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Tony T. Yarber, Mayor



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February 27, 2015

Chief, Environmental Enforcement Section
Environment and National Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-1-1-09841

Brad Ammons
Environmental Engineer
Clean Water Enforcement Branch
Municipal & Industrial Enforcement Section
U.S. EPA Region 4
61 Forsyth St., SW
Atlanta, GA 30303

Karl Fingerhood
Environmental Enforcement Section
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611

RE: City of Jackson, Mississippi, EPA Consent Decree
CMOM Programs

Dear Gentlemen:

Attached please find the following CMOM Programs required by the Consent Decree and being proposed by the City of Jackson for your review, comment, and approval:

- 1) Inter-jurisdictional Agreement Program;
- 2) Fats, Oils, and Grease (FOG) Control Program;
- 3) Private Lateral Program; and
- 4) Water Quality Monitoring Program.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Tony T. Yarber
Mayor

2015 MAR 04 10:12 CWEL

cc: Les Herrington, P.E., Mississippi Department of Environmental Quality
Gus McCoy, Chief Administrative Officer
Monica Joiner, City Attorney
Kishia L. Powell, P.E., Director, Department of Public Works
Mary D. Carter, Deputy Director of Public Works
Terry Williamson, Consent Decree Manager
Public Depository, Eudora Welty Public Library



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

AUG 09 2016

CERTIFIED MAIL 7015 1730 0002 0524 3556
RETURN RECEIPT REQUESTED

Mr. Jerriot Smash
Interim Director
Department of Public Works
City of Jackson
P.O. Box 17
Jackson, Mississippi 39205-0015

Re: Fats, Oils and Grease Control Program Approval City of Jackson, Mississippi Consent Decree
Case No.: 3:12-cv-790 TSL-JMR

Dear Mr. Smash:

The U.S. Environmental Protection Agency Region 4 has reviewed the Fats, Oils and Grease Control (FOG) Program document dated February 27, 2015. Pursuant to Section V of the subject Consent Decree above, and with consultation with the Mississippi Department of Environmental Quality (MDEQ), the EPA and the MDEQ hereby approve this document.

The EPA expects that the City of Jackson will revise and resubmit (for the EPA's records) the FOG Program document and certification that the program has been fully implemented no later than 12 months of receipt of this letter, pursuant to Paragraph 32 of the Consent Decree. If you should have any questions, please contact Mr. Dennis Sayre at (404) 562-9756 or via email at sayre.dennis@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Sayre", is positioned below the word "Sincerely,".

Dennis Sayre, Acting Chief
Municipal & Industrial Enforcement Section
NPDES Permitting and Enforcement Branch

cc: Mr. Les Herrington, P.E.
Mississippi Department of Environmental Quality

Mr. Terry Williamson
City of Jackson

Fats, Oils, and Grease (FOG) Control Program



Department of Public Works
Wastewater Infrastructure Redevelopment Program

February 28, 2015

City of Jackson
Wastewater Infrastructure Redevelopment
Program

Fats, Oils, and Grease (FOG) Control Program

February 28, 2015

Prepared for:

City of Jackson
Department of Public Works
P.O. Box 17
Jackson, MS 39205-0017

Prepared by:

WEI/AJALLC
143A LeFleurs Square
Jackson, MS 39211

City of Jackson, Mississippi

Fats, Oils, and Grease Control Program

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

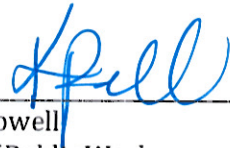




Tony T. Yarber
Mayor

2.27.15

Date



Kishia L. Powell
Director of Public Works

2.27.15

Date

Fats, Oils, and Grease Control Program

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1.0 Introduction

The City of Jackson entered into a Consent Decree with U.S. EPA on March 1, 2013 to address inadequacies of the City's wastewater collection and transportation system (WCTS). This ***Fats, Oils, and Grease Control Program*** (FOG Program) report fulfills the requirements set forth in Consent Decree § VI (D) 39. FOG discharges into the sewer system create several problems. The FOG components coalesce as the material moves through the sewers, and can cause line blockages or sanitary sewer overflows (SSOs). Sewer maintenance activities to alleviate FOG problems requires significant resources. This report describes the program the City will follow to prevent and control FOG releases into the sewer system.

1.1 Consent Decree Requirements

As stated in the Consent Decree, the FOG Control Program shall contain the following, at a minimum:

Within twenty-four (24) months after the Date on Entry of the Consent Decree, the City shall submit to EPA for review and approval a FOG Control Program, including a schedule for full implementation of the program not to exceed twelve (12) months after its approval by EPA. The FOG Control Program shall include, at a minimum, the following:

1. The legal authority to control the discharge of FOG into the WCTS, including the ability to implement a permit and enforcement program.
2. Specification of accepted devices to control the discharge of FOG into the WCTS.
3. Establishment of standards for the design and construction of FOG control devices including standards for capacity and accessibility, site map, design documents, and as-built drawings.
4. Establishment of FOG control device management, operations, and maintenance standards, or best management practices, that address onsite record keeping requirements, cleaning frequency, cleaning standards, use of additives, and ultimate disposal.
5. Establishment of construction inspection protocols, including scheduling, inspection report forms, and inspection record keeping requirements, to assure that FOG control devices are constructed in accordance with established design and construction standards.
6. Establishment of compliance inspection protocols, including scheduling, inspection report forms, and inspection record keeping requirements to assure that FOG control devices are being managed, operated, and maintained in accordance with the established management, operations, and maintenance standards or best management practices.

7. Establishment of a FOG disposal manifest system.
8. Establishment of an enforcement program, including specific enforcement mechanisms, to ensure compliance with the FOG Control Program.
9. Establishment of a compliance assistance program to facilitate training of FOG generators and their employees.
10. Establishment of a public education program directed at reducing the amount of FOG entering the WCTS from private residences.
11. Establishment of staffing (technical and legal) and equipment requirements to ensure effective implementation of the FOG Control Program.
12. A FOG characterization study that shall identify the sources of FOG causing problems in the WCTS and the best method or mechanism for addressing those sources.
13. A list of current commercial establishment FOG generators including a description of their FOG generating processes and average daily discharge volume.
14. Establishment of performance indicators to be used by the City to measure the effectiveness of the FOG Control Program.

1.2 FOG Control Program Objectives

The goal of the City of Jackson FOG Control Program is to prevent grease from entering the sanitary sewer collection system. This goal will be achieved through the FOG Control Program together with effective routine collection system maintenance. The FOG Control Program consists of two important components:

1) Commercial Food Service Establishments

As part of the FOG Control Program, food service establishments (FSEs) are required to capture and dispose of grease generated by their operation. The FOG Control Program requires FSEs to install approved, adequately sized, properly installed and maintained grease control equipment. Through this effort, the goal of improved sewer service through proper grease control can be achieved.

2) Public Awareness Program

A Public Awareness Program of harm caused by unnecessary grease disposal into sinks and drains will be developed and promulgated to all residential customers. Besides general outreach efforts, the Program will include additional communication to residential customers in sanitary sewer overflow (SSO) areas to further inform residents of good housekeeping practices for grease control. The program is designed to raise awareness about disposing of grease in a way that is good for household plumbing, the City's wastewater system, and our environment.

The commercial FSE component of Jackson’s FOG Control Program is described in this document, including requirements for proper sizing, installation, and maintenance of grease control equipment. Program administrative and inspection requirements are established as well. Additionally, the proposed framework for public education efforts to reduce direct FOG discharges to the sewer system is presented.

1.3 FOG Control Program Elements

The legal authority provided in the City’s sewer use ordinance is described in Section 2, together with limitations in the ordinance and proposed modifications to the legal framework for controlling FOG. Results of a FOG characterization study in Jackson are provided in Section 3. New standards for FOG control devices are proposed in Section 4. This section also includes planned enhancements to current FOG management, operations, and maintenance procedures. Section 5 describes new FOG Program compliance protocols and enforcement mechanisms. For effective FOG control, proper public education is required to prevent discharges of FOG into the sewer system; the public education plan is described in Section 6. The proposed schedule for implementing the *City of Jackson FOG Control Program* is provided in Section 7.

1.4 Definitions

Unless otherwise expressly stated in the City of Jackson Sewer Use Ordinance or the context in this Program report clearly indicates a different intention, the following terms have the meanings indicated below.

Black Water

Wastewater from sanitary fixtures such as toilets and urinals.

Food Service Establishment

Any establishment, business, or facility engaged in preparing, serving, or making food available for consumption.

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.

Gray Water

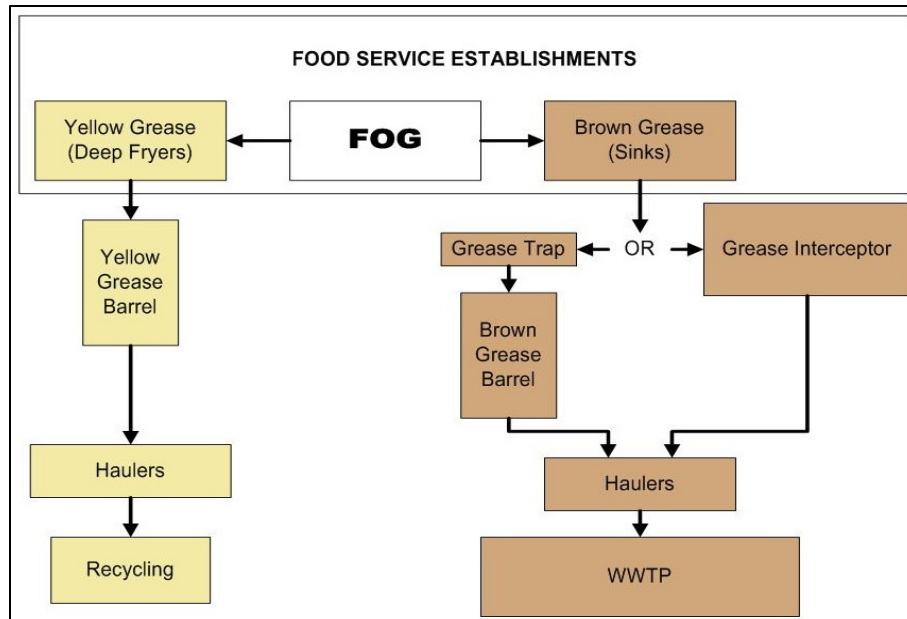
Refers to all wastewater other than “Black Water” as defined in this section.

Grease

A material composed primarily of fats, oil, and grease from animal or vegetable sources. The term fats, oil, and grease may be referred to as grease or types of grease in this document and does not include petroleum-based products.

- Brown grease – Fats, oils, and grease that is discharged to the grease control equipment.

- Yellow grease – Fats, oils, and grease, usually spent oil from deep frying, that has not been in contact with or contaminated from other sources (water, wastewater, solid waste, etc.) and can be recycled. Yellow grease is typically stored in a rendering container outside the FSE.



Proper Waste Grease Management

Grease Control Device (GCD)

A device for separating and retaining grease and solids prior to wastewater exiting the FSE and entering the sanitary sewer collection system. The GCD is so constructed as to separate and trap or hold grease from entering the sanitary sewer collection system. Devices include hydromechanical grease interceptors and gravity grease interceptors.

Gravity Grease Interceptor

Grease control equipment identified as a large 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. Grease Interceptors are typically located outside of FSEs due to their size.

Hydromechanical Grease Interceptor

Grease control equipment designed to separate, trap or hold fats, oils and grease substances to prevent their entry into the sanitary sewer collection system. Hydromechanical grease interceptors are usually installed inside and under or in close proximity to sinks or other fixtures likely to discharge grease. All hydromechanical grease interceptors must be installed with a flow restrictor and vent. Gravity grease interceptors are larger tanks generally installed outside of the facility. Hydromechanical grease interceptors in lieu of gravity grease

interceptors are only allowed under specific conditions including, but not limited to, if no cooking is occurring at the facility.

Waste Hauler

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

2.0 Legal Authority

This section describes the legal authority of the City of Jackson related to control of FOG discharges. Also described are proposed modifications to the current legal structure that will strengthen Jackson's ability to regulate FOG discharges.

2.1 Current Legal Controls

Jackson Code of Ordinances, Section 122, Sewage Disposal Standards contains the current regulatory structure for FOG control. Principally:

Sec. 122-171. – Prohibited discharges to public sewers without approval.

Any water or waste containing fat, wax, grease or oils, whether emulsified or not, in excess of 100 milligrams per liter or containing substances which may solidify or become viscous at temperatures between 32 degrees Fahrenheit and 150 degrees Fahrenheit or zero degrees Celsius and 65 degrees Celsius.

Sec. 122-172. – Interceptors required for certain liquid wastes.

Grease, oil, and sand interceptors shall be provided when, in the opinion of the approving authority, they are necessary for the proper handling of the discharge into public sewers 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 approving authority, and shall be located as to be readily and easily accessible for cleaning and inspection.

Where approved, FOG discharges are allowed. Under Section 122-173, the maximum allowed FOG concentration is 67 mg/L; approved discharges greater than this concentration are assessed a surcharge of \$1.05/lb.

Pretreatment requirements are addressed in the ordinance for industrial discharges containing significant FOG. The industrial pretreatment program is administered by the Mississippi Department of Environmental Quality (MDEQ). Other than private residences, the major contributors of FOG that cause sewer maintenance issues in Jackson are Food Service Establishments (FSEs).

