.
- f. In the maintaining of existing grease traps/interceptors, the Owner(s) shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain records of the dates and means of disposal which are subject by PUI, per Section C, Paragraph 5 of this Standard.
- g. In the event of an existing food service establishment’s grease handling facilities are either under-designed, substandard, or poorly operated, the Owner(s) will be notified in writing, of the required improvements and given a compliance deadline not to exceed eight (8) weeks to conform with the requirements of this Grease Standard. This does not include general grease removal violations referred to in Section C, Paragraph 9 of this Standard.
- h. Any use of enzymes or other grease solvents, emulsifiers, etc. in lieu of physical cleaning is not considered acceptable grease trap maintenance

practice. Any use of the above must be approved by PUI before introduction into the system.

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 Grease Trap Standards applicable to new facilities, i.e., outdoor grease traps units (minimum size 1,000 gallons) shall be installed.
- b. Where physically impossible to install “outdoor” units, “under-the-counter” units may be allowed as with existing food service establishments provided prior approval of unit type, size, location, etc. is approved by PUI. 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.

**E. SAND, OIL AND GREASE INTERCEPTOR**

1. Provide precast concrete vault.
  - a. 4000 psi concrete.
2. Other construction and/or prefabricated materials may be considered by PUI. Shop drawing submittal and approval by the District shall precede any construction or installation.

**F. LOCATING**

1. Easily accessible for cleaning and solids removal.

**G. MANHOLE FRAMES AND COVERS**

1. Provide grey iron castings, ASTM A48, Class 30 iron.
2. Machine all bearing surfaces.
3. Coat frames and covers with two shop coats of bitumastic paint.
4. Provide watertight covers, where indicated, conforming to above requirements and with frame tapped for four bolts, countersunk in cover.
  - a. Provide rubber gasket between frame and cover.

