### CITY OF CLERMONT

# ENVIRONMENTAL SERVICES DEPARTMENT



**MANUAL** 

OF

### OIL AND GREASE PREVENTION

January 2, 2015

#### **Preface**

This manual of policies and specifications has been prepared by the City of Clermont Environmental Services Department to establish an effective Oil and Grease Prevention Program in the City's sewer service area in accordance with directives issued at the Federal and State level. This manual had been adopted by the City Council through City ordinance. Responsibilities for the control of oil and grease traps/interceptors are shared by the consumer, this department, and the Florida Department of Environmental Protection. This manual of policies and specifications serves as a guide to insure the safety and maintenance of the wastewater system.

The City of Clermont Environmental Services Department:

- 1. Urges the review of this manual of policies and specifications before designing or installing an oil or grease trap/interceptor device.
- 2. Believes the material in this manual will provide the consumer with the understanding of the necessity of oil and grease trap/interceptor devices.
- 3. Will ensure that the policies, standards and specifications as set forth in this manual will be uniformly enforced.
- 4. Reserves the right to update this manual as necessary due to changes in Florida Department of Environmental Protection policies and regulations.

If there are any questions regarding this manual or policies, please call the City of Clermont Environmental Services Department at 352-241-0178.

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#### **SECTION 1 – PURPOSE AND INTENT**

#### 1.1 Purpose

The purpose of this section is to provide for the implementation of the oil and grease prevention program. The objective of the oil and grease prevention program is to minimize the introduction of fat soluble wastes, including petroleum-based hydrocarbons, into the city wastewater system.

#### 1.2 General Criteria

#### 1.21

The discharge by any nonresidential user to the city wastewater system of certain liquids or wastes may be prohibited or limited pursuant to the provisions of this article.

#### 1.22

Wastes containing oil and grease, including materials processed through garbage grinders, shall be directed to the grease trap/interceptor.

#### 1.23

Wastes containing residual or trace amounts of petroleum based oils and greases shall be directed to the oil/water separator.

#### 1 24

Sanitary facilities and other similar fixtures shall not be connected to the oil and grease trap/interceptor, or the oil/water separator.

#### 1.25

Liquid wastes shall be discharged to the oil and grease trap/interceptor, or oil/water separator through the inlet pipe only and in accordance with the design/operating specifications for the device.

#### 1.26

Oil and grease traps/interceptors and oil/water separators shall be installed in accordance with the county building codes, in accordance with city approved plans and specifications created to implement this ordinance, and development review requirements and in a location which provides easy and safe access at all times for inspections, cleaning and proper maintenance, such as routine pumping. Oil and grease traps/interceptors shall not be located inside of a structure.

#### 1.27

Nonresidential establishments (users) that prepare, process or serve food or food products shall install an oil and grease trap/interceptor. Nonresidential establishments that have the potential to discharge wastes containing petroleum based oil and grease, such as commercial laundries, car washes and automotive-related facilities, shall have an oil/water separator. Other nonresidential users may be required by the utility director to install an oil and grease trap/interceptor and/or an oil/water separator, as appropriate, for the proper handling of wastes containing oils and greases.

#### 1.28

Grease, oil and sand interceptors shall be approved when, in the opinion of the director, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the utility director, and shall be located as to be readily and easily accessible for cleaning and inspection.

#### 1.29

Other types of food manufacturing or food preparation enterprises, such as, but not limited to, commissaries, commercial kitchens and caterers, shall install an oil and grease trap/interceptor. A control manhole or inspection box for monitoring purposes is required and shall be installed as approved by the director.

#### 1.30

Automotive related enterprises, commercial laundries and Laundromats and other users, which contribute wastes containing petroleum (hydrocarbon) based oil and greases shall install an oil/water separator. A control manhole or inspection box for monitoring purposes is required and shall be installed downstream as approved by the director.