2.2 Regulation of FSEs

Grease interceptors can be required where they are deemed necessary by the City. Additionally, Jackson has adopted the International Plumbing Code which requires that FSEs with the potential for significant FOG production to install control devices. The Mississippi Department of Health (MDOH) regulations require FSEs to comply with the Food and Drug Administration (FDA) Food Code, which requires FOG control devices. MDOH issues permits for food service establishments, and performs periodic inspections; however, FSE grease interceptors are not generally inspected.

The legal authority appears adequate to enforce proper FOG controls on FSEs, although this authority has been rarely used. As a result, and because MDOH does not typically monitor grease interceptor conditions, additional FOG controls are needed.

2.3 Proposed Sewer Use Ordinance Revisions

The current legal authority contained in the City's Sewer Use Ordinance allows basic control over FOG generators and requires that grease interceptors be installed where they are required. This authority is adequate to commence the City's FOG Control Program and begin the inspection process and enforcement of grease interceptor operation and maintenance. While the basic legal authority for the FOG Control Program is in effect, improvements are needed in the current Sewer Use Ordinance to strengthen the City's ability to carry out the FOG Control Program as well as other CMOM programs. Accordingly, over the course of the implementation period for the FOG Control Program, the City will be developing revisions to the Sewer Use Ordinance to prescribe:

- Enhanced grease interceptor sizing and design standards;
- Onsite management, record keeping, and maintenance (MOM) standards;
- Fees to recover inspection and compliance program costs;
- Graduated enforcement responses;
- Appeal and waiver provisions;
- Suspension of service;
- Civil penalties; and
- Other provisions or revisions deemed required.

It is anticipated that a new comprehensive up-to-date sewer use ordinance will be issued for review by June 1, 2016. The new ordinance will contain desired enhancements to allow the City to better implement and execute all of the CMOM programs currently being developed as well as other requirements of the Consent Decree. This extended time for developing necessary revisions is required because the entire ordinance needs to be revamped. After the draft ordinance is issued for review, but within six months, the new City of Jackson Sewer Use Ordinance will be adopted by the City.

3.0 FOG Characterization Study

The occurrence of FOG-caused problems in the Jackson wastewater collection system was reviewed to characterize the nature and extent of FOG in contributing to SSOs. The major FOG contributors in the City were also identified. This inventory will serve as a basis for implementing required control measures to mitigate sewer blockages caused by FOG.

3.1 Jackson FOG Issues

Like most cities, Jackson must expend significant resources within the Sewer Maintenance Division for controlling FOG problems. A *Sewer Overflow Response Plan* was prepared by the City and approved by EPA on October 20, 2011. The approved SORP includes a proactive procedure to identify potential and actual sewer overflows and to determine the primary cause of each overflow. The number, quantity discharged, and primary cause of SSOs are tracked and reported quarterly.

FOG is a leading cause of sewer blockages and is the primary cause of dry weather sewer overflows. Based on SORP analysis results, the extent of FOG-caused SSOs is illustrated on **Figure 2-1**.

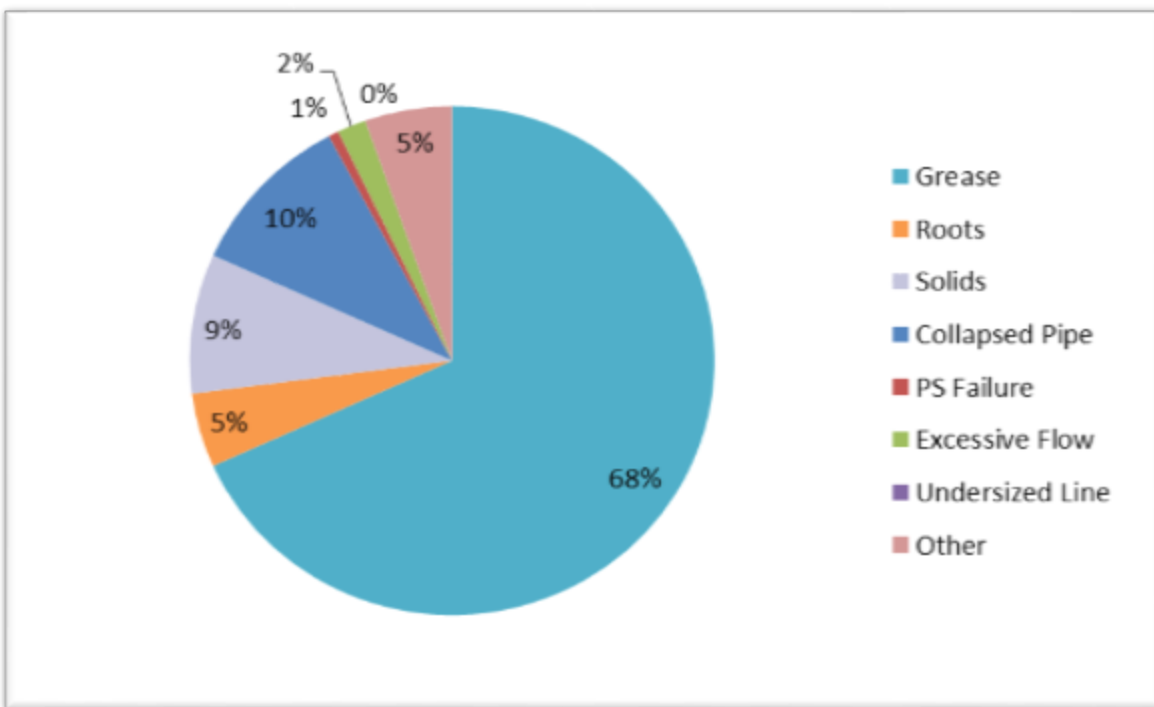


Figure 2-1
Annual Percentage of Collection System SSOs by Cause

3.2 FOG Sources

In order to make the FOG Control Program effective, sources of FOG must be addressed to the extent practicable. Industrial customers that generate FOG are regulated under the pretreatment program administered by MDEQ. This regulation is generally effective, and the industrial customers do not typically cause recurring problems in illicit FOG discharges and resultant SSOs. In Jackson, the primary sources of FOG are food service establishments (FSEs) and private residences.

Areas with Recurring FOG Cleaning Needs

Like all cities, there are a number of locations in the Jackson sewer system where recurring cleaning is performed to avoid excessive grease buildup and to reduce the potential for SSOs at these locations. The current locations where recurring cleaning operations are performed are listed below.

- Glenwood Drive – Behind Buford Yerger Retirement Center
- 4800 I-55 North - East frontage road adjacent to Piccadilly Cafeteria
- 1501 Jacksonian Plaza – Manhole between Piccadilly and Post Office
- 4910 I-55 North – Adjacent to Kroger Grocery Store
- State Street at Meadowbrook – Adjacent to KFC Restaurant
- McDowell Road at I-55 – Adjacent to Waffle House Restaurant
- 4884 Hwy. 18 – Adjacent to Chans Garden Chinese Restaurant
- Briarwood at I-55 – Adjacent to IHOP Restaurant
- 4515 I-55 North – Adjacent to Waffle House Restaurant

Grease buildup at these locations is caused by food service establishments; the retirement center also contributes excessive flushable wipes and other materials that, together with FOG, cause recurring problems. Preventative cleaning for these facilities is performed weekly, in some cases.

Hydraulic jet/vacuum trucks are used to perform sewer cleaning. The jets utilize high pressure water to scour the walls of sewer pipes. Debris and grease deposits removed by jet washing are vacuumed from the downstream manhole and disposed at the WWTP. Mechanical cleaning methods may also be employed when roots or other blockages are encountered that cannot be removed using hydraulic methods. The sewer maintenance activities are logged on a form and records are kept of the cleaning history of the sewer.

FSEs contributing to the problematic sewers are known to be a major cause of the continuous grease accumulation observed in these particular areas. In some locations, however, private residences including apartment buildings appear to be the principal contributors.

FSE Inventory

As part of the FOG Characterization Study, an inventory of FSEs within the City of Jackson sewer service area was compiled. This inventory resulted in the identification of currently

licensed 734 FSEs that would typically require FOG control devices. The current listing is shown on **Table 3-1**.

Table 3-1
Current Jackson FSEs
January 1, 2015

FSE Type	No. Licensed
Fast Food/Delicatessen	366
Full Service Restaurant	138
Educational Institution	66
Bakery/Donuts/Coffee Shop	42
Summer Feeding Programs	37
Full Service Bar	23
Caterer	23
Hospital/Nursing Home	22
Other	17
Total	734

The OTHER category includes feeding centers (6), food processors (6), correctional facilities (2), full-service day care facilities (2), and summer feeding programs (1).

Given that a program of regular inspections of FSE grease control equipment has not been in place, food service establishments will be a principal focus of the FOG Control Program compliance and enforcement efforts as described in Section 5.

Private Residences

Recurring FOG problems in neighborhoods where no contributing FSE is identified appear due to improper housekeeping practices in waste grease handling. This problem is apparent in many Jackson neighborhoods. For this reason, an effective public education program will be developed and implemented to inform residents about proper waste grease handling procedures and the harm caused by improper disposal of waste grease in sinks and drains. Proper procedures for use of garbage grinders will also be included.

Other FOG Contributors

The only other type of commercial establishment in Jackson that generates wastewater with significant FOG is carwash establishments. Wash water from commercial car wash facilities contains grease, oil, and other substances such as engine cleaner chemicals, sludge, heavy metals, salt and sand mixed with soaps, waxes, and detergents. These facilities require sand and oil interceptors which are similar in construction and purpose to grease removal devices used in FSEs. In these devices, oil and dirt are removed from the carwash wastewater before it is released into the sanitary sewer system. There are currently 40 car wash facilities in Jackson. Most, excluding older facilities, have sand and oil interceptors installed and regularly maintained. All car wash facilities without sand and oil interceptors will be required to install them upon any modification to the facility that requires a building permit.

Summary

The results of the FOG Characterization Study indicate that the focus of the FOG control program should be FSEs and private residences. Greater control of FOG discharges from FSEs together with effective public education to reduce FOG contributions from private residences is necessary to achieve the Program objectives.

4.0 Standards for FOG Control

This section describes the design and construction standards for FOG control devices used by FSEs and/or any commercial establishment with FOG discharges. Compliance inspection requirements and management, operations, and maintenance (MOM) standards are also addressed.

4.1 General Criteria

The City of Jackson FOG Control Program will require compliance with the general criteria listed below.

1. Food Service Establishment (FSE) Employee Training. FSEs shall train their employees on proper grease disposal practices and the requirements of this program.
2. Installation Requirements for New or Remodeled FSEs. All proposed or newly remodeled FSEs inside the City of Jackson wastewater service area will be required to install or upgrade to approved, adequately sized, properly installed and maintained grease control equipment in accordance with this document. Remodeling of an FSE may include, but is not limited to, the addition of new plumbing fixtures or kitchen equipment. A site map, design drawings, and as-built drawings must be prepared by the FSE and furnished to the City for review and approval. Construction inspection of the device installation will be performed by the building inspector.
3. Inspections and Compliance for Existing FSEs. All existing FSEs inside the City of Jackson wastewater service area shall conduct their operations in such a manner that grease is captured on the user's premises and then properly disposed of. This will be ensured through routine inspections by City staff.

Each FSE will be inspected on an as-needed basis to ensure each facility is complying with the FOG Control Program requirements, but at least every two years as a minimum. Maintenance records will be reviewed and posting of "No Grease" signs will be required at each fixture that drains to the grease control equipment.

In addition, through preventive maintenance records or emergency calls related to grease, the City will identify and target grease problem areas in the wastewater collection system. FSEs located upstream of these problem areas and that discharge their wastewater into the problem lines are potential contributors to the grease build-up. Each FSE in the vicinity of the problem area will be inspected. The FSE maintenance records, grease control practices, and adequacy of their grease control equipment will be assessed.

It will be prohibited for facilities to have grease control equipment that malfunctions due to structural failure. For example, a collapsed or deteriorated baffle wall, leaks, improperly located or missing tees, and other deficiencies will prevent the grease control equipment from working properly. These deficiencies must be addressed through repair of existing

equipment or installation of a larger device. The FOG Program compliance aspect of the program will require FSEs to have their equipment inspected every other year to verify that the grease interceptor is installed and the device is working properly.

