



DESTIN WATER USERS

FOG CONTROL PROGRAM

APPROVED BY BOARD OF DIRECTORS

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Destin Water Users, Inc. FOG CONTROL PROGRAM

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I. PURPOSE OF THE FOG CONTROL PROGRAM

FOG(Fats, Oils, & Grease) is one of the primary causes of stoppages, backups, upsets and overflows in a wastewater system. Grease buildup in the sewers also causes restrictions and capacity problems. DWU's goal is to improve sewer service by reducing the impact of grease. This goal will be achieved through two related programs:

A. Preventive Maintenance Program

DWU's collection system inspection program, which identifies grease "problem areas" routinely cleans and inspects the gravity sewer system. DWU is responsible for the "field control" of grease, through its normal collection system operations.

B. FOG Control Program

DWU's "source control" program, through which Food Service Facilities (FSF's) are required to capture and properly dispose of the FOG generated by their operation. The focus of this document is the FOG Control Program, including the proper sizing, installation, and maintenance of grease interceptors. The administrative and inspection requirements are established as well. Through the cooperative efforts of FSF's with DWU, the goal of improved sewer service through proper grease control can be achieved. This program does not apply to single family residences, but may be required on multiple family residences.

II. DEFINITIONS

Unless otherwise expressly stated or the context clearly indicates a different intention, the following terms shall, for the purpose of this document, have the meanings indicated in this section:

A. Black Water

Waste water from sanitary fixtures such as toilets and urinals.

B. Bulk Service Kitchen

A facility which prepares bulk quantities of food, such as hospitals, schools, or caterers.

C. Common Grease Interceptor

A device to which grease wastes are directed from more than one facility having different operators or type of operations, such as in a Food Court.

D. Customer

A user of the sanitary sewer system who produces wastes from their process operations. The customer is responsible for assuring that the produced waste is disposed of in accordance with all Federal, State and local disposal regulations.

E. FDEP

Stands for Florida Department of Environmental Protection under which the DWU Wastewater Treatment Plant is permitted and regulated, along with sanitary sewer overflows.

F. FOG

A material composed primarily of fats, oil, and grease from animal or

vegetable sources. The terms fats, oil, and grease shall be deemed as FOG by definition. Grease does not include petroleum-based products.

G. Food Courts/Shopping Centers

Areas predominantly found in shopping centers or amusement parks and festivals where several food preparation establishments having different owners may be sharing seating space and/or plumbing facilities.

H. Food Service Facility (FSF)

Any facility, which cuts, cooks, bakes, prepares, or serves food, or which disposes of food related wastes.

I. Garbage Grinder

A device which shreds or grinds up solid or semisolid waste materials into smaller portions for discharge into the sanitary sewer collection system.

J. Gray Water

Refers to all wastewater other than “Black Water” as defined in this section, such as showers, sinks, and floor drains.

K. Grease Interceptor

A tank or device so constructed as to separate and trap or hold fats, oil, and grease substances from the sewage discharged from a facility in order to keep fats, oil, and grease substances from entering the sanitary sewer collection system. Depending upon the size, grease interceptors are located either outside of food service facilities, or are located in the kitchen under the sink (“Under the sink Grease Trap”)

L. Hauler

One who transfers waste from the site of a customer to an approved site for disposal or treatment. The hauler is responsible for assuring that all Federal, State and local regulations are followed regarding waste transport.

M. POTW

Stands for Publicly-Owned Treatment Works or “Treatment Works” as defined by Section 212 of the Clean Water Act (33 U.S.C. § 1292) which is owned or operated in this instance by DWU. This definition includes any sewers that convey wastewater to DWU’s sewage treatment plants.

N. Pretreatment Coordinator

An individual employed by DWU who is charged with the responsibility of administering the provisions of the pretreatment program to ensure compliance by users with applicable laws, rules, regulations, resolutions and ordinances relative to the concentration(s) of substances found in the waste stream of facilities connected to the POTW.

O. Sewage

The liquid and water-carried domestic or industrial wastes from dwellings, commercial establishments, industrial facilities, and institutions, whether treated or untreated. The terms “waste” and “wastewater” shall be deemed as Sewage by definition.