#### 1.31

Oil and grease traps/interceptors, and oil/water separators and control manholes or inspection boxes shall be installed at the user's sole expense. Proper operation, maintenance and repair shall be done solely at the user's expense.

#### 1.4 General Design Criteria

#### 1.41

Oil and grease traps/interceptors and oil/water separators shall be designed and constructed in accordance with this article, county building code and other applicable state and county regulations. Design and construction of the devices shall be approved by the director.

#### 1.42

Oil and grease traps/interceptors and oil/water separators shall have a minimum of two compartments and shall be capable of separation and retention of oil and grease and storage of settleable solids

#### 1.43

Under the sink oil and grease traps/interceptors shall be prohibited.

#### 1.44

An adequate number of access points shall be provided for inspection and monitoring purposes. Covers shall have a gas tight fit. Where additional weight loads may exist, the oil and grease trap/interceptor and oil/water separator shall be designed, constructed and installed for adequate load-bearing capacity.

#### 1.45

The design of oil/water separators shall be based on peak flow, and where applicable, capable of treating and removing emulsions. Oil/water separators shall be sized to provide reliable, consistent and efficient removal (retention) of the petroleum based oils and greases in the user's discharge to the city collection system.

#### 1.46

Where possible, multiple oil and grease traps/interceptors and oil/water separators shall be placed in series instead of a single large unit.

#### 1.5 Capacity

The design and capacity of the oil and grease trap/interceptor shall be a minimum of 750-gallons.

#### 1.6 Installation in New Facilities

After the effective date of this article, facilities with the potential to discharge oil and grease, which are newly proposed or constructed; or existing structures, buildings or facilities which are being expanded, remodeled, or renovated to include a food service facility where such facilities did not previously exist, shall be required to install an approved, oil and grease trap/interceptor.

#### 1.7 Extensions

Any requests for extensions to the required compliance dates shall be made in writing to the utility director at least fifteen (15) days and shall be done in advance of the compliance date. The written request shall include the reasons for the user's failure or inability to comply with the compliance date set forth, the additional time needed to complete the remaining work, and the steps taken to avoid future delays. Extensions of time shall not exceed sixty (60) days and shall only be valid if granted in writing by the director or his designee.

#### 1.8 Maintenance

#### 1.81

Cleaning and maintenance of the oil and grease trap/interceptor or the oil/water separator shall be performed on a regularly scheduled basis by the user. Cleaning shall include complete removal of the entire contents of the device, including floating materials, wastewater, and bottom sludges and solids. Cleaning shall also include removal of materials from the tank walls, baffles, cross pipes, inlets, outlets and vents.

#### 1.82

Decanting or discharging of removed wastes back into the grease trap/interceptor or oil/water separator from which the wastes were removed or from any other trap or oil/water separator, is strictly prohibited.

#### 1.83

Pumping frequency shall be determined by the utility director based on flows, quantity of oil and grease in the discharge, volume of business, hours of operation and seasonal variations. The user shall be responsible for maintaining the trap/interceptor or oil/water separator in such a condition for efficient and proper operation. An oil and grease trap/interceptor shall be considered out of compliance if the grease layer on top exceeds six (6) inches; or the solids layer on the bottom exceeds twelve (12) inches; or the device is not retaining/capturing oils and greases. An oil/water separator shall be considered out of compliance if the retained oil layer is leaking into the discharge; or the captured oil reservoir is full and overflowing; or the containment area or vault is flooded.

#### 1.84

Wastes removed from each grease trap/interceptor or oil/water separator shall be disposed at a facility that is permitted to receive such wastes or a location so designated by the city/county/state for such purposes, in accordance with the provisions of this article. In no way shall the pumpage be returned to any private or public portion of the city collection system or treatment facilities.

#### 1.85

Additives such as, but not limited to, emulsifiers, enzymes, commercially available bacteria or other additives designed to absorb, purge, consume, trap or otherwise eliminate oils and grease shall be strictly prohibited.