Following the inspection, the City will provide the FSE with a copy of the inspection report and other program materials if necessary. The inspections will typically result in one of the following actions:

- (1) Facilities equipped with adequately-sized and properly maintained grease control equipment who are in compliance with the FOG Control Program by implementing grease control practices are provided a copy of the inspection form indicating compliance.
 - (2) Facilities may be required to develop and submit to the City a proposed plan designed to achieve compliance through improved housekeeping and/or increased maintenance and pumping on the existing grease control equipment.
 - (3) Facilities that are not successful in achieving compliance with the FOG Control Program and other applicable rules and regulations of the City through improved housekeeping and increased maintenance and cleaning of the existing grease control equipment will be required to install and maintain adequate grease control equipment to bring the facility into compliance. The City recognizes that it may not be possible for the facility to immediately come into compliance with the requirements and in such cases, if appropriate, the City, at its sole discretion, may be willing to work with the customer to arrive at an acceptable compliance schedule for the customer.
 - (4) FSEs that fail to comply with the required maintenance schedule for a hydromechanical grease interceptor will be required to install a gravity grease interceptor to prevent continued discharge of grease to the City of Jackson sanitary sewer collection system.
4. Enforcement. The City will evaluate compliance with the FOG Control Program during site inspections. Failure to comply with program requirements increases the risk of producing grease related SSOs in the collection system, which must be prevented. Enforcement action will be taken as necessary in accordance with the enforcement provisions in the Sewer Use Ordinance for the FOG Control Program.
 5. Upgrades or Changes to Existing FSEs. Any changes or upgrades to an existing FSE (including the addition of new plumbing fixtures or kitchen equipment) which, directly or indirectly, affects grease discharge to the City of Jackson sanitary sewer system must be reported to the City to determine if the existing grease control equipment is adequate.
 6. Prohibited Discharges to Grease Control Equipment. Black water shall not be discharged to the grease control equipment. Additives or chemicals designed to absorb, purge, consume, treat, or otherwise eliminate fats, oils, and grease are prohibited. Yellow grease is prohibited from being discharged to a grease interceptor.

7. Floor Drains. Only floor drains which discharge or have the potential to discharge grease shall be connected to a grease interceptor.
8. Garbage Grinders and Dishwashers. Solid food waste products should be disposed of through normal solid waste/garbage disposal procedures. The use of garbage grinders, which discharge to the sanitary sewer, is discouraged. However, in the event that the device is used in a commercial or industrial facility, it must have a large particle trap and be connected to a gravity 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 dishwashers must be connected to a gravity grease interceptor and are prohibited from being connected to a hydromechanical grease interceptor. Dishwashers discharge hot water and soap, which can melt grease stored in grease control equipment. Melted grease may then pass through the grease control equipment into the customer's private service lateral and ultimately to the City's sanitary sewer collection system, where the grease can harden and causes buildup and overflows.

4.2 FOG Control Device Standards

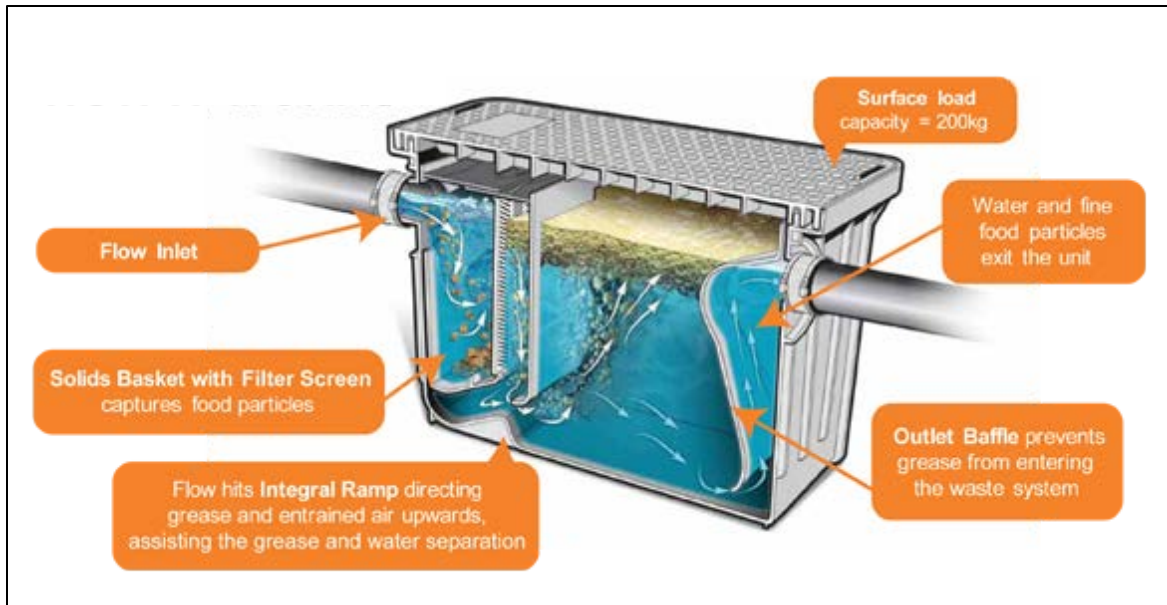
The City of Jackson has adopted the International Plumbing Code (IPC) which includes acceptable standards for FOG control devices. The City's interpretation of the IPC pertaining to furnishing, installing, and operating FOG interceptors is described below.

Grease Interceptors

A grease interceptor is a specialized device installed in the sanitary drainage system of an FSE to retain nonpetroleum fats, oils, and grease contained in wastewater discharged to the system from cooking and cleaning operations. Grease interceptors must receive wastewater from all contributory sources, such as pot sinks, dishwashers, floor drains, and mat washing area drains before draining to the sanitary sewer system. For grease interceptors to function properly they must be properly sized and regularly serviced and maintained by qualified personnel. There are two major types of grease interceptors plus two less common types that may be required in special applications:

Hydromechanical Grease Interceptor. A hydromechanical grease interceptor (HGI), previously called grease trap, is a smaller grease removal device installed indoors, typically under sinks. In addition to gravity, HGIs use air entrainment, flow restriction, removable screens, and interior baffles to influence flow characteristics resulting in FOG separation in a smaller tank size.

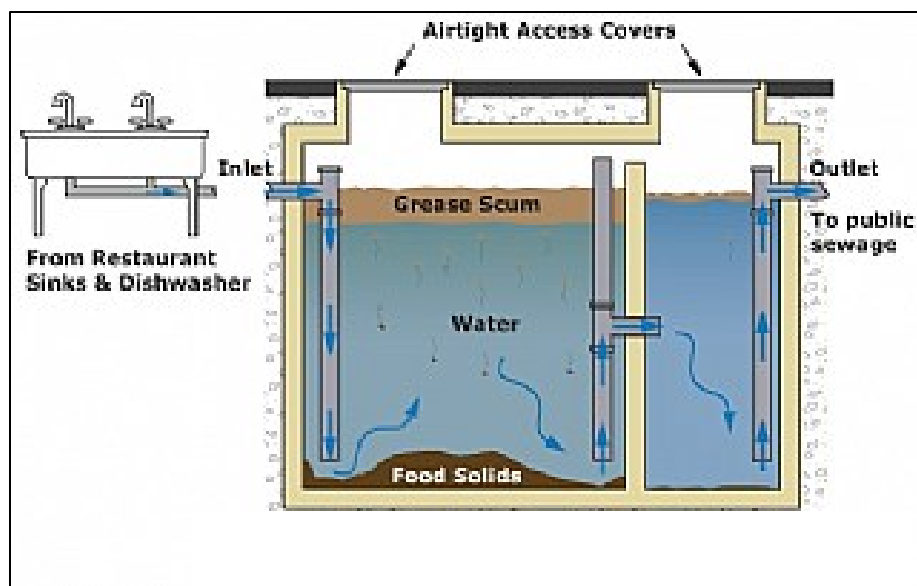
Figure 4-1
Typical Hydromechanical Grease Interceptor



Courtesy Marley Pipe Systems

Gravity Grease Interceptor (GGI). Gravity grease interceptor is the term used for larger tanks that are typically installed outdoors. A GGI consists of a tank with at least two compartments, at least 500 gallons capacity, and interior baffles for flow control. FOG is removed by gravity separation.

Figure 4-2
Typical Gravity Grease Interceptor



Courtesy Advance Concrete Products

Other Grease Interceptor Types. These include Grease Removal Devices (GRDs) and FOG Disposal Systems (FDSs). GRDs employ heat and a mechanical grease separator (rotating drum or belt, typically) to physically remove the grease from the unit and divert it to a separate storage vessel. FDSs are on-site treatment units that reduce FOG by biological decomposition; specialized bacteria are metered into the flow and membrane filters are used to separate biological solids from the wastewater. Both of these systems are more expensive and require more maintenance than conventional HGIs; however, they may be required by the City in certain special circumstances (e.g., recurring grease discharge violations, insufficient space to install a GGI).

FOG Control Device Requirements

Most FSEs will require a gravity grease interceptor. Hydromechanical grease interceptors can be used at FSEs if there is no cooking or frying. The appropriate type of grease control equipment will be determined by the FSE based on FSE type and the plumbing fixtures. Sizing and design of the grease interceptor must be performed by a licensed plumber or professional engineer and approved by the City. The following must be provided with the building permit application:

- Grease interceptor sizing calculations (IPC 2006).
- Site plan to scale showing grease interceptor location in relation to building and streets.
- Completed plumbing plan showing food preparation area and all plumbing, kitchen fixtures, and grease interceptors.
- For exterior interceptors, plan and profile showing ground level and tank.
- Completed plumbing permit application and fee.
- Manufacturer's drawing, specifications and performance information on grease interceptor device.

Grease control equipment shall be installed and connected so that it is easily accessible for inspection, cleaning, and removal of the intercepted grease at any time and be located in an area that is a sufficient distance from any air intake. The best location for a GGI is in an area outside of an exterior wall, but upstream from the black water drain line(s). The best location for a HGI is inside the FSE in an area that can be easily accessed for maintenance.

All potential FOG-containing wastewater streams shall be plumbed to a grease interceptor. Black water and wastewater sources not containing grease may not be connected to the grease interceptor. No discharges from food waste grinders or dishwashers may be connected to HGIs (these units require GGIs).

Grease Interceptor Sizing

Grease interceptors are sized for the peak wastewater flow from all contributory sources. Gravity grease interceptors are sized on the basis of a 30 minute detention time to allow FOG separation from the waste stream by gravity and accumulation in the tank for subsequent removal. The size of a hydromechanical grease interceptor is expressed in gallons per minute (gpm) based on the flow that the unit can accept and still remove 90% or more of FOG in the waste stream. HGI sizes are rated by the manufacturer.

All grease interceptors must be sized properly. Cleaning of interceptors is required on a regular schedule to avoid overload and passing of FOG to downstream sewers, and to prevent hydrogen sulfide generation that would lead to corrosion of the tank and downstream sewers, and to control odors.

Sizing of grease interceptors must conform to the requirements of the International Plumbing Code as adopted by the City of Jackson. Specifically, IPC 2009 Section 1003.3 lists specific sizing criteria for grease interceptors:

1003.3 Grease interceptors. Grease interceptors shall comply with the requirements of Sections 1003.3.1 through 1003.3.5.

1003.3.1 Grease interceptors and automatic grease removal devices required.

A grease interceptor or automatic grease removal device shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias and clubs. Fixtures and equipment shall include pot sinks, prerinse sinks; soup kettles or similar devices; wok stations; floor drains or sinks into which kettles are drained; automatic hood wash units and dishwashers without prerinse sinks. Grease interceptors and automatic grease removal devices shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged.

1003.3.2 Food waste grinders. Where food waste grinders connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder. Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste grinder.

1003.3.3 Grease interceptors and automatic grease removal devices not required. A grease interceptor or an automatic grease removal device shall not be required for individual dwelling units or any private living quarters.

1003.3.4 Grease interceptors and automatic grease removal devices. Grease interceptors and automatic grease removal devices shall be sized in accordance with PDI G101, ASME A112.14.3 Appendix A, or ASME A112.14.4. Grease interceptors and automatic grease removal devices shall be designed and tested in accordance with PDI G101, ASME A112.14.3 or ASME A112.14.4. Grease interceptors and automatic grease removal devices shall be installed in accordance with the manufacturer's instructions.

Exception: Interceptors that have a volume of not less than 500 gallons (1893 L) and that are located outdoors shall not be required to meet the requirements of this section.

1003.3.4.1 Grease interceptor capacity. Grease interceptors shall have the grease retention capacity indicated in Table 1003.3.4.1 for the flow-through rates

indicated.

TABLE 1003.3.4.1 CAPACITY OF GREASE INTERCEPTORS^a

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
75	150
100	200

For SI: 1 gallon per minute = 3.785 L/m, 1 pound = 0.454 kg.

a. For total flow-through ratings greater than 100 (gpm), double the flow-through rating to determine the grease retention capacity (pounds).

1003.3.4.2 Rate of flow controls. Grease interceptors 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 be installed in accordance with the manufacturer's instructions.

1003.3.5 Automatic grease removal devices. Where automatic grease removal devices are installed, such devices shall be located downstream of each fixture or multiple fixtures in accordance with the manufacturer's instructions. The automatic grease removal device shall be sized to pretreat the measured or calculated flows for all connected fixtures or equipment. Ready *access* shall be provided for inspection and maintenance.

Similarly, the IPC 2009 Section 1003.4 contains design standards for oil separators for car washes and auto repair shops:

1003.4 Oil separators required. At repair garages, car-washing facilities, at factories where oily and flammable liquid wastes are produced and in hydraulic elevator pits, separators shall be installed into which all oil-bearing, grease-bearing or flammable wastes shall be discharged before emptying into the building drainage system or other point of disposal.

Exception: An oil separator is not required in hydraulic elevator pits where an *approved* alarm system is installed.

1003.4.1 Separation of liquids. A mixture of treated or untreated light and heavy liquids with various specific gravities shall be separated in an *approved* receptacle.

1003.4.2 Oil separator design. Oil separators shall be designed in accordance with Sections 1003.4.2.1 and 1003.4.2.2.

1003.4.2.1 General design requirements. Oil separators shall have a depth of not less than 2 feet (610 mm) below the invert of the discharge drain. The outlet opening of the separator shall have not less than an 18-inch (457 mm) water seal.

