



# Town of Orleans, MA

## Operation, Maintenance, and Management Services for the Wastewater Infrastructure

*Collection System, Pumping Stations, Wastewater Treatment Facility, and Aquifer Recharge*

# Fats, Oils, and Grease (FOG) Management Plan DRAFT OR-014 Revision 0

Step	First & Last Name	Date (yyyy-mm-dd)
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## Revision Log

<b>Revision</b>	<b>Date</b> (yyyy-mm-dd)	<b>Description of Changes</b>
Draft 0	2022-12-19	First Draft Issue
Draft 1	2023-02-09	Changes to sections 4.3, 5.1, 8.1, 8.3, 8.4.1, 9, 10.1, 11 per meeting with BOH and Dick Hartman pending update of SURR
Draft 2.0	2023-08-28	Updates to match latest SURR version

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## 1. Introduction

The purpose of this document is to provide an overview to the Town of Orleans Fats, Oil, and Grease (FOG) management plan. The plan is designed to be a collaborative effort between the Orleans Department of Public Works and Natural Resources (DPW&NR), the Orleans Board of Health (BOH), Food Service Establishments (FSE), the Contract Operator of the Orleans Wastewater Infrastructure, Veolia.

The FOG Management Plan will be implemented as required for any FSE that discharges into the town's wastewater collection system and will present a proactive approach to eliminating the ability of FOG to enter the collection system. If implemented properly, the program will minimize the risk of Sanitary Sewer Overflows (SSOs), minimize maintenance costs for all parties, and reduce the potential of public health issues caused by SSOs.

The Town has retained Veolia for implementation, management, and administration of the FOG Management Program. The Town has the legal authority to enforce its FOG ordinances and regulations. The Town is also responsible for enforcement of its FOG Management Plan fees and penalties as described in the Town's Sewer Use Rules and Regulations (SURR).

## 2. Addressed Obligations

This document addresses the following contractual and regulatory obligations.

Document	Section	Obligation
O&M Contract	6E	The Contract Operator shall implement, manage and administer the Town-wide grease trap management program on behalf of the Department of Public Works and Natural Resources and Board of Health.

## 3. Reference Documents

Reference Number	Document Name
[1]	Sewer Use Rules and Regulations. Orleans Massachusetts. Board of Water and Sewer Commissioners.
[2]	Town of Orleans Industrial Pretreatment Program Rules and Regulations. Orleans Massachusetts. Board of Water and Sewer Commissioners.

## **4. Purpose of Program**

### **4.1 FOG Description**

FOG refers to Fats, Oil, and Grease found in most residential and commercial kitchens and food service establishments (FSE). Waste FOG is a semisolid, viscous liquid that is generated during the food cooking process or during cleaning, maintenance, and sanitizing processes. Many foods that are processed and served contain FOG, including meats, sauces, gravy, dressings, deep-fried foods, baked goods, cheeses, butter and others. Many different businesses generate FOG wastes by processing or serving food, including; eating and drinking establishments, caterers, hospitals, nursing homes, day care centers, schools and grocery stores.

Additional FOG information can be found at the following links:

[National Restaurant Association - Fats, Oils, and Grease Control](#)

[EPA - Controlling Fats, Oils, and Grease Discharges from Food Service Establishments](#)

### **4.2 Effects on Sewer System**

The unique properties of FOG make it one of the leading causes of sewer back-ups in the United States. As FOG cools, it begins to congeal and will eventually become solid. Once FOG is in a solid state, it can create a blockage in the sewer pipes. As sewer pipes become blocked, they can cause sewage back-ups into your basement/business and/or blockages in the public sewer line. This results in sanitary sewer back-ups and overflows (SSOs) into numerous properties and/or the environment. The Environmental Protection Agency (EPA) reports 47% of all reported sewer blockages were a result of FOG. Proper participation in the FOG program can keep sewer maintenance/repair costs down as well as protect public health, safety, and the environment.

Veolia shall administer the Town of Orleans' FOG program which is intended to prevent fats, oils, grease, and other substances which are likely to block or create a hazard within the sanitary sewer system from entering the system through the use of grease interceptors or grease traps.

### **4.3 Program Participants**

Any FSE whose business process has the potential to have FOG as a byproduct and discharges to the Town's wastewater infrastructure will be required to follow the regulations of the FOG Management Plan.

If an FSE would like to inquire for a variance to the program, a written request explaining justification of the variance must be submitted to the Department for review and approval.

## 5. Roles and Responsibilities

### 5.1 Veolia

As the contract operator of the Town of Orleans Wastewater Infrastructure, it is the responsibility of Veolia to implement the requirements of the FOG program as written in both the Town of Orleans Sewer Use Rules and Regulations, and the Town of Orleans Industrial Pretreatment Program on behalf of both the Department of Public Works and Natural Resources and Board of Health.