#### 1.86

All maintenance of oil and grease management devices, including proper disposal, shall be performed by the user at the user's sole expense.

#### SECTION 2 – ADMINSTRATIVE AND ENFORCEMENT

#### 2.1 Administrative Procedures

#### 2.11

Pumpage from oil and grease traps/interceptors and oil/water separators shall be tracked by a manifest which confirms pumping, hauling and disposal of the wastes. The manifest shall be in the format and contain the tracking information set forth by the director.

#### 2.12

The user shall report a pump-out within forty-eight (48) hours to the utility director on the form so designated by the city for such purposes.

#### 2.2 Enforcement

#### 2.21

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

- a. Submit the required user survey in a timely manner.
- Report pumping activities within the designated time frame.
- Properly maintain (clean out or pump) the trap/interceptor or separator in accordance with the provisions of this ordinance.
- d. Properly complete and sign logs or records required by this ordinance.

#### 2.22

The utility director shall provide the user with written notice stating the nature of the violation. The user shall have seventy-two (72) hours to complete corrective action and submit evidence of compliance to the utility director.

#### 2.23

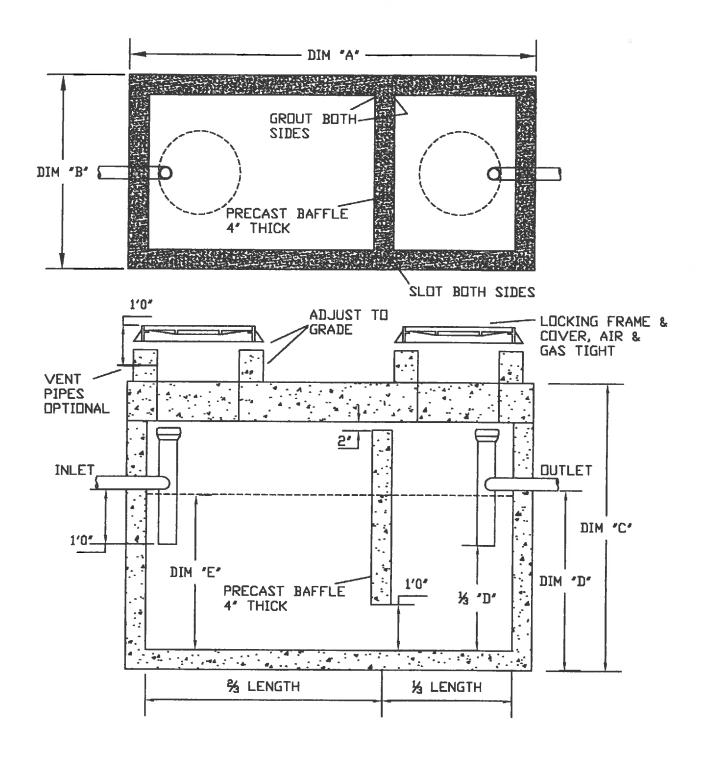
If a user violates or continues to violate the provisions set forth in section 1.8 of this article or fails to initiate/complete corrective action in response to a notice of violation, then the utility director may pursue one or a combination of the following options:

- a. Pump and clean the trap/interceptor or separator and place the appropriate charge on the user's monthly utility bill.
- b. Assess a reasonable fee for each additional facility compliance inspections, sample collection and laboratory analyses, or other monitoring activities.
- c. Terminate water and wastewater service, or
- d. A combination of the above enforcement response options as determined to be appropriate by the director.

#### 2.24

The user shall pay all outstanding fees, penalties and other utility charges prior to reinstatement of water and sewer service.

## APPENDIX A TRAP DIAGRAM



DETAIL 40A CONTAINS THE SIZING CHART FOR THE DIL/GREASE TRAP

#### Sec. 114-5. Sanitary sewer service.

- (a) Minimum service requirements. All new development shall provide required facilities to provide minimum service as follows:
- (4) A minimum 750-gallon grease traps shall be required in sewer services for licensed food service, or as determined by the public services director.