P. Sewer Lateral

A sewer line or lines maintained and controlled by private persons for the purpose of conveying sewage from the waste producing location to the

public sanitary sewer collection system.

Q. Single Service Restaurant

A restaurant where the meals are served on throwaway plates and utensils.

R. Standard Restaurant

A restaurant where meals are served on plates and utensils that are washed and re-used.

S. “Under the Sink” Grease Interceptor (Grease Trap)

A device placed under or in close proximity to sinks or other facilities likely to discharge grease in an attempt to separate, trap or hold, fats, oil and grease substances to prevent their entry into the sanitary sewer collection system. Grease Traps are commonly referred to based on their grease retention capacity, i.e. 20#, 30#, 40#, etc.)

T. User

Shall mean a DWU member operating a “food service facility” inside the DWU wastewater service area.

U. Waste

The liquid and water-carried domestic or industrial wastes from dwellings, commercial establishments, industrial facilities, and institutions, whether treated or untreated. Wastes may include but not be limited to, discharges from scullery sinks, pot and pan sinks, dishwashing machines, soup kettles, and floor drains located in areas where grease-containing materials may exist. The terms “sewage” and “wastewater” shall be deemed as Waste by definition.

III. GENERAL CRITERIA

A. Installation Requirements for New Food Service Facilities. All proposed or newly remodeled food service facilities inside the DWU Wastewater Service area shall be required to install an approved properly operated and maintained grease interceptor.

B. Phased Implementation Plan for Existing Food Service Facilities. All existing food service facilities inside the DWU Wastewater Service area are expected to conduct their operations in such a manner that grease is captured on the user’s premises and then properly disposed of. Existing Food Service Facilities will typically be handled under DWU’s FOG Control Program.

1) DWU will periodically inspect each Food Service Facility to assure that each facility is complying with the intent of the FOG Control Program. DWU’s goal is to achieve compliance by all existing Food Service Facilities by July 1, 2016.

2) Through preventive maintenance records or emergency calls related to grease, DWU will identify and target “FOG problem areas” in the wastewater collection system. Food Service Facilities located upstream of these problem areas which discharge their wastewater into the “problem” lines will be identified as potential

contributors to the FOG build-up.

3) Each Food Service Facility in the vicinity of the problem area will be inspected. The facilities' FOG control practices and the adequacy of their grease control interceptor/equipment will be assessed. Maintenance records will also be reviewed.

4) Following the inspections, DWU will send written notice to the inspected food service facilities, containing an educational brochure on grease in the sewer system, a summary of the policy requirements, and the results of the inspection. The inspections will typically result in one of the following actions:

- a)** Facilities equipped with an appropriate and adequately-sized grease interceptor who are meeting the intent of the FOG Control Program through effective FOG control practices will be commended for their compliance.
- b)** Facilities may be required to develop and submit to DWU a proposed plan designed to achieve compliance through improved housekeeping and increased maintenance and pumping on the existing grease interceptor/equipment.
- c)** Facilities that are not successful in achieving compliance with the intent of the FOG Control Program through improved housekeeping and increased maintenance and pumping on the existing grease interceptor/equipment will be required to install/upgrade the necessary interceptor/equipment to bring the facility into compliance. Required installations/upgrades will be accomplished within six (6) months of notice.
- d)** Facilities that do not have an existing grease interceptor/equipment will be required to install the necessary interceptor/equipment to bring the facility into compliance. Required installations will be accomplished within six (6) months of notice.

C. Prohibited Discharges. Black water shall not be discharged to the grease interceptor unless specifically approved, in writing, by DWU.

D. Floor Drains. Only floor drains which discharge or have the potential to discharge grease shall be connected to a grease interceptor.