1003.4.2.2 Garages and service stations. Where automobiles are serviced, greased, repaired or washed or where gasoline is dispensed, oil separators shall have a minimum capacity of 6 cubic feet (0.168 m³) for the first 100 square feet (9.3 m²) of area to be drained, plus 1 cubic foot (0.28 m³) for each additional 100 square feet (9.3 m²) of area to be drained into the separator. Parking garages in which servicing, repairing or washing is not conducted, and in which gasoline is not dispensed, shall not require a separator. Areas of commercial garages utilized only for storage of automobiles are not required to be drained through a separator.

Grease Interceptor Specifications

Construction of Grease Interceptors. Grease interceptors shall be constructed of sound durable materials, not subject to excessive corrosion or decay and in accordance with the standards described in the IPC and shall have a minimum of two compartments with fittings designed for grease retention. Other grease removal devices or technologies shall be subject to the written approval of the City. Such approval shall be based on demonstrated removal efficiencies of the proposed technology.

Access. Access to grease interceptors shall be available at all times to allow for their maintenance and inspection. Access to grease interceptors shall be provided by at least two manholes terminating 1-inch above finished grade with a cast iron frame and cover. One manhole shall be located above the inlet tee and the second manhole shall be located above the outlet tee.

Load-Bearing Capacity. In areas where additional weight loads may exist (example: vehicular traffic in parking or driving areas), the grease interceptor and manhole lids shall be designed to have adequate load-bearing capacity.

Inlet and Outlet Piping. Wastewater discharging to a grease interceptor shall enter only through the inlet tee of the grease interceptor. Each grease interceptor shall have only one inlet and one outlet tee. Tees must be constructed of non-collapsible material.

Required Components for HGI's. HGI's are required to be installed per manufacturer specifications, which include a flow restrictor and venting prior to the discharge entering the HGI tank.

Inlet and Outlet Piping. Wastewater discharging to a grease interceptor shall enter only through the inlet tee. Each interceptor shall have only one inlet and one outlet tee.

Grease Interceptor Sizing. The required size of a grease interceptor is determined by using the Grease Interceptor Sizing Procedure. Gravity grease interceptors shall have a capacity of not less than 500 gallons nor exceed a capacity of 3,000 gallons. If the calculated capacity using the City's Grease Interceptor sizing formula exceeds 3,000 gallons, multiple units in series or additional equipment may be necessary.

Grease interceptor designs represent minimum standards for normal usage for grease control. Installations with heavier usage require more stringent measures for which the user is responsible and the user shall pay the costs to provide additional measures if required by the City. The City reserves the right to evaluate interceptor sizing on an individual basis for FSEs with special conditions, such as highly variable flows, high levels of grease discharge, or other unusual situations that are not adequately addressed by the procedure.

Construction Inspection

An inspection of new or modified grease control equipment is required. The inspection will be performed by inspectors from the City of Jackson Building Department. Inspectors will check for proper installation in accordance with manufacturer instructions and proper pipe and fitting connections in accordance with the IBC. Passing of the inspection is required prior to placing the equipment in service.

Compliance Inspection

Operation of the grease control equipment must comply with the City's FOG Control Program requirements. Inspections will be performed by qualified staff assigned by the Public Works Department. Inspections may be performed at any time, but will be performed at least every two years.

4.3 Management, Operation and Maintenance Standards

Grease control device management, operation, and maintenance standards required by the City of Jackson are listed below.

Grease Control Equipment Maintenance

Cleaning/Pumping. The user, at the user's expense, shall properly maintain all grease control equipment.

Maintenance of hydromechanical grease interceptors includes the removal of all fats, oil, and grease from the detention compartment of the tank. Removal is usually accomplished by hand-dipping or scooping the collected grease, solids, and wastewater from the tank. Maintenance may also be performed by a waste hauler.

Maintenance of gravity grease interceptors must be performed by a waste hauler and includes the complete removal of all contents, including floating materials, wastewater, bottom sludges and solids, as well as grease that has accumulated on the side walls. Dewatering or discharging removed waste back into the grease interceptor from which the waste was removed or into any other grease interceptor or downstream manhole on the sewer collection system, for the purpose of reducing the volume to be disposed of, is prohibited.

Cleaning/Pumping Frequency. Hydromechanical grease interceptors must be cleaned no less than monthly or as often as necessary to prevent grease from entering the City's sanitary sewer collection system. Failure to perform cleaning and maintenance of an HGI as required may result in an order from the City to execute a contract with a waste hauler to perform the cleaning per the required schedule, or result in a requirement for the FSE to install a larger capacity grease control device that could include a gravity grease interceptor.

Gravity grease interceptors must be pumped out completely a minimum of once every three months, or more frequently as needed to prevent grease from entering the sanitary sewer collection system. Measurement of solids greater than or equal to 25% shall be considered non-compliance with the City's FOG Control Program. This compliance monitoring and evaluation may be conducted by a sludge judge or electronic measuring device.

Disposal of Grease Waste. Waste removed from grease interceptors must be disposed of with other solid waste or garbage in a sealed container to prevent leakage unless cleaned and disposed of by a waste hauler. All waste removed from grease interceptors must be disposed of at a facility approved by the City 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.

Additives. Any additive(s) placed into the grease interceptor or building discharge line system on a constant, regular, or scheduled basis is prohibited. Such additives include, but are not be limited to, chemicals, drain cleaners, acids, caustics, enzymes, commercially available bacteria, emulsifiers, surfactants, or other product designed to absorb, purge, consume, treat, or otherwise eliminate fats, oils, and grease. Written approval may be given by the City under

specific circumstances; however, approved use may be discontinued at any time if grease is found downstream of the FSE. In addition, approved use will in no way be considered as a substitution to the required maintenance procedures and schedule.

Manifests. All pumpage from grease interceptors must be tracked by a manifest, which confirms pumping, hauling, and disposal of waste. The customer must obtain a manifest from the waste hauler with signatures and keep copies for their records. Waste disposal manifest records will be reviewed during routine inspections by the City.

Maintenance Log. A Grease Control Equipment Cleaning Record Maintenance Log and pumping manifest indicating each cleaning or pumping for the previous 24 months shall be maintained by each facility required to install grease control equipment. This log shall include the date and time of the cleaning, and the company or person conducting the cleaning. For gravity grease interceptors, the log should also include the volume pumped and disposal site used. Maintenance logs shall be kept in an accessible location for inspection and be made immediately available to the City representative upon request.

Grease Control Equipment Certification Program. All FSEs with grease control equipment must have their grease interceptor inspected every other year to verify that all components of the interceptors are installed and working properly. Results of the equipment inspection shall be documented to certify that there are no missing inlet or outlet tees, holes or cracks, deterioration of the equipment, overflowing grease at the outlet tee, or any other obvious problems with the interceptor and there is access to all interceptor chambers. A detailed corrective action response is required from the FSE owner or authorized representative if deficiencies are discovered and the grease control equipment fails the certification.

Corrective actions will be reviewed by the City and an appropriate course of action will be agreed to between the City and the FSE. Failure to appropriately address the deficiencies noted in the failed certification will result in enforcement action as outlined in the City's Sewer Use Ordinance. Immediate corrective action may be necessary if grease is found to be entering the City's sanitary sewer collection system.

5.0 FOG Control Program Compliance

This section includes the administrative provisions of the FOG Control Program and enforcement mechanisms that will apply. Assistance available to FSEs in complying with the program requirements are also described.

5.1 Permitting Process

FOG control devices will be required as part of the normal building permitting process. The plumbing permit required for new facilities or facility renovations also covers any grease control equipment required. As part of the application for a plumbing permit, a separate application page describing the FSE characteristics relating to FOG generation will be included. A sample FOG discharge application is provided in the Appendix.

The permitting process as it relates to FOG control devices is described below.

New FSEs

Before construction of a new FSE begins, the permit applicant for new FSE will be required to submit a FOG Control Plan together with the application for a Building Permit. As part of the review and approval process, the FOG Program Compliance Team in the Public Works Department will review the FOG Control Plan. If the plan does not conform to City requirements, the permit applicant will be required to revise and resubmit the plan. Upon approval of the plan by the Compliance Team, the Building Permits Division may then issue a Building Permit.

Construction of the new FSE will include installation of the approved grease control device. The assigned plumbing inspector from the Building Permits Division will perform the inspection. If the installed GCD is not approved (for example, if it has not been installed in accordance with the approved plan), the FSE will be required to make appropriate changes to the installed GCD or reinstall the device, and have the device re-inspected.

If the GCD inspection is passed, the Building Permits Division will issue a Certificate of Occupancy to the FSE and the City's FOG Control Program database will be updated with the new FSE and GCD records. The City's Code Services Department may then issue the Business License.

A flow chart showing the permitting process for new FSEs is provided on **Figure 5-1**.

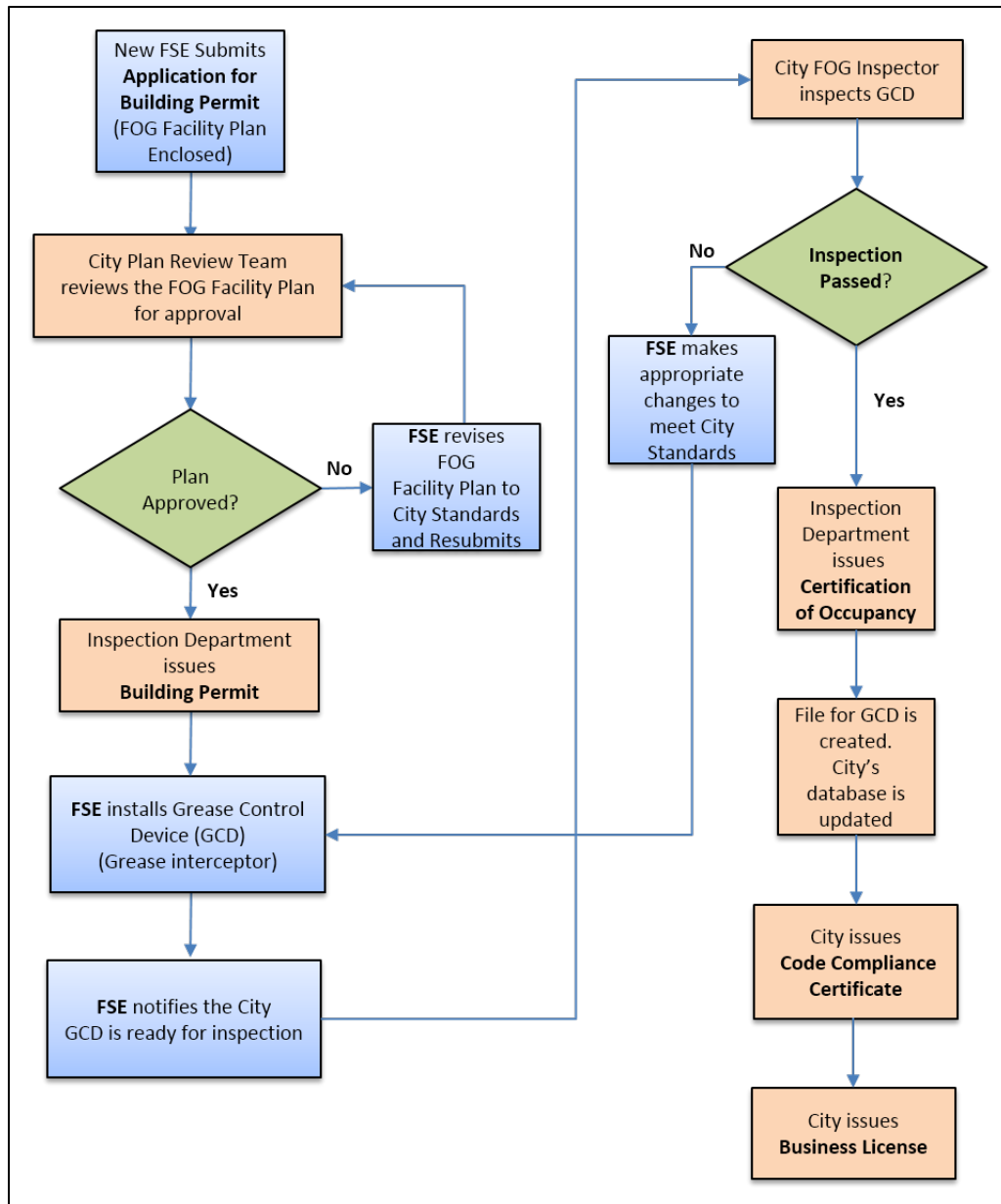


Figure 5-1
Permitting Process for New FSEs

Remodeled FSEs

Before work on remodeling of an existing FSE begins, the FSE owner will submit an application for a Building Permit. A new FOG Control Plan is not required but the permit applicant must schedule an inspection of the existing GCD with the City.

The FOG Inspector from the Public Works Department will perform the inspection. If the existing GCD is approved, a Letter of Approval will be forwarded to the Building Permits Division where a Certificate of Occupancy will be issued when the planned remodeling work is completed and passed inspection.

If the existing GCD is not approved, the FSE will be required to prepare and submit a new FOG Control Plan for review. The FOG Compliance Team will review the plan; if it does not conform to City standards, the applicant will be required to revise and resubmit the plan. Upon approval of the plan by Public Works, the Building Permits Division may issue a Building Permit.

