



PO Box 330316 • 3071 SW 38 Avenue Miami, Florida 33233-0316 T 305-665-7471

miamidade.gov

VIA ELECTRONIC CORRESPONDENCE

June 30, 2025 CCN: 65918 File No: 8.DC.20.52

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Tom Mariani
Washington, D.C. 20044-7611
RE: DOJ No. 90-5-1-1-4022/1
Tom.Mariani@usdoj.gov

Rachael Amy Kamons
Environmental Enforcement Section
U.S. Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044-7611
Rachael.Kamons@usdoj.gov

Chief, Clean Water Enforcement Branch