E. Garbage Grinders and Dishwashers. DWU recommends that solid food waste products be disposed of through normal solid waste/garbage disposal procedures. The use of garbage grinders which discharge to the sanitary sewer is discouraged within the DWU wastewater service area but in the event that the device is used in a commercial or industrial facility, it must be connected to the grease interceptor. The use of a garbage grinder decreases the operational capacity of the grease interceptor and will require an increased pumping frequency to ensure continuous and effective operation. Commercial dishwasher connections must be connected to the grease interceptor. Food particles from garbage grinders take up storage capacity in the grease interceptor and will require

that the interceptor be pumped more frequently. Dishwashers discharge hot water and soap, which can melt grease stored in an overburdened interceptor. Melted grease may then pass through the interceptor into the customer's service line and the public sewer system, where the grease hardens and causes line clogs.

- 1) Although not recommended, existing food service facilities may allow any fixture to remain connected to a grease interceptor, except fixtures which may discharge black water.
- 2) Proposed and remodeled food service facilities may not connect janitor sinks or black water fixtures to a grease interceptor.

F. Location

- 1) Each grease trap and grease interceptor shall be installed and connected so that it is easily accessible for inspection, cleaning, and removal of the intercepted grease at any time. A grease interceptor may not be installed in any part of a building unless approved in writing by DWU.
- 2) Location of grease interceptors shall meet the approval of DWU. The best location is in an area outside of an outside wall, but upstream from the black water drain line(s).

G. Plans and Specifications Required. Users must submit two (2) sets of plans and specifications for DWU review and approval for all work prior to commencement of construction. The following must be included in all submittals:

- 1) Site plan showing the location of all interceptors, lines, clean out ports/manholes, and all other appurtenances.
- 2) Details of the interceptor, lines, clean out ports/manholes and all other appurtenances.
- 3) Application form describing the existing/proposed kitchen equipment capacities, type of Food Service Facility, and all other information requested by DWU.

IV. DESIGN CRITERIA

A. Construction of Interceptors. Grease interceptors shall be constructed in accordance with DWU's standards and shall have a minimum of two compartments with fittings designed for grease retention. All FOG removal devices or technologies shall be subject to the written approval of DWU. Such approval shall be based on demonstrated removal efficiencies of the proposed technology. DWU's standard drawing for grease interceptors is shown in **Appendix A**.

B. Access. Access to grease traps and grease interceptors shall be available at all times, to allow for their maintenance and inspection. Access to grease interceptors shall be provided by 2 (two) manholes terminating 1-inch above finished grade with cast iron frame and cover.

C. Load-Bearing Capacity. In areas where additional weight loads may exist, the grease interceptor shall be designed to have adequate load-

bearing capacity (example: vehicular traffic in parking or driving areas).

D. Inlet and Outlet Piping. Wastewater discharging to a grease trap or grease interceptor shall enter only through the inlet pipe of the interceptor. Each grease interceptor shall have only one inlet and one outlet pipe.

E. Interceptor Sizing. The required size of a grease interceptor shall be approximated by using the DWU Grease Interceptor Sizing formula shown in Appendix B. Most grease interceptors will have a capacity of not less than 1,000 gallons nor exceed a capacity of 3,000 gallons. If the calculated capacity using the DWU Grease Interceptor sizing formula exceeds 3,000 gallons, multiple units in series shall be installed. **(See Appendix B for example of formula.)** Grease interceptor designs represent minimum standards for normal usage. Installations with heavier usage require more stringent measures for which the user is responsible and shall pay the costs to provide additional measures if required by DWU. DWU reserves the right to evaluate interceptor sizing on an individual basis for facilities with special conditions, such as highly variable flows, high levels of FOG discharge, or other unusual situations that are not adequately addressed by the formula.

V. GREASE TRAP AND INTERCEPTOR MAINTENANCE

A. Cleaning/Pumping. The user at the user's expense shall maintain all grease traps and interceptors.

1) Maintenance of "under the sink" grease traps shall include the removal of all fats, oil, and grease from the detention compartment of the trap. Removal is usually accomplished by hand-dipping or scooping the collected grease from the trap.

2) Maintenance of grease interceptors shall include the complete removal of all contents, including floating materials, wastewater, and bottom sludges and solids. Decanting or discharging of removed waste back into the interceptor from which the waste was removed or any other grease interceptor, for the purpose of reducing the volume to be disposed, is prohibited.

B. Cleaning/Pumping Frequency.

1) "Under the sink" grease traps must be cleaned no less than weekly. If grease traps are more than 50% full when cleaned weekly, the frequency shall be increased.