If a new GCD is required, a FOG Inspector will perform an inspection after installation. If the installed GCD is not approved (for example, it has not been installed in accordance with the approved FOG Control Plan), the FSE will be required to make appropriate changes to the installed GCD or reinstall the device, and have the device re-inspected.

If the GCD inspection is passed, the Building Permits Division may issue a Certificate of Occupancy to the FSE. The FSE and GCD records in the City's database will be updated to reflect the new information. The City's Code Services Department may then issue the Business License.

A flow chart showing the permitting process for remodeled FSEs is provided on **Figure 5-2**.

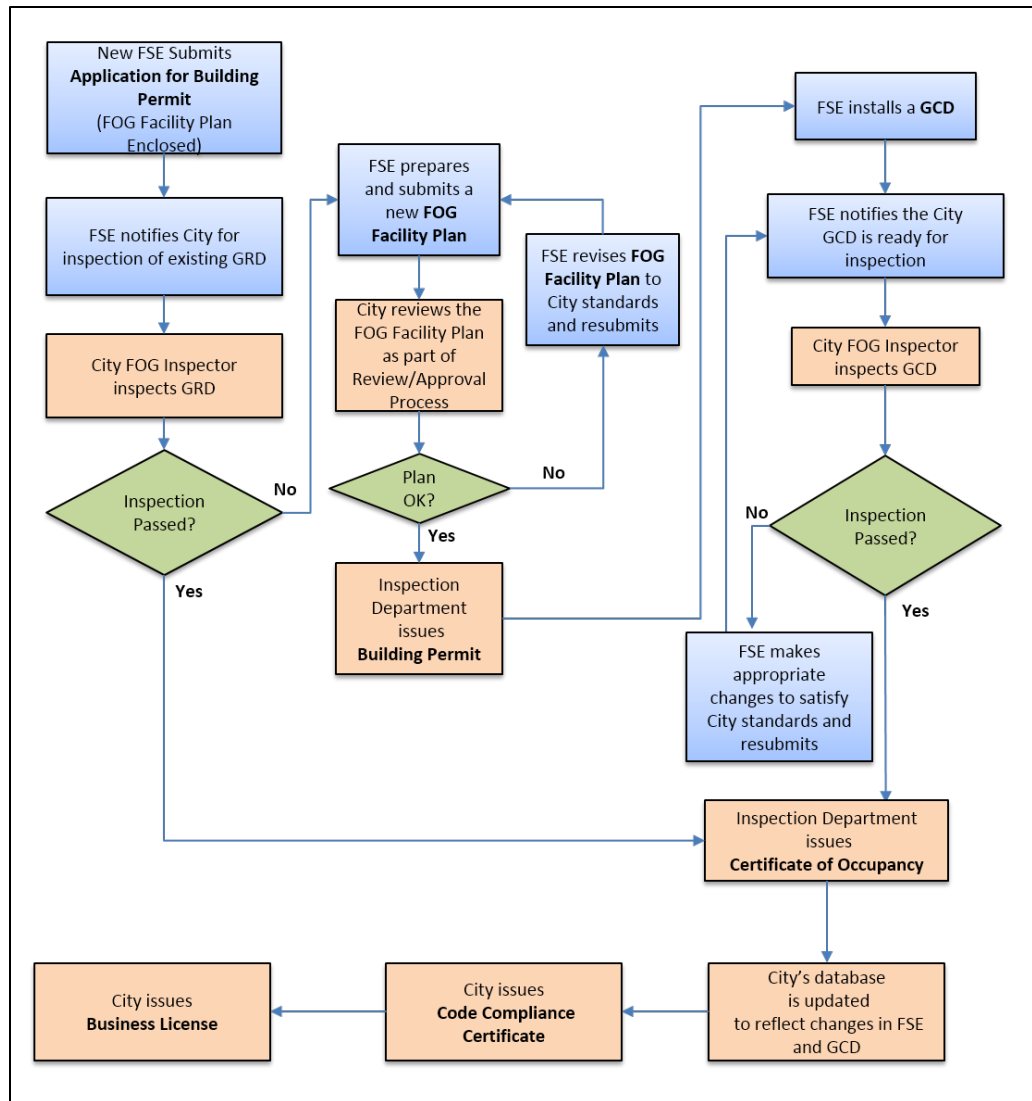


Figure 5-2
Permitting Process for Remodeled FSEs

FSE Change of Ownership

A change of FSE ownership affects an existing FSE Business License because it is non-transferable and therefore the new FSE owner is required to obtain a new license. Upon application, the FOG Program Compliance Team will be notified to determine if the existing GCD requires inspection.

A FOG Inspector will then perform an inspection. If the existing GCD is approved, the Building Permits Division will be notified. A Certificate of Occupancy can then be issued when any planned remodeling work is completed and passes inspection.

If the existing GCD is not approved, the FSE will be required to prepare and submit a new FOG Control Plan and submit to the City for review. The FOG Compliance Team will

review the plan; if it does not conform to City standards, the applicant will be required to revise and resubmit the plan. Upon approval of the plan by Public Works, the Building Permits Division may issue a Building Permit to install a new GCD.

If a new GCD is required, a FOG Inspector will perform an inspection after installation. If the installed GCD is not approved (for example, it has not been installed in accordance with the approved FOG Control Plan), the FSE will be required to make appropriate changes to the installed GCD or reinstall the device, and have the device re-inspected.

If the GCD inspection is passed, the Building Permits Division may issue a Certificate of Occupancy to the FSE. The FSE and GCD records in the City's database will be updated to reflect the new information. The City's Code Services Department may then issue the Business License. A flow chart showing the permitting process for FSEs with changed ownership is included in **Figure 5-3**.

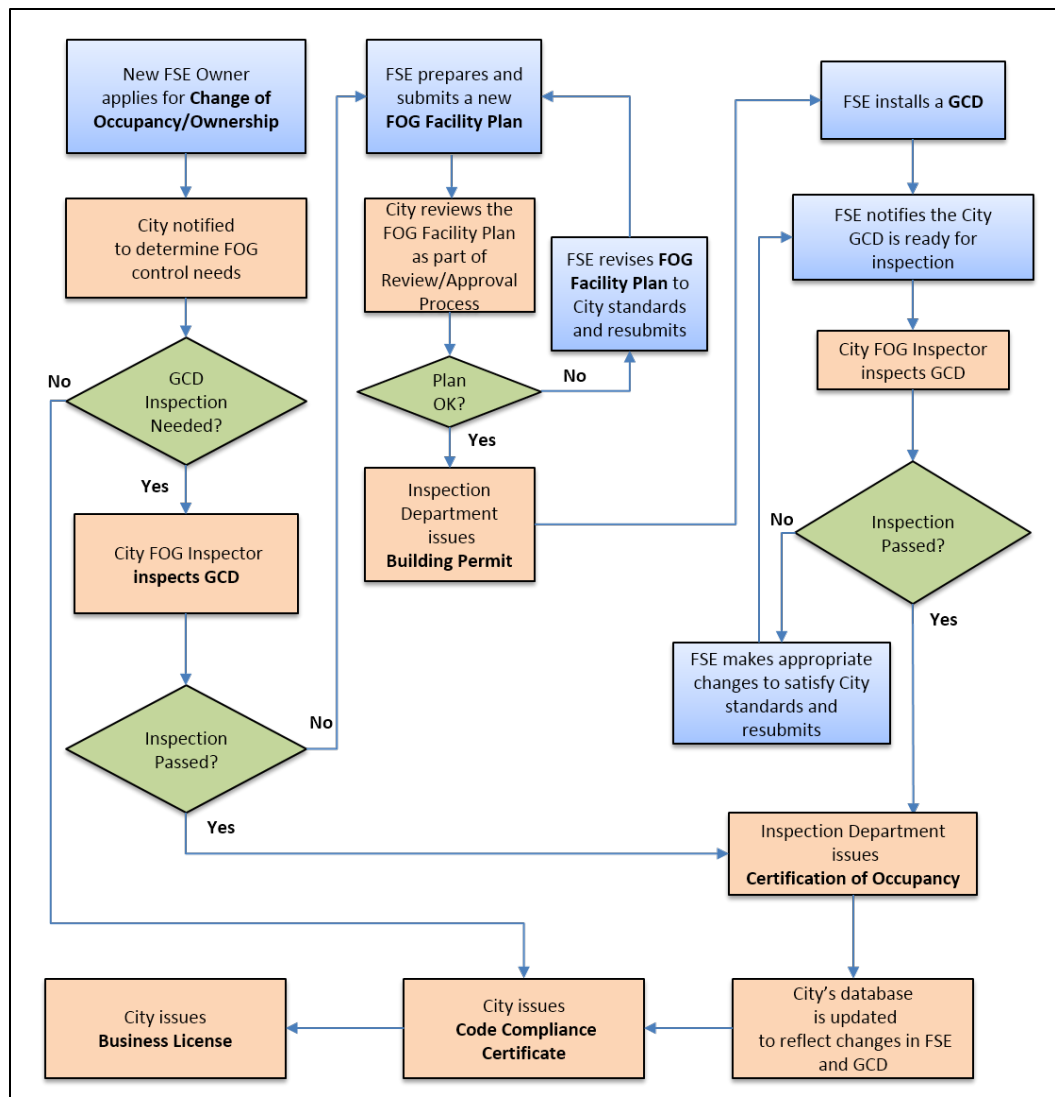


Figure 5-3
Permitting Process for FSEs with Changed Ownership

5.2 FOG Disposal

The Mississippi Department of Health regulates cleaning and disposal of FOG from grease control devices. FOG disposal operators are required to obtain a Certified Pumper license from MDOH. As part of the certification process, pumpers are required to pass an examination on disposal regulations. MDOH also provides a 1-day Certified Pumper course to prepare applicants for the examination.

Mississippi Code Title 41-67-3, Rule 2.1.41 §(2) requires that Certified Pumpers keep a record on all systems cleaned, pumped and disposed of by address, type of treatment unit, amount pumped, and receipt of disposal at a waste treatment facility permitted by the Mississippi Department of Environmental Quality. Proper cleaning must include substantial removal of its contents. Discharge of liquid wastes are allowed only at those specific locations designated by the owners/operators of approved disposal facilities. Discharge of liquid waste into a public sewage collection system, without the consent and permission of the owner/operator of such system, is prohibited. MDOH also requires that records shall be made available at time of any inspection, and that records must be retained for a minimum of 2 years.

The City of Jackson will require that FSEs keep a copy of the disposal manifest required by MDOH to serve as a record of proper FOG disposal. Review of prior disposal manifests will be a component of the normal inspection activities performed by the FOG Control Program compliance inspector.

5.3 FOG Program Compliance

This section describes the proposed inspection, inspection documentation, and program fees for the FOG Control Program to be administered by the Department of Public Works.

Inspection Procedure

The City's assigned FOG Control Program inspectors will follow a checklist in inspecting each FSE. A sample checklist is provided in the Appendix. During inspection, items to be checked include:

Inside Areas

1. Screens installed in FOG disposal sinks and floor drains.
2. Verification of waste food handling practices (solid food from pots, pans, fryers, utensils, and dishes are scraped into a trash container; no waste food in sinks; pots and utensils are dry wiped prior to washing).
3. Floors are swept before mopping and floor drains are not removed to dispose of sweeping debris.
4. Temperature of faucet water is not over 140°F and water heater temperatures are set accordingly.
5. Any grease spills on floors are cleaned promptly using towels and absorbent materials, and that wet mops are only used to remove trace residues.
6. Proper spill clean-up kits are available in the facility.
7. Small grease waste containers with lids are available and used for collecting used oil and grease.

8. Proper signage on grease control and list of BMPs is mounted on the wall in a visible location.
9. Exhaust hoods are properly maintained to prevent discharge of grease to roof areas and washed off to storm drains during rains.

Outside Areas

10. Outside grease containers are covered and closed.
11. No grease spills observed on pavement or other surfaces from transporting grease to outside containers.
12. Outside grease containers are not leaking and any damaged containers are promptly replaced.
13. Employees do not dump oil and grease into a storm sewer.
14. Employees do not clean cooking equipment (degrease) outside. The equipment should be scraped and dry wiped indoors and any washing done in utility sinks connected to a grease control device.
15. Employees do not wash mats outdoors. Mats should be vacuumed and washed in utility sinks connected to a grease control device.

Employee Training and Maintenance Documentation

16. Employee training log is complete; i.e., employees get training about proper FOG handling and learn requirements of the FOG Control Program. Training logs are current and proper training is provided to new employees. Refresher training is provided periodically to all employees.
17. The FOG control device inspection/cleaning log is complete. Employees in charge of inspection and cleaning of grease interceptors perform these assignments regularly and keep the grease control devices in good operating condition. Employees are aware of the required frequency of inspection and cleaning of FOG control devices in the facility and inspection and cleaning are performed routinely.
18. FOG Hauler manifests are complete.