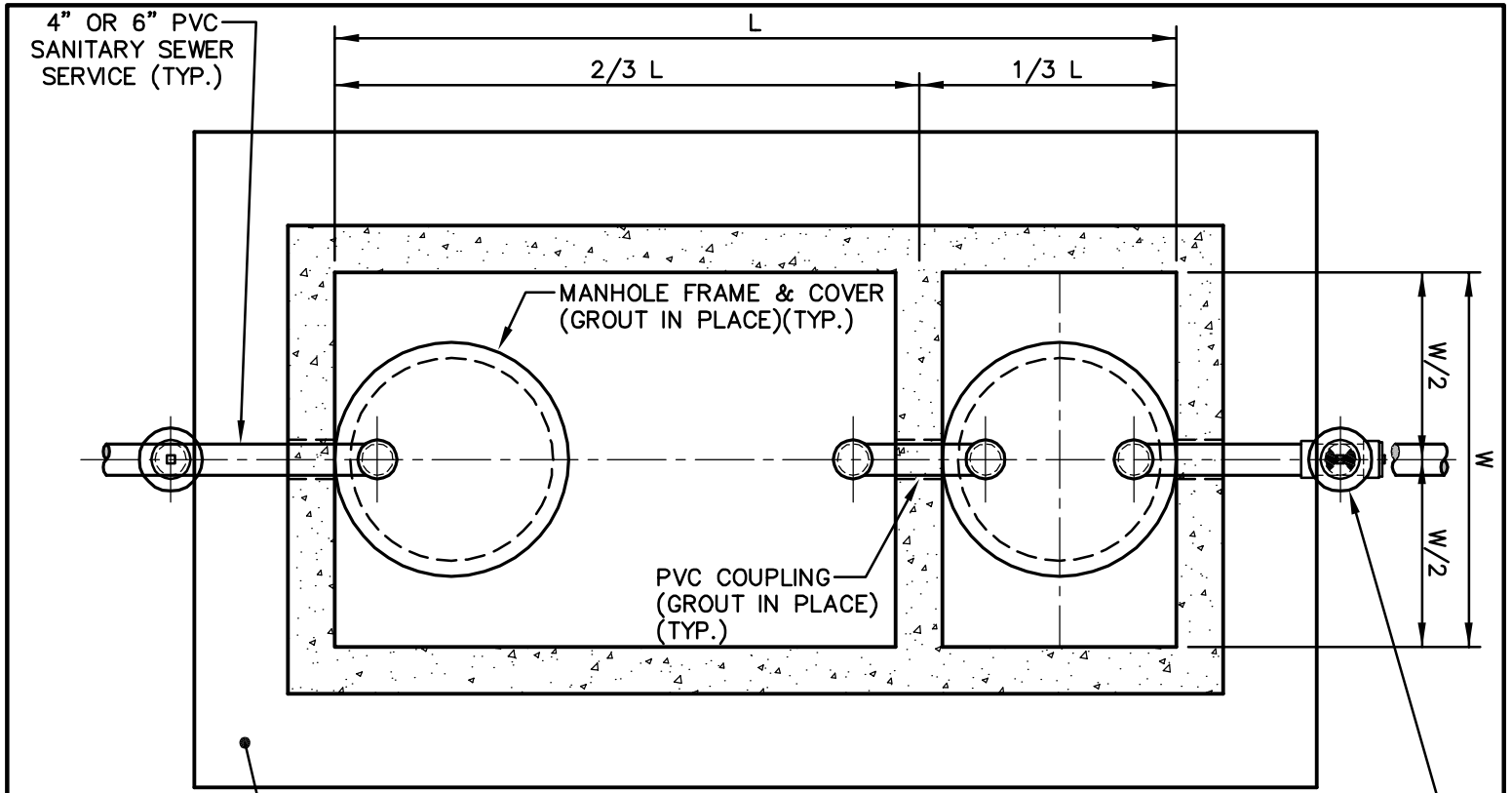
## H. ENFORCEMENT

1. Enforcement of this Standard shall be in accordance with the provisions of PUI rate schedule and applicable law. FAILURE TO COMPLY WITH THIS STANDARD MAY BE GROUNDS FOR DISCONTINUANCE OF SEWER SERVICE WITHOUT NOTICE. ADDITIONALLY, FAILURE TO COMPLY MAY RESULT IN NOTIFICATION TO THE COUNTY HEALTH DEPARTMENT FOR REQUEST OF ENFORCEMENT ACTION WHICH MAY LEAD TO REVOCATION OF FOOD SERVICE PERMITS.
2. For new food service establishments, PUI may elect to request from appropriate building official that certificates of occupancy be withheld until compliance with PUI's requirements, including grease trap compliance is fully met.

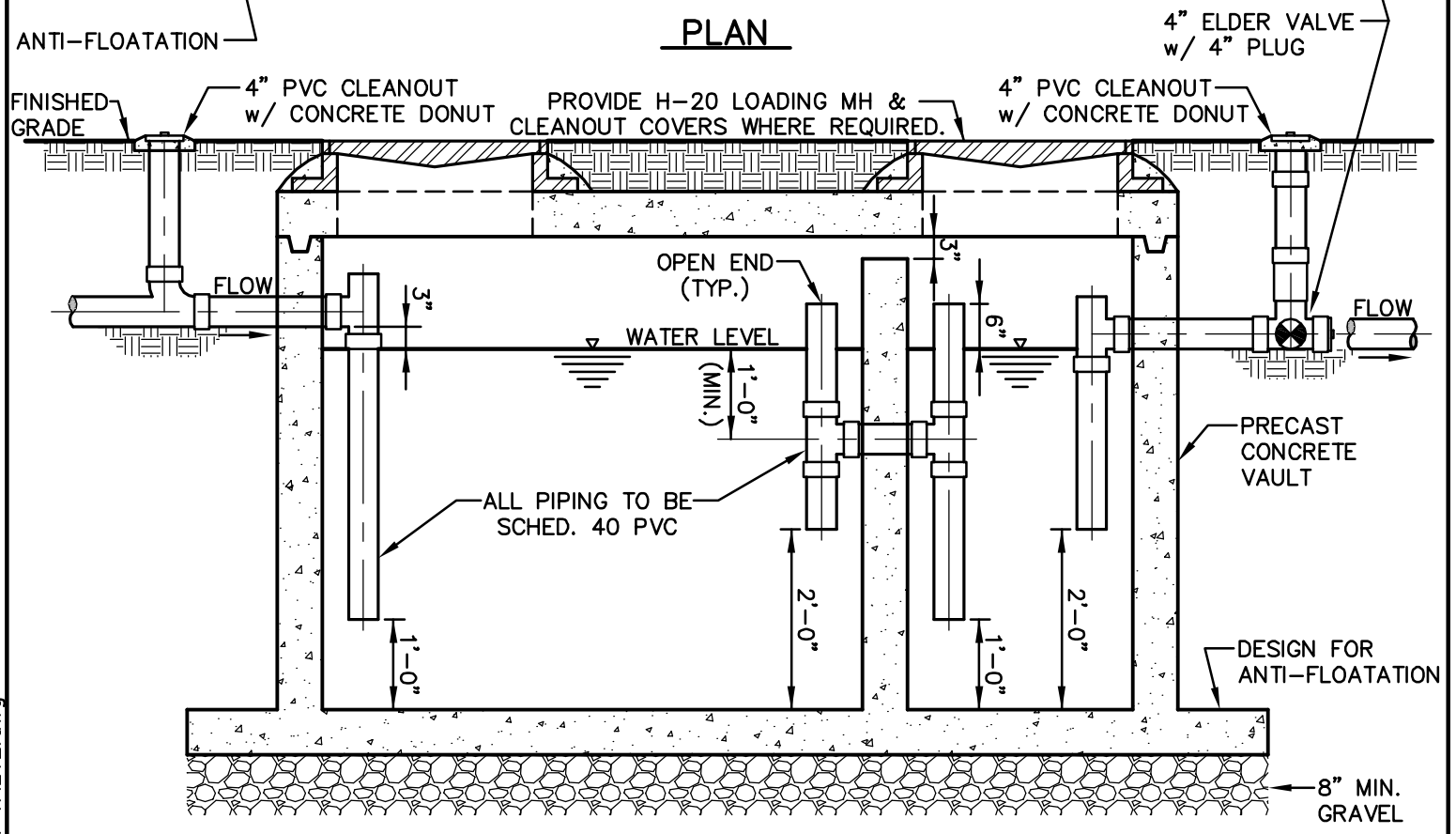


## Appendix A

Example of a grease trap design



**PLAN**



**PROFILE**

**NOTES:**

- 1. ALL PROPOSED GREASE TRAP PLANS TO BE SUBMITTED & APPROVED BY PALMETTO UTILITIES, INC. PRIOR TO INSTALLATION.
- 2. ELDER VALVE MUST BE INSTALLED.
- 3. MINIMUM CAPACITY 20 gal. PER SEAT.
- 4. CALL (803) 699-2422 FOR INSPECTION.

**PALMETTO UTILITIES STANDARD  
GREASE TRAP WITH ELDER VALVE**

SCALE: 1/2"=1'-0"

GREASE TRAP WITH ELDER VALVE.dwg