## APPENDIX B SIZING FORMULA

1003.2 Approval. The size, type and location of each interceptor and of each separator shall be approved by the plumbing official. Where the interceptor or separator is located within a private sewage disposal system, such interceptor or separator shall be approved by the health official. The interceptor or separator shall be designed and installed in accordance with the manufacturer's instructions and the requirements of this section. Wastes that do not require treatment or separation shall not be discharged into any interceptor or separator.

1003.3 Grease traps and grease interceptors. Grease traps and interceptors shall comply with the requirements of Section 1003.1 through 1003.5

1003.3.1 Grease traps and grease interceptors required. A grease trap or grease interceptor shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas such as restaurants, hotel kitchens, hospitals, school kitchens, bars, factory kitchens, cafeterias or clubs.

1003.3.2 Food waste grinders. Where food waste grinders connect to grease traps or grease interceptors, the grease interceptor or trap shall be sized and rated for the discharge of the food waste grinder.

1003.3.3 Grease trap and grease interceptor not required. A grease trap or grease interceptor shall not be required for individual dwelling units or any private living quarters.

1003.4 Grease traps. Grease traps shall conform to PDI G101 and shall be installed in accordance with the manufacturer's instruction.

1003.4.1 Grease trap capacity. Grease traps shall have the grease retention capacity indicated in Table 1003.4.1 for the flow-through rates indicated.

#### TABLE 1003.4.1 CAPACITY OF GREASE TRAPS

TOTAL FLOW-THROUGH RATING (gpm)	GREASE RETENTION CAPACITY (pounds)
4	8
6	12
7	14
9	18
10	20
12	24
14	28
15	30
18	36
20	40
25	50
35	70
50	100

For SI: 1 gpm = 3.785 L/m, 1 pound = 0.454 kg.

1003.4.2 Rate of flow controls. Grease traps shall be equipped with devices to control the rate of water flow so that the water flow does not exceed the rated flow. The flow-control device shall be vented and terminate not less than 6 inches (152 mm) above the flood rim level or installed in accordance with the manufacturer's instructions.

1003.5 Grease Interceptors. Grease interceptors shall be water and gas tight. Each interceptor shall be engineered to withstand the load, such as from vehicular traffic, to be placed on the interceptor. The minimum volume of grease interceptors shall be 750 gallons. Interceptors shall be permitted to be installed in series.

1003.5.1 Grease interceptor capacity. The minimum grease retention capacity for interceptors shall be at least two times the flow-through rate.

## TABLE 1003.5.1 SIZING FORMULAS FOR GREASE INTERCEPTORS PRIVATE SEWAGE DISPOSAL SYSTEM

SIZING FORMULA FOR RESTAURANTS:	OTHER ESTABLISHMENTS WITH COMMERCIAL KITCHENS:
(S) x (GS) x (HR/12) x (LF) = Effective capacity of grease interceptor in gallons	(M) x (GM) x (LF) = Effective capacity of grease inter- ceptor in gallons
Where: S = Number of seats in dining area GS = Gallons of waste water per seat (Use 25 gallons for restaurants with china dishes and/or automatic dishwasher) (Use 10 gallons for restaurants with paper or baskets and no dishwashers) HR = Number of hours restaurant is open LF = Loading Factor (Use 2.00 interstate highway; 1.50 other freeways; 1.25 recreational area; 1.00 main highway; 0.75 other highway)	Where:  M = Meals prepared per day  GM = Gallons of waste water per meal  (Use 5 gallons)  LF = Loading Factor  (Use 1.00 with dishwashing machine and 0.75 without dishwashing machine)

Note: For other than private sewage disposal systems, reduce gallon values by 25%.

## APPENDIX C HAULER MANIFEST