Fog Control Device Condition and Performance

19. Checks are made to insure the grease control device is functioning properly. The device should contain wastewater with the grease layer floating on top and does not enter the outlet pipe.
20. Check that the 25% rule is met, i.e., the thickness of the layer of floating grease and solids does not exceed 25% of the operating depth of the device (depth between the invert of the outlet pipe and the bottom of the device).
21. The inlet pipe to the grease control device is visible during inspection.
22. The outlet pipe of the grease control device is visible during inspection.
23. There are no roots growing in the interceptor. Cleaning is required if roots are observed.
24. There is no corrosion damage to the GRD. If metal traps are corroded they should be replaced with new ones, preferably made of plastic. Any corrosion damage to the device must be repaired promptly to avoid more severe deterioration (such as exposed rebar).
25. Any broken or missing parts are replaced, especially a missing outlet T.

The FSE is ultimately responsible that the wastewater discharged to the sewer lateral contains less than 100 mg/L of FOG. If a FSE is following the requirements of the FOG Control Program and despite best efforts the effluent from a grease control device still contains unacceptable levels of FOG, the installed device is most likely undersized. The connections to the device should be checked and the existing grease control device may need to be modified or replaced accordingly.

Inspection Documentation

Upon inspection of each FSE, the City's inspector shall complete an inspection report. Sample inspection reports for interior FOG control practices and for grease interceptors are provided in the Appendix. Information from the inspection report will be entered into a database for the FOG Control Program. The database will be updated with additional or modified information after each inspection.

Program Fees

All FSEs that discharge wastewater to the City of Jackson wastewater collection system must agree to comply with all aspects of this program. Provision of acceptable FOG control devices will be a condition of the Building Permit required for new construction, building remodeling, or plumbing modifications. The building permit fee will include services required by city code enforcement inspectors to review plans for grease interceptors and perform construction inspection. An additional fee will be established to recover costs of the FOG Control Program compliance and enforcement activities incurred by the Department of Public Works and includes, but is not limited to, the cost of field, administrative, engineering, and clerical expenses involved. The fee shall be established by the Public Works Department to cover the costs of the program, and will include an additional charge for FSEs that pose a high or unacceptable risk to the sewer system or that require repeat inspections to achieve compliance. The annual FOG Control compliance fee will be applied to the customer's sewer service bill.

Inspection and Entry

Authorized personnel of the City of Jackson, bearing proper credentials and identification, shall have the right to enter upon all properties subject to the FOG Control 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.

5.4 Program Enforcement

As described in Section 2, the City of Jackson Sewer Use Ordinance will be amended to include additional provisions for enforcement, abatement, and appeals of the FOG Control Program rules and regulations. In addition to the authority established under these provisions, the City may take the actions listed below.

Enforcement Responses for Rule Violations

Any person who is in noncompliance and/or violates any provision of the City's FOG Control Program rules and regulations, program requirements, or a compliance order shall be subject

to an enforcement response, including but not limited to a civil penalty and the possibility of water and/or wastewater service termination. Civil penalties or termination of water and/or wastewater service may be appealed in accordance with provisions in the Sewer Use Ordinance. The following situations are subject to an enforcement response by the City:

- FSE operating without an appropriate permit
- Failure to pay annual permit fees
- Failure to install grease control equipment or to meet City of Jackson guidelines for grease control equipment design and installation
- Structural failure of grease control equipment
- Inadequate maintenance of grease control equipment
- Pumping records not maintained
- Failure to report upgrades/changes to existing facilities to the City
- Failure to report improper operation or failure of grease control equipment
- Denial of entry
- Inadequate FSE employee training and/or recordkeeping
- Failure to respond to a City of Jackson enforcement action

Suspension of Services

The City may suspend water or wastewater service when such suspension is necessary, and without prior notice, when, in the opinion of the City, an actual or threatened discharge:

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 wastewater treatment facility; or
4. Causes the City to violate any condition of its NPDES permits, agreed orders, or consent decree.

The above provisions will be authorized in the Sewer Use Ordinance after amendment.

5.5 Compliance Assistance

The City of Jackson will provide resources and educational materials to FSEs to assist them in complying with FOG Control Program requirements. Brochures and posters will be prepared in English and Spanish that describe the overall purpose of the Program and to communicate Best Management Practices to handle FOG wastes. Sample checklists of required compliance items and BMPs pertaining to FOG control are provided in the Appendix.

Guidance in training FSE employees in proper waste management and good FSE operational practices to prevent FOG discharges will be provided. These materials will be provided to all FSEs within the City of Jackson sewer service area. The City's compliance inspectors will also be trained to provide proper FOG management instruction to FSE owners or operators during their periodic inspections. FSEs will be required to maintain a training log documenting the FOG control training provided. A sample training log is provided in the Appendix.

The City will also consider establishing an incentive-based program with certifications and/or business awards to FSEs that implement proper FOG control measures and follow all program requirements. Program awards and recognition offered would be designed to provide an incentive for program compliance.

6.0 Public Education

Successful control of FOG discharges into the sewer system from private residences requires educating the public in proper grease disposal practices. During the implementation phase of the FOG Control Program, the City will develop a public education and outreach program that will be designed to inform the City's customers about proper disposal of fats, oils, and grease to reduce grease-related SSOs, and to provide the following benefits:

- Reduce sewer maintenance efforts
- Reduce sewer maintenance costs
- Reduce environmental impact
- Protect human health

A number of cities have instituted *Cease the Grease*, *Can the Grease*, or similar campaigns that have proven successful in reducing grease-caused SSOs over time. These successful outreach efforts will be reviewed, and appropriate and desirable components will be adopted for the City of Jackson public education program. Additional measures will be incorporated to tailor the City's public education program to meet the specific needs of the Jackson area.

Key elements of the Jackson FOG Control public education program may include some or all of the following elements:

- Flyers and brochures to communicate the FOG control message
- FOG Program webpage linked to City of Jackson and other relevant websites
- Presentations to schools, business and community groups
- Booths at community events
- Radio and TV public service messages
- Social media outreach
- Used cooking oil recycling options

Special efforts will be focused on selected groups in Jackson including schools, apartment owners/operators, Jackson Public Housing Authority properties, and other groups where enhanced public education appears needed. The public education program will be developed in accordance with the implementation schedule provided in Section 6. Sample FOG control public education posters are shown on **Figure 6-1** and in the Appendix.



The flyer is a vertical rectangular poster with a yellow background and red borders at the top and bottom. The top border features a repeating pattern of the Maryland state flag. A large white circle with a red outline is positioned at the top center. Below it, the text "CEASE THE GREASE" is written in a large, bold, red, distressed font, with a red circle and a diagonal slash over a sink drain. The main body of the flyer is yellow. On the left side, there is a section titled "Did You Know?" in bold red font, followed by a list of four bullet points. On the right side, there is a section titled "Put fats, oils, and grease where they belong." in bold red font, followed by a numbered list of three steps. Below this is a red banner with white text stating "50% of all grease blockages are caused by pouring F.O.G. down residential drains." Further down is a section titled "Sewer Blockage Formation" in bold red font, which includes three illustrations of a pipe being blocked by grease and debris, with corresponding text explaining the process. The bottom of the flyer has a red border containing two sections: "Help Sustain Baltimore County's Fats, Oils, and Grease Program" on the left, which includes the Baltimore County logo, and "Contact Baltimore County's Bureau of Utility" on the right, which provides a phone number and an email address.

CEASE THE GREASE

Did You Know?

Fats, oils, and grease (F.O.G.) may cause:

- Raw sewage overflowing into homes—clean up is expensive and unpleasant, and often must be paid for by homeowners
- Raw sewage overflowing into yards, streets and parks
- Exposure to disease-causing organisms
- An increase in operation and maintenance costs for local sewer departments, bringing about higher sewer bills for Baltimore County sewer customers

Put fats, oils, and grease where they belong.

- 1 Never pour F.O.G. into your sink or toilet. Rather, dispose of F.O.G. into a small can, storing in the freezer until full. When it's full, throw it into the trash.
- 2 When there is F.O.G. residue in a pan or on a dish, wipe it with a paper towel before washing and throw the towel in the trash.
- 3 Place a strainer in the kitchen sink drain to catch food scraps and other solids, then empty the strainer into the trash.

50% of all grease blockages are caused by pouring F.O.G. down residential drains.

Sewer Blockage Formation

The start of a blocked pipe begins when grease and solids collect on the top and sides of the pipe interior.

The build up increases over time when grease and other debris are washed down the drain.

Excessive accumulation will restrict the flow of wastewater and can result in a sanitary sewer overflow.

Help Sustain Baltimore County's Fats, Oils, and Grease Program

Contact Baltimore County's Bureau of Utility
at 410-887-1836 or
utilities@baltimorecountymd.gov

Figure 6-1
Example Grease Control Flyer

7.0 FOG Control Program Implementation

This section describes the resources the City of Jackson will provide to implement the FOG Control Program, the proposed Information Management System, and performance measures for FOG control. An implementation schedule for the FOG Control Program is also provided.

7.1 Resource Requirements

At present there are approximately 734 FSEs within the City of Jackson which includes restaurants and educational and correctional institutions. It is estimated that three full-time staff positions will be required to operate the program. Their duties will include:

- Perform FSE inspections
- Complete inspection follow-up activities
- Initiate enforcement actions and follow-up
- Provide training
- Manage FOG control public outreach efforts
- Maintain the information management system

In addition to staffing, the Program will be furnished with vehicles to conduct the inspections, inspection tools, office supplies to prepare and distribute inspection forms and Program materials, and computers to efficiently administer the program. It is estimated that two full-time FOG inspectors will be required to inspect all of the FSEs within the City on at least a two-year cycle, plus a data analyst to maintain the information management system. Other required program resources include the necessary equipment and supplies for the FOG inspectors together with inspection vehicles. Inspection equipment would include notepad computer, manhole cover lift hook, pole-mounted mirror and flashlight, pole-mounted camera, sludge judge or depth probe, and required hand tools.

The actual resources required for the FOG Control Program will be determined by the City as the program is developed and implemented. All staff and resources required to effectively administer the Program will be provided.

7.2 Information Management System

The City of Jackson does not have a specific information management system or database currently dedicated to FOG; however, the City's existing 311 data management software for asset management and maintenance can be adapted to accommodate this information. The software integrates maintenance management, asset inventory and inspection, and GIS data and can generate work orders and create standard or custom reports for work and performance analysis. A FOG module (Environmental Compliance module) in the 311 system, or an Excel database, will be developed for tracking the FOG Control Program. The information management system will include:

- Facility type and FOG control devices used
- Scheduling and tracking of inspections
- Tracking of training activities
- Tracking of conversations to/from facility
- Tracking of notices, warnings, and violations and enforcement activities
- Other facets of the FOG Control Program that require documentation

The database will be populated with the following facility information, as needed:

1. General – Identifying information about the facility such as facility ID and name, address, classification (car wash, restaurant, coffee shop, etc.), subclass (i.e., light, moderate, heavy or very heavy user).
2. FSE Characteristics – Type of food prepared, cooking equipment used, FOG control devices used, and other relevant information.
3. Contacts – Contact information for FSE owner and other contact persons in the FSE.
4. Conversations – Tracking of calls made to the FSE.
5. Inspection/Notifications – Record of inspection and follow-up activities performed, including an inspection checklist, corrective actions needed, notification date, due date for corrections, and compliance status.
6. Tracking – Record of notifications sent.
7. Violations/Enforcement – Record of violations, type of enforcement action, and penalties imposed.
8. Codes – Specifies codes that apply to the FSE, such as North American Industry Classification System (NAICS) codes, e.g., 7221 for Food Services Restaurants and/or Standard Industrial Classification (SIC) codes, e.g., 5812 for Retail/Eating Place.
9. Comments specific to the facility.

7.3 Performance Indicators

Performance measures are important management tools that allow for continuous measurement and evaluation of the FOG Control Program activities. Performance measures are designed to collect information to allow the City to determine if established goals and level of service are being met and if not, what adjustments need to be made to achieve program objectives. The initial performance indicators are listed below. As the program is fully implemented, these measures will be reevaluated and adjusted as warranted.

Number of FSEs in the Program. This number determines required staffing for communication, training, and inspection of FSEs.

Number of FSEs Inspections. The number of inspections and follow-up inspections per day and month conducted by the FOG Control Program inspectors will be tracked to assess adequacy of staff resources and training. The initial inspection goal is 4 to 6 inspections per work day and 64 per month, which should allow for inspections outside of prime FSE busy periods.

Time per Inspection. Average time per inspection will be calculated to ensure appropriate staffing and training (sum of actual inspection times divided by number of inspections). The desired duration is between 30 and 60 minutes.

Notices of Non-Compliance. The number of warning and violation notice letters is expected to decrease over time with proper FSE education and outreach, together with effective enforcement measures.

Percentage SSOs due to FOG. The percentage of all SSOs attributed to FOG is expected to decrease as a result of the FOG Control Program.

Regulatory Fines for FOG Violations. Penalties imposed should decrease over time.