2) Grease interceptors must be pumped out completely a minimum of once every thirty (30) days, or more frequently as needed to prevent carryover of grease into the sanitary sewer collection system. A variance may be granted to the thirty day minimum requirement if the user can establish that such maintenance schedule is not necessary. DWU reserves the right to approve or disapprove any requested variance.

C. Disposal of Grease Interceptor Waste. All waste removed from each grease interceptor must be disposed of at a facility approved by DWU to

receive such waste in accordance with the provisions of this program. In no way shall the pumpage be returned to any private or public portion of the sanitary sewer collection system.

D. Additives. The use of additives is conditionally permissible, upon prior written approval by DWU. Any additive(s) placed into the grease interceptor or building discharge line system on a constant, regular, or scheduled basis shall be reported to DWU. Such additives shall include, but not be limited to, enzymes, commercially available bacteria, or other additives designed to absorb, purge, consume, treat, or otherwise eliminate fats, oils, and grease. The use of additives shall in no way be considered as a substitution to the maintenance procedures required herein.

E. Chemical Treatment. Chemical treatments such as drain cleaners, acid and other chemicals designed to dissolve or remove grease shall not be allowed to enter the grease interceptor.

F. Manifest. All pumpage from grease interceptors must be tracked by a manifest, which confirms pumping, hauling, and disposal of waste. The customer must obtain a copy of the original manifest from the hauler. The original manifest with original signatures must be left at the disposal facility. The customer is required to utilize only DWU permitted haulers for the disposal of FOG.

G. Maintenance Log. A Grease Interceptor Cleaning Record Maintenance Log indicating each pumping for the previous 24 months shall be maintained by each FSF. This log shall include the date, time, amount pumped, hauler, and disposal site and shall be kept in a conspicuous location for inspection. Said log shall be made immediately available to the DWU representative upon request.

VI. ADMINISTRATIVE REQUIREMENTS

A. Initial Data Acquisition. Upon inspection of each FSF, DWU's inspector shall collect the necessary FOG Control data to facilitate the population of DWU's FOG Control Program database. The database will be updated with additional or modified information after each inspection.

B. Administrative Fee. An administrative fee for facilities with grease discharges shall be set by DWU. The fee shall be established to insure full cost recovery and shall include but not be limited to the cost of field, administrative, engineering, and clerical expenses involved. The fees shall be not less than \$100.00 per year for each facility. The monthly administrative fee shall be applied to the customer's water & sewer service bill and be paid in accordance with DWU's current rules and regulations. The rates starting 2015 for monthly administrative fees will be \$8.50 for under the sink units and \$12.50 for in-ground grease interceptors.

C. Monitoring. As a condition for service, the user shall provide, operate, and maintain, at user's expense, safe and accessible monitoring facilities (such as a suitable manhole) at all times to allow observation, inspection,

sampling, and flow measurement of the building sewer or internal drainage systems. There shall be ample room in or near such monitoring facility to allow accurate sampling and preparation of samples for analysis. When the physical location and hydraulic conditions are suitable, a manhole, cleanout or similar facility existing on the sanitary sewer collection system may be utilized as the user's manhole, cleanout, or other location when agreed to by both the user and DWU.

D. Inspection and Entry. Authorized personnel of DWU, bearing proper credentials and identification, shall have the right to enter upon all properties subject to this program, at any time and without prior notification, for the purpose of inspection, observation, measurement, sampling, testing or record review, in accordance with this program.

VII. ENFORCEMENT

DWU shall have the administrative authority to enforce this program. Whenever DWU finds that any user has violated or is violating this program, or any prohibition, limitation, or requirements contained herein, DWU will initiate corrective action, which may include but not be limited to the following:

A. Notice of Violation. DWU may issue any user a written notice stating the nature of violation. Within fifteen (15) days of the date of notice, a plan for the satisfactory correction thereof shall be submitted to DWU by the user.

B. Warning Agreement. DWU may enter into warning agreements, assurances of voluntary compliance, or other similar documents establishing an agreement with the user responsible for noncompliance. Such agreements will include specific action to be taken by the user to correct the noncompliance with a time period specified by the agreement.