Veolia staff will be the main contact for FSEs who are required to participate in the town wide FOG management program and will coordinate all requirements of the program with FSE points of contact.

Veolia will perform both scheduled and random site inspections to ensure that the requirements of this plan and associated town rules and regulations are being met.

Veolia will not be an enforcing authority of any fines, fees, or penalties associated with this program. This role will be held by the BOH, DPW&NR, and BOWSC. Veolia will, as required, notify the necessary Town personnel of any noncompliance issues found during the management of this program.

Monthly Operating Reports prepared by Veolia and delivered to the BOH and DPW&NR will include FOG program inspection reports and findings as required by the Town's O&M contract with Veolia. This information will include:

- Completed Scheduled and Random Site Inspection Reports
- Notices of noncompliance

### 5.2 Food Service Establishments

It will be the responsibility of all FSEs required to participate in the FOG Management program as described in [Section 4.3](#) to read, understand, acknowledge, implement, and comply with all requirements within this document and associated town rules and regulations.

These requirements include, but are not limited to:

- Submitting an application along with required documentation for a FOG Permit to the Sewer Department (Veolia) before connecting to the sewer infrastructure
- Identify a designated FOG program representative
- Perform inspections, maintenance, and cleaning as required by the program and maintain documentation of inspections, maintenance, and cleaning
- Provide written documentation of cleaning every 3 months, or more frequently as required

- by the program (25% solids capacity)
- Maintain a contract with a licensed hauler to perform monthly cleaning/inspections of internal grease traps.
- Hire approved hauler to pump, and transport FOG for offsite disposal
- Provide notice of intermittent operations to the Sewer Department
- Provide documentation/information to obtain approval for any additives to be used in FOG equipment
- Pay any associated fees as listed in the SURR as necessary to the appropriate authority

## 6. FOG Permit Process

FSEs are required to maintain a FOG permit issued by Veolia on behalf of the BOH. Permits will be issued on an annual basis. Permits will be valid Jan. 1 - Dec. 31 of the issuing year. Permit applications will be provided and reviewed by Veolia on behalf of the BOH.

### Permit Requirements:

- FSE Business Name and Address
- Name and contact info of designated FOG program representative
- Identify major equipment used for food preparation
- Approved drawings showing location and access points of external grease tanks
- Dimensions of both internal and external grease traps/tanks
- Description of operations as it applies to FOG
- Acknowledgement of FOG Management Plan and associated town rules and regulations as it applies to FOG
- Declaration of any notice of violations of FOG Program requirements within the previous permit year. If any, actions taken to correct violations
- Any major maintenance, repairs and/or replacements made to the system within the previous permit year
- Fee payable to the DPW&NR per the SURR

## **6.1 FSE Designated Program Responsible Person**

Each FSE will be required to designate an employee that will be responsible for managing and administering the FOG program requirements locally at the site. The designated person will be the main point of contact for the program and will be responsible for ensuring that all requirements of the program are being implemented at the FSE.

# **7. Cleaning and Inspections**

## **7.1 Internal Grease Traps**

FSEs will be required to hire a professional service provider to clean, maintain and inspect internal grease traps every 30 days per the SURR. A log must be maintained on site that includes the following:

- Date of cleaning performed
- Service Provider Company Name
- Volume of material removed in gallons

A typical cleaning of an internal grease trap would typically consist of the following steps:

- 1) Remove the lid paying careful attention to the Gasket
- 2) Inspect Gasket and report if it requires replacing
- 3) Note normal liquid Level
- 4) Note approximate depth of floating FOG layer
- 5) Note approximate depth of Settled Solids
- 6) Vacuum entire contents
- 7) Remove and Scrape baffles
- 8) Check and Clear Flow Control Device
- 9) Check and Clear Inlet and Outlet
- 10) Refill trap and let water flow to observe liquid static level; if water rises there is an obstruction and may require line cleaning
- 11) Replace lid
- 12) Tighten bolts
- 13) Complete Grease Trap Log



## **7.2 External Tanks**

External grease interceptor tanks are to be inspected and cleaned out regularly. The required frequency of cleaning is when the solids level of the tank reaches 25% of the capacity or every 3 months, whichever is sooner.

A typical inspection consists of:

- Accessing the discharge side of the grease trap via the inspection manhole.
- Visually inspect the discharge tee and note the amount of grease escaping into the sewer system if any.
- Visually inspect and take note of the surface of the tank and the grease layer.
- Probe the grease layer and note the depth of floating FOG.
- Should the FOG layer be deemed to be greater or equal to 25 percent of the tank volume, a pump out by a hauler is warranted. Remember that there will be a sludge layer on the bottom of the tank and this too should be considered when deciding to pump the tank.
- Regardless of condition it is a Best Management Practice and it is required by the Sewer Use Rules and Regulations that you pump out your grease interceptor tank every three months.
- Remember, these inspections, pump outs, and maintenance not only protect the Town's collection system and pumping systems, they also work to prevent costly back-ups into your establishment.