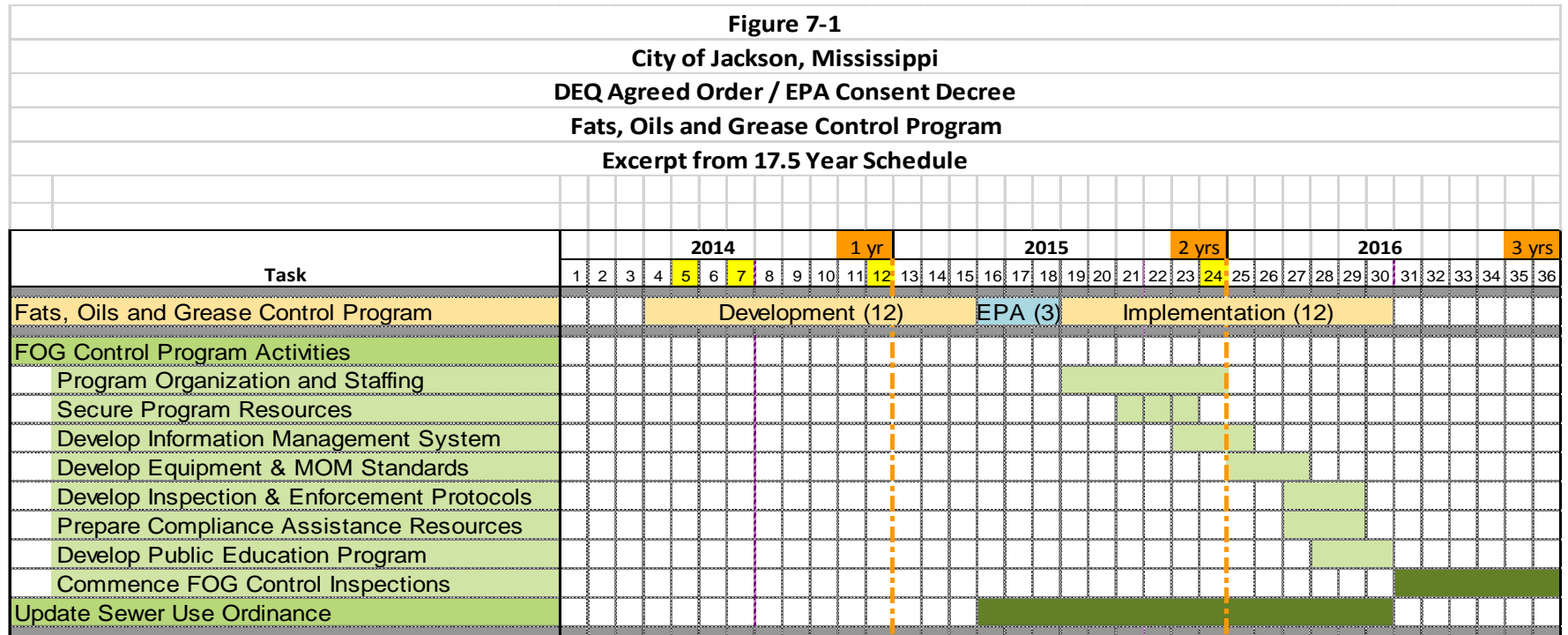
The performance and effectiveness of the FOG Control Program using the key performance measures will be tracked and documented quarterly. Results will be summarized in the quarterly reports to EPA/MDEQ.

7.4 Implementation Schedule

During the 1-year implementation phase of the program, the City will complete the following:

- Allocate staff to perform FOG Control Program inspection and administration.
- Acquire resources required by FOG control inspection team.
- Coordination of duties with City's code compliance department.
- Written FOG control equipment standards, specifications, and guidance for FSEs.
- Written FOG control equipment management, operation, and maintenance standards.
- Develop inspection protocols, check lists, and documentation procedures.
- Develop enforcement mechanisms in conformance to updated Sewer Use Ordinance.
- Develop compliance assistance resources and materials.
- Formulate and promulgate public education program for FOG control.
- Develop information management system.

The above elements will be developed as described in this FOG Control Program report. A schedule for implementing the program is provided on **Figure 7-1**.



Appendix

FOG Wastewater Discharge
Permit Application Form



FOG WASTEWATER DISCHARGE PERMIT APPLICATION Form 100- 02

**City
Of
Jackson
Code
Services**

New FSE :	Yes or No	New Address:	Yes or No
Change of Ownership:	Yes or No	Classified as a FSE	Yes or No
New Business Name:		Address:	
Name of Facility:		Address:	
Application Date:	Month	Day	Year
Business Name:		Contact Person Name	
Business Address:			
Mailing Address if Different:			
Telephone Number:		Assessor's Parcel Number: (If known)	
Fax Number:		24 Hour Emergency Phone Number:	
Principal/Owners/Major Shareholders Name and Address		If leased, Property Manager Name and Address	
		Property Manager Phone Number	
		Property Manager Emergency Phone Number	
Are you a limited food service establishment? (A limited food preparation establishment is not considered a FSE when engaged only in reheating, hot holding or assembly of ready to eat food products and as a result, there is no wastewater discharge containing a significant amount of FOG. A limited food preparation establishment does not include any operation that changes the form, flavor, or consistency of food.)			Yes or No
Do you have a food grinder or garbage disposal?			Yes or No
Do you have an exhaust hood?			Yes or No
Do you have an outdoor grease interceptor?			Yes or No
Do you have an indoor grease interceptor?			Yes or No
Approximate Number of Employees			No. _____
Please provide a description of your food service establishment including hours of operation, cuisine, service activities, or clients that may help the Department evaluate your application. Attach additional sheets if necessary.			
CERTIFICATION: I certify under penalty of law that the above information is true and accurate and complete to the best of my knowledge. I also understand this is not a permit but rather an application for a permit. INITIAL _____			
City of Jackson Planning and Development Department 200 South President Street. P.O. Box 17. Jackson, MS 39205-0017 Ph: (601) 960-2091 Fax: (601) 960-1174			

Food Service Establishment Inspection Reports



**GREASE CONTROL BEST
MANAGEMENT PRACTICES
INSPECTION REPORT
Form 100- 01**

**City
Of
Jackson
Code
Services**

Name of Facility:	Address:
Name / Title of Facility Contact Person:	Phone Number:
Facility/BMP Inspections:	
1. Food Grinder	Installation/usage must be in accordance with FOG Program guidelines.
2. Grease Collection Maintenance Log	Must be kept current and accessible at all times
3. Exhaust Hood Maintenance Log	Must be kept current and accessible at all times
4. Employee Training	Must be kept current and accessible at all times
5. Drain Screens Installed/Maintained	Must be present and in good working condition
6. Food Waste Practices	Food Waste to be placed in plastic bags or trash, not in sink(s)
7. Dry Wiping Practices	Pots, Pans, Plates to be Dry Wiped of food debris before washing
8. Emergency Spill Responses Materials	Grease Absorbent Materials present/accessible in event a spill
9. BMP Poster(s) in approved areas	BMP Poster visible in all food preparation and dishwashing areas
10. Facility and Equipment accessibility	Must allow full accessibility for inspector or representative
<input type="checkbox"/> COMPLIANCE. Facility is in compliance. No corrective action is required at this time (note any remarks)	
<input type="checkbox"/> NOTICE OF NON-COMPLIANCE	
Facility is NOT in compliance for the items checked below. Corrective action is required:	
<input type="checkbox"/> Food Grinder installed or in usage	
<input type="checkbox"/> Grease Collection Maintenance Log missing - not current	
<input type="checkbox"/> Exhaust Hood Maintenance Log missing - not current	
<input type="checkbox"/> Employee Training Log missing - not current	
<input type="checkbox"/> Drain Screens missing, damaged or clogged	
<input type="checkbox"/> Food Waste in sink(s) and not in enclosed plastic bag or garbage	
<input type="checkbox"/> Employee(s) observed not following Dry Wiping practices	
<input type="checkbox"/> Missing/inadequate or inaccessible Grease Absorbing Material(s)	
<input type="checkbox"/> BMP Poster(s) missing/obscured/damaged	
<input type="checkbox"/> Other Observations:	
Required corrective action includes any or all of the following:	
<input type="checkbox"/> Remove Food Grinder installed or in usage	
<input type="checkbox"/> Make available/accessible/update - Grease Collection Maintenance Log missing - not current	
<input type="checkbox"/> Make available/accessible/update - Exhaust Hood Maintenance Log missing - not current	
<input type="checkbox"/> Make available/accessible/update - Employee Training Log missing - not current	
<input type="checkbox"/> Drain Screens missing, damaged or clogged	
<input type="checkbox"/> Food Waste in sink(s) and not in enclosed plastic bag or garbage	
<input type="checkbox"/> Employee(s) observed not following Dry Wiping practices	
<input type="checkbox"/> Missing/inadequate or inaccessible Grease Absorbing Material(s)	
<input type="checkbox"/> BMP Poster(s) missing/obscured/damaged etc.	
<input type="checkbox"/> Other Noted Observations	
The Items Checked Above Must Be Corrected With <u>10</u> Days From Date Of This Notice	
Inspector Name: _____ FSE Owner/Manager: _____	
Date: _____ Date: _____	
<p>City of Jackson Planning and Development Department 200 South President Street. P.O. Box 17. Jackson, MS 39205-0017 Ph: (601) 960-2091 Fax: (601) 960-1174</p>	



**GREASE INTERCEPTOR
INSPECTION REPORT
Form 100- 03**

**City
Of
Jackson
Code
Services**

Business Name:

Address:

Facility Contact Person:

Phone:

FOG Interceptors Inspected:

Parameter:	Range or Limit:	Results:
Lower Explosive Limit (LEL)	10% or less	
pH Range	5.0 to 11.0	
Oil and grease	300 mg/L	
Hydrogen Sulfide	10 ppm or less	
Mechanical condition		
Other observations		

Comments:

COMPLIANCE. Facility is in compliance. No corrective action is required at this time (note any remarks)

NOTICE OF NON-COMPLIANCE

Facility is NOT in compliance for the items checked below. Corrective action is required Immediately:

<input type="checkbox"/>	Interceptor inaccessible for inspection
<input type="checkbox"/>	Interceptor capacity has been exceeded
<input type="checkbox"/>	Excessive oil and grease in the sample box
<input type="checkbox"/>	Discharge (effluent) line restricted
<input type="checkbox"/>	Baffle tubes plugged, submerged, damaged or missing
<input type="checkbox"/>	Other

Required corrective action includes any or all of the following:

<input type="checkbox"/>	Promptly remove any obstruction that does not allow safe and easy access to the interceptor
<input type="checkbox"/>	Repair or replace baffles
<input type="checkbox"/>	Pump out interceptor completely
<input type="checkbox"/>	Other

The Items Checked Above Must Be Corrected With 10 Days From Date Of This Notice

Inspector Name: _____ **FSE Owner/Manager:** _____

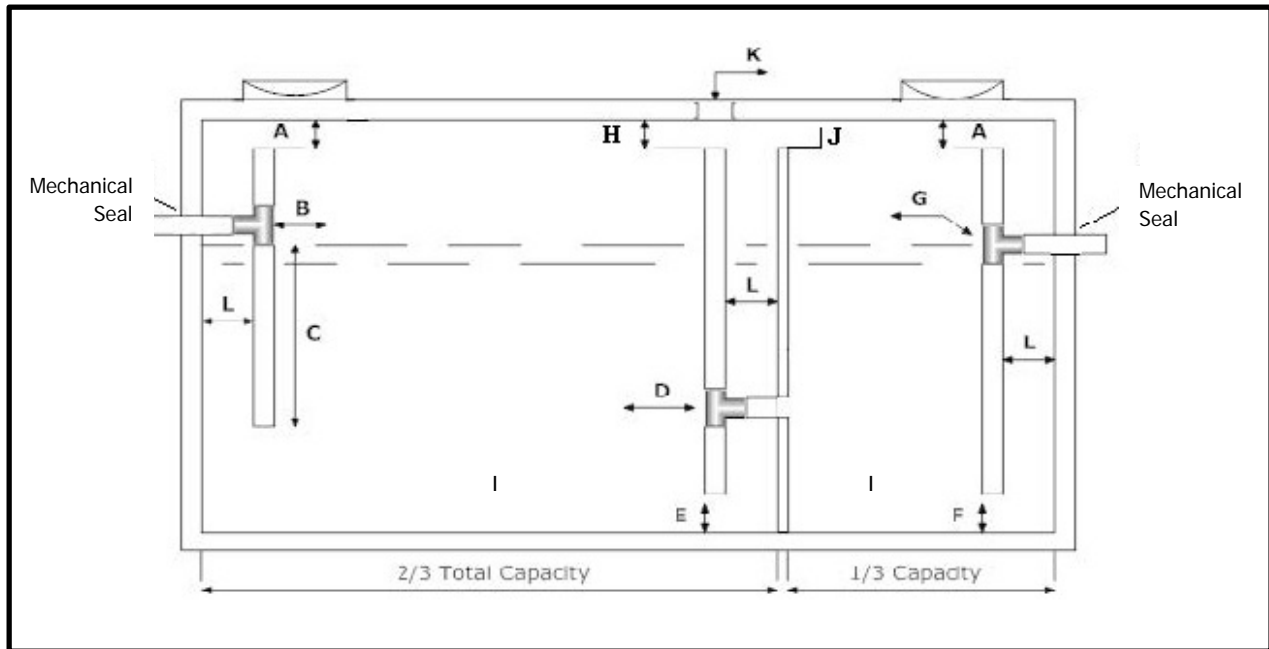
Date: _____ **Date:** _____

City of Jackson Planning and Development Department
200 South President Street. P.O. Box 17. Jackson, MS 39205-0017
Ph: (601) 960-2091 Fax: (601) 960-1174