C. Administrative Agreement. When DWU finds that a user has violated or continues to violate the provisions set forth in this program, or the agreement issued hereunder, DWU may issue an agreement for compliance to the user responsible for the discharge. Agreements may contain any requirements as might be reasonable, necessary, and appropriate to address the noncompliance, including but not be limited to the installation of pretreatment technology, additional self-monitoring, and management practices.

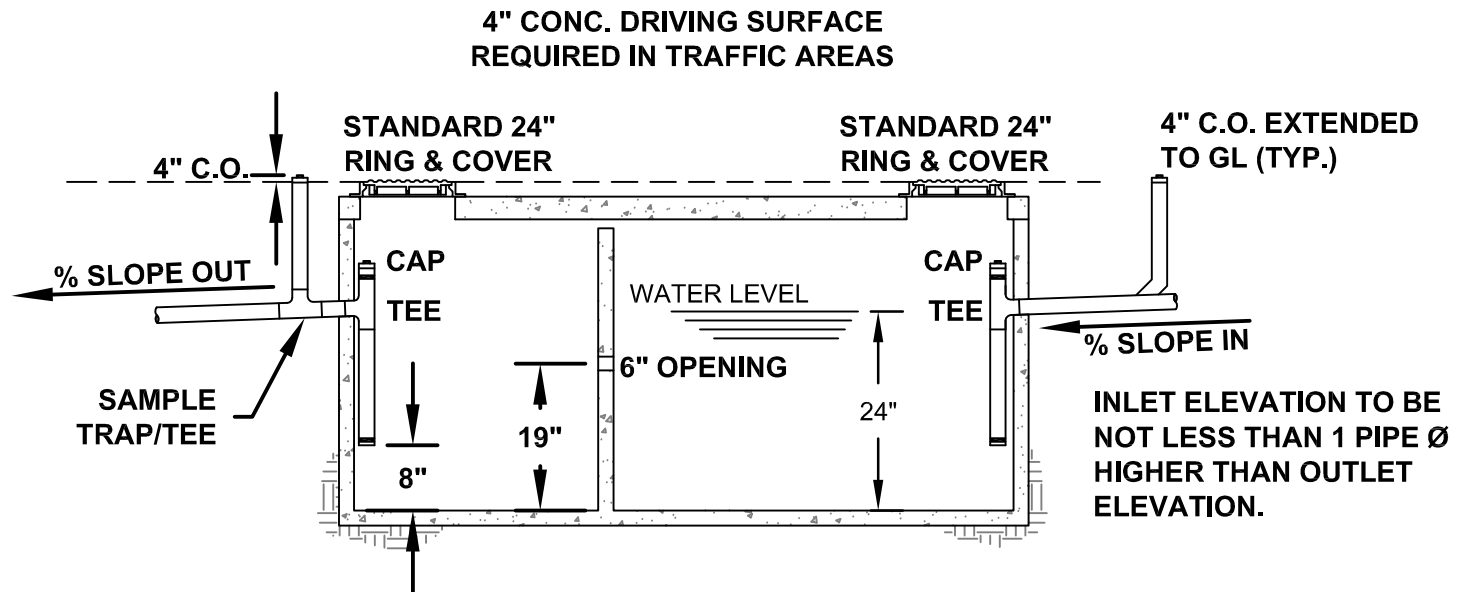
D. Emergency Suspension of Services. DWU may suspend water or sewer service when such suspension is necessary, in the opinion of DWU; in order to stop an actual or threatened discharge which:

- 1) presents or may present an imminent or substantial endangerment to the health or welfare of persons or the environment;
- 2) causes stoppages, sanitary sewer overflows, or excessive maintenance to be performed to prevent stoppages in the sanitary sewer collection system;
- 3) causes interference to the POTW; or
- 4) causes DWU to violate any condition of its FDEP permits

Any person notified of a suspension of the water or sewer service shall immediately stop or eliminate the discharge. In the event of a failure of the person to comply voluntarily with the suspension order, DWU shall take such steps as deemed necessary, including immediate termination of water or sewer service, to prevent or minimize damage to the POTW system or sewer connection or endangerment to any individuals. DWU shall reinstate the water or sewer service when such conditions causing the suspension have been eliminated and the reconnection fee paid. A detailed written statement submitted by the user describing the cause(s) of the harmful discharge and the measure(s) taken to prevent any future occurrence shall be submitted to DWU within fifteen (15) days of the date of occurrence.