External grease interceptor tank cleanings should be completed by a professional Septic/Grease hauler licensed the the Town of Orleans BOH.

## **7.3 Acceptance of Additives**

Per the SURR, the usage of any biological and/or chemical treatments to assist in the performance of FOG equipment shall not be used without prior written approval from the Town of Orleans DPW&NR

It is the responsibility of the FSE to provide sufficient information to Veolia of any such treatment/additive to Veolia for review and written approval. Veolia will submit the request to the DPW&NR Director for review and written approval. This information shall include at a minimum the following:

- Product Name and Manufacturer
- Product SDS Information
- Quantity of product desired to utilize
- Reason for addition of product

## **7.4 Hauler Pump Out Forms**

All Food Service Establishments must have a service contract with a licensed hauling company that is permitted by the town. When a hauler services an establishment, they must complete a grease interceptor/service report form. The department will provide forms, but if a hauler decides, they may use their own form. If using their own form, it must contain the same information as the provided form. If pumping is not required at the time of inspection, a detailed inspection report must be provided along with the calculation information. This report must be filled out and submitted to the customer (FSE) at the time of service. All pumping manifests shall be submitted to the department within 14 days of a pumping service.

## **8. Modification to FOG Cleaning Schedule**

FSEs which are intermittent in nature in regard to inspections and cleaning of FOG traps and tanks, shall submit a Request for Modification to the Orleans Board of Health. The Request for Modification applies to all seasonal FSEs. FSEs that are closed for periods of time exceeding thirty (30) consecutive days are exempt from pumping during those closed months.

Additional steps as noted on the Request for Modification include an inspection to gather information to evaluate this form as well as supporting documentation for the modification. Supporting documentation includes:

- Proof of temporary closure
- Schedule of seasonal close and anticipated opening date
- Six 6 Months of maintenance reports with documentation from a licensed septic hauler or plumber with a detailed explanation for the adjustment to cleaning frequency.

### **8.1 Temporary Food Service Establishments**

Per the SURR, all temporary FSEs and events that use, generate, or store FOG will be required to have a written FOG management plan before a temporary food service permit will be issued by the Board of Health.

## 9. Formal Inspections

### 9.1 Scheduled Site Inspections

Scheduled site inspections will be performed annually by Veolia staff to ensure compliance with program requirements. Veolia will notify the FSE at least 2 weeks prior to scheduled site inspections. A standardized inspection form will be utilized for all scheduled inspections.

Scheduled site inspections will include, but not be limited to the following:

- Visual Inspection of both internal and external grease traps/tanks
- Depth Measurement of grease layer in FOG tank
- Visual inspection of lateral sewer line post FOG trap/tank
- Review of inspection/cleaning logs

A completed inspection report will be distributed to the FSE, DPW&NR and BOH.

If there are any violations found during the inspection, the FSE will be notified in writing by a Notice of Violation sent via email to the FSE, DPW&NR, BOH and BOWSC. A follow up inspection may be required to inspect corrective action as needed.

Inspection fees will be payable to the DPW&NR per the SURR.

### 9.2 Random Site Inspections

Veolia will make random inspections of FSE establishments connected to the Town sewer collection system. Random site inspections may include, but are not limited to, all items listed in Section 9.1, Scheduled Site Inspections and Section 9.3, Sampling. A report detailing the findings of these inspections will be provided to the FSE manager.

### 9.3 Sampling

Should Veolia, DPW&NR, or the BOH determine that sampling and testing of a FSE sewer connection is required due to observed FOG accumulation in the downstream sewers, a composite sampler will be deployed to the FSE cleanout or property lateral sewer line and a FSE grease trap sample will be obtained for analysis.

## **10. Compliance**

If there are points of noncompliance with this program observed at any time, a Notice of Violation will be prepared by Veolia and sent to the DPW&NR, BOWSC, and BOH for review and signature before being distributed to the FSEs.

Any fees for violations of the program will be enforced by the appropriate Town department per the SURR. Veolia will not be responsible for any enforcement of violations or collection of violation fees.

## **11. Attachments**

- Title 5
- SURR
- Town of Orleans Industrial Pretreatment Plan
- Initial FOG Permit Application
- Modification Request Form
- Additive Request Form
- Inspection Log (Preferred)
- Pump out Log
- FSE Program Compliance Path (Flow Chart)
- Best Management Practices
- Notice of Violation Form
- National Restaurant Association Toolkit
- EPA National Pretreatment Program FOG Control
- FOG Trifold