FOG Inspector Guideline

Gravity Grease Interceptor

Design Requirements



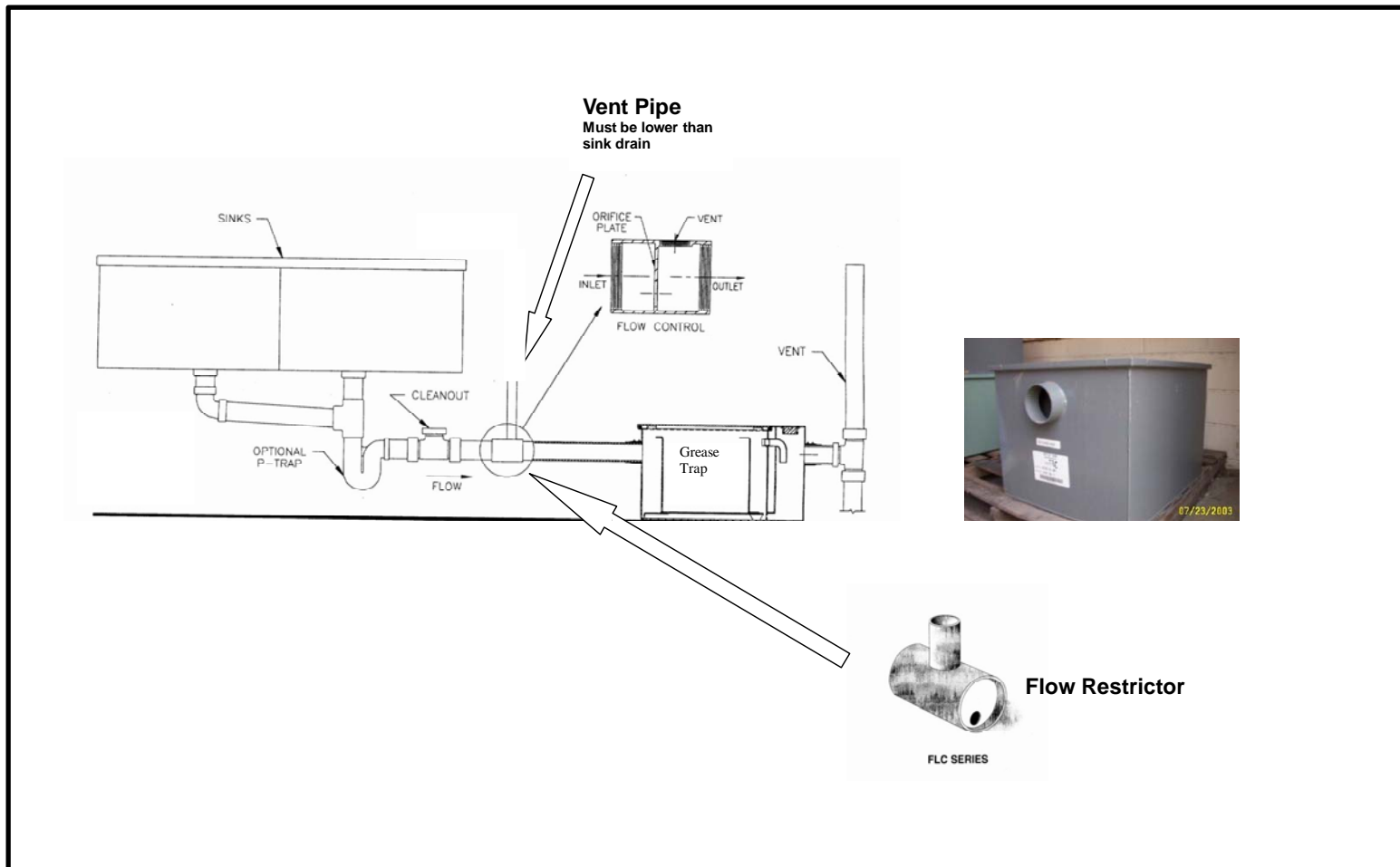
Typical 1000 Gallon Grease Interceptor

- A Minimum 6", but no less than pipe diameter
- B Inlet pipe invert to be 2½" above liquid surface
- C Inlet pipe to terminate 2/3 depth of water level
- D Baffle
- E 12" from floor to end of baffle pipe
- F 12" from floor to end of outlet pipe
- G Outlet pipe no smaller than inlet pipe
- H Top of baffle pipe terminates no lower than baffle height
- I Inlet chamber is 2/3 total capacity; outlet chamber 1/3 total capacity
- J 6" minimum distance from ceiling
- K Minimum 6" cleanout
- L Inlet/outlet pipes offset 12" from wall and accessible from manholes

FOG Inspector Guideline

Hydromechanical Grease Interceptor

Installation Diagram



Food Service Establishment Compliance Checklist



FOOD SERVICE ESTABLISHMENT COMPLIANCE CHECKLIST

**City
Of
Jackson
Code
Services**

KEEP POSTED ON PREMISES IN FACILITY KITCHEN

Compliance Checklist

1. The establishment has implemented a training program to ensure that the BMPs are followed.
2. "No Grease" signs are posted in appropriate locations.
3. The establishment recycles waste cooking oil and can provide records of this.
4. Water temperatures at all sinks, especially the pre-rinse sink before the mechanical dishwasher or the sinks in the three-sink system are less than 140° F. Measure and record temperature.
5. The establishment "dry wipe" procedure for pots, pans, and dishware prior to rinsing and washing.
6. Food waste is disposed of by recycling or solid waste removal and is not discharged to the grease traps or interceptors.
7. Grease interceptor(s) is cleaned regularly. Note and record the frequency of cleaning.
8. Grease interceptor cleaning frequency is documented on a maintenance log.
9. Gravity grease interceptor does not contain greater than 1/3 the depth in grease accumulation. Estimate and record amount of grease in interceptor.
10. Gravity grease interceptor does not contain greater than 1/4 the depth in sediment accumulation. Estimate and record amount of sediment in interceptor if possible.
11. Grease interceptor is cleaned and maintained regularly. Note and record frequency of cleaning.
12. Grease interceptor cleaning and maintenance frequency is documented on a maintenance log.
13. Outdoor grease and oil storage containers are covered and do not show signs of overflowing.
14. Grease and oil storage containers are protected from discharge to storm drains.
15. Absorbent pads or other materials (not free flowing material such as cat litter) are used to clean up any spills or leakages that could reach the storm drain.
16. Storm drain catch basins show no signs of grease or oil.
17. The roof shows no signs of grease and oil from the exhaust system.
18. Exhaust system filters are cleaned regularly, which is documented by cleaning records. Note and record frequency of cleaning.

City of Jackson Planning and Development Department
200 South President Street. P.O. Box 17. Jackson, MS 39205-0017
Ph: (601) 960-2091 Fax: (601) 960-1174

Food Service Establishment
Best Management Practices
Poster



FOOD SERVICE ESTABLISHMENT FOG CONTROL BMPs -1-

**City
Of
Jackson
Department
Of
Public Works**

KEEP POSTED ON PREMISES IN FACILITY KITCHEN

Best Management Practices

Train Your kitchen Staff and other employees about how they can help ensure the Best Management Practices (BMPs) are implemented. People are more willing to support an effort when they understand the basis for it. Training should include:

- Discussing the nature of grease and the results of improper grease handling.
- Discussing the effects of grease on the City sewer system and the environment.
- Proper grease disposal practices.
- Proper housekeeping practices.
- Explaining the proper periodic maintenance and inspection schedules.

Conspicuously Post No Grease Signs. Post these signs in restrooms, over sinks, near all floor drains, near all dishwashers and anywhere else where water may enter a drain to the sewer.

Use the Most Appropriate Water Temperature. Use water temperature of less than 140°F in all sinks, especially the pre-rinse sink before a mechanical dishwasher. The mechanical dishwasher requires a minimum temperature of 160°F, but the International Plumbing Code prohibits discharging the dishwasher to a grease interceptor.

Use the 3-Sink System. Use the first sink to wash plates; the second sink to rinse plates and the third sink to sanitize with a 50-100 ppm bleach solution. Water temperatures in the sinks should be less than 140°F. This procedure will save energy and costs as a result.

Recycle Waste Cooking Oil. There are many companies who specialize in taking waste cooking oil from fryers and other types of equipment and making animal feed or fuels, such as biodiesel. Recycling reduces the amount of wastes that have to be disposed as a solid waste, and helps to prolong the life of any grease traps and interceptors. It keeps FOG out of the sewer system.

Dry Wipe All Pots, Pans and Plates. Wiping the FOG and food that remain in pots, pans and dishware before washing will keep the FOG out of the grease interceptors. This will result in less frequent cleaning of the grease interceptors, and result in lower maintenance costs.

Properly Dispose of Food Waste Food should never be poured down a drain or into a toilet. Recycling of food wastes is the best option for a food service establishment. Recycling of food wastes will reduce solid waste disposal costs, and the need to more frequently clean grease interceptors.

Witness Grease Interceptor Cleaning. Grease interceptor waste haulers may take shortcuts. They may not completely clean the unit or only partially remove accumulated materials. Witnessing the cleaning of the grease interceptors or traps will ensure that the food service establishment is getting full value for the cost of the cleaning.

City of Jackson Department of Public Works
200 South President Street. P.O. Box 17. Jackson, MS 39205-0017
Ph: (601) 960-2091 Fax: (601) 960-1174



FOOD SERVICE ESTABLISHMENT FOG CONTROL BMPs - 2 -

City
Of
Jackson
Department
Of
Public Works

KEEP POSTED ON PREMISES IN FACILITY KITCHEN

Best Management Practices

Clean Under Sink Grease Interceptors at least weekly. Under sink interceptors have less volume than outdoor underground interceptors. Place recovered grease in a proper disposal container. Waste grease may be placed in a dumpster if it is in a closed container. Do not pour waste grease down any drains or in any toilets.

Clean Underground Outdoor Grease Interceptors at least monthly. These interceptors must be cleaned routinely to ensure that grease accumulation does not interfere with proper operation. The cleaning frequency is a function of the type of establishment, the size of the interceptor, and the volume of flow discharged to the interceptor. Routine cleaning will prevent unlawful discharge of grease to the sanitary sewer system and keep the drain system functioning properly.

Keep a Maintenance Log and All Service Records. The log serves as a record of the frequency and volume of cleaning of the grease interceptor(s). The record helps to ensure that the food service establishment is in compliance with its permit, and affords any inspector the opportunity to verify compliance. Service records verify the accuracy of the log. The log can be used to optimize the cleaning frequency in order to reduce costs.

Cover Grease Containers Stored Outdoors. Uncovered FOG containers can collect rainwater. Since FOG floats, the rainwater can overflow the container and flow onto the ground where it can reach the storm water system. Any discharge to the storm water may result in pollution of local receiving waters. The discharge might also result in legal penalties being imposed on the food service establishment.

Locate Dumpsters and FOG Containers Away From Storm Drains. A release of FOG can degrade water quality in receiving streams in the area by adding biological and chemical pollutants to the stream. Discharging of FOG into storm drains can also result in fines and other legal actions. The farther away from a storm drain the FOG is stored, the more time someone has to clean up any spills. BE AWARE of FOG dripping out of containers or dumpsters and clean up quickly.

Use Absorbents Around All Storm Drains. Use absorbent pads around all storm drains where dumpsters or containers are nearby. This can present an effective barrier to prevent FOG from entering the storm drain system.

Use Absorbent Pads For All Spills. Absorbent pads can help to clean up grease and oil that is spilled on the ground near outdoor equipment, containers or dumpsters. They prevent the spills from entering the storm drain system when it rains. DO NOT use absorbent material such as "kitty litter" or saw dust since they can flow into the storm drains when it rains.

Routinely Clean Exhaust Hoods. If FOG escapes through the kitchen exhaust system, it can accumulate on the roof of the building and enter the storm drain when it rains, as well as create a fire hazard.

City of Jackson Department of Public Works
200 South President Street, P.O. Box 17, Jackson, MS 39205-0017
Ph: (601) 960-2091 Fax: (601) 960-1174

Food Service Establishment
FOG Control
Best Management Practices
Training Log



**FOOD SERVICE ESTABLISHMENT
FOG CONTROL
BEST MANAGEMENT PRACTICES
TRAINING LOG
Form 100 - 07**

**City
Of
Jackson
Department
Of
Public Works**

KEEP ON FILE ON PREMISES FOR NO LESS THAN 2 YEARS

INSTRUCTIONS: To be filled out by the Food Service Establishment and filed in the FSE On-Site FOG Control Program Compliance Binder. Use this form to record training sessions and attendance. All employees must attend a grease control training session twice each year. Training must include distribution of "Best Management Practices" brochure and viewing of the Grease Control Program video.

Business Name:

Street Address:

MANAGER: Your signature on this form acknowledges that you have received the "Best Management Practices" brochure and that you have viewed the Grease Control Program video

[illegible]

City of Jackson Department of Public Works
200 South President Street, P.O. Box 17, Jackson, MS 39205-0017
Ph: (601) 960-2091 Fax: (601) 960-1174

City of Jackson
FOG Control
Public Education Posters

FOG

Fats Oils Grease

in your kitchen drains

creates

CLOG

in city sewer mains



HELP

STOP the FOG



Fats.Oils.Grease in Pipe



City of Jackson
Department
of
Public Works



Always properly dispose of grease.

FATS, OILS & GREASE CLOG DRAINS.



Tony T. Yarber, Mayor



Jackson: Fixing Leaks and Overflowing Wastewater

**City of Jackson
Department of Public Works**

**Kishia L. Powell, PE
Director**