E. Administrative Penalty. Notwithstanding any other remedies or procedures available to DWU, any user who is found to have violated any provision of this program, or any order issued hereunder, may be assessed an administrative penalty of not to exceed one thousand dollars (\$1,000) per violation. Each day on which noncompliance shall occur or continue shall be deemed a separate and distinct violation. Such assessment may be added to the user's next scheduled sewer service charge and DWU shall have such other collection remedies as are available by law.

F. Request for Hearing and Appeal. Any person affected by a penalty, agreement, or directive of DWU issued pursuant to this program may, within ten (10) days of the issuance of such penalty, agreement, or directive, request a hearing in writing before a committee of the Board of Directors of DWU to show cause why such should be modified or made to not apply to such person. After receiving the request, the hearing shall be held the week prior to the next regular meeting of the Board of Directors, or as soon as the hearing may be scheduled as determined in the discretion of DWU, at which time the person affected shall have an opportunity to be heard. At the conclusion of the hearing, DWU shall issue a written response to the person requesting the hearing affirming, modifying, or rescinding the penalty, agreement, or directive at issue.



GENERAL NOTES:

- 1) INTERIOR PIPING TO BE STRAPPED AT TOP & BOTTOM WITH GALVANIZED CLAMPS OR EQUAL.
- 2) SPECIFIC SIZE APPLICATION OF THE GREASE INTERCEPTOR TO BE DETERMINED BY DESTIN WATER USER, INC.

APPENDIX A: TYPICAL RESTAURANT GREASE INTERCEPTOR

SCALE: N.T.S.

Facility Name: _____

Facility Address: _____

Sizing Calculations (to be completed by Destin Water Users, Inc.)

Re: Florida Plumbing Code Section P1003

IN-GROUND GREASE INTERCEPTORS

SIZING FORMULA for RESTAURANTS

$(S) * (GS) * (HR/12) * (LF) * 0.75 =$ Effective capacity of grease
Interceptor in gallons

_____ * _____ * (_____/12) * _____ * 0.75 = _____ GAL

Where:

S = Number of seats in dining area

GS = Gallons of waste water per seat

(Use 25 gallons for restaurants with china and/or

Automatic dishwashers. Use 10 gallons for restaurants

With paper or baskets and no dishwashers

HR = Number of hours restaurant is open

LF = Loading Factor (Use 1.25 for rec. area, 1.00 main highway, 0.75 other highway)

OTHER ESTABLISHMENTS WITH COMMERCIAL KITCHENS

$(M) * (GM) * (LF) * 0.75 =$ Effective capacity of grease
interceptor in gallons

_____ * _____ * _____ * 0.75 = _____ GAL

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.)

UNDER SINK GREASE TRAPS

SIZED BASED UPON TOTAL FLOW THROUGH CAPACITY OF SINKS & DISHWASHERS

$((DEPTH * WIDTH * LENGTH) / 1728) * 7.48 =$ Flow through capacity of sink in gallons
(Assumes sink empties in one minute)

$((_____ * _____ * _____) / 1728) * 7.48 =$ _____

Where:

DEPTH = Depth of sink

WIDTH = Width of sink

LENGTH = Length of sink

GREASE TRAP CAPACITY IN POUNDS OF GREASE SHALL BE TWICE THE TOTAL FLOW THROUGH CAPACITY OF THE SINK IN GALLONS, i.e. Total Flow Capacity of sink = 19 gpm...Grease Trap capacity = 38 pounds of grease

CALCULATED SIZE OF IN-GROUND GREASE INTERCEPTOR _____ GALLONS

CALCULATED SIZE OF UNDER-SINK GREASE TRAP _____ POUNDS

Signature _____ Date _____

Destin Water Users, Inc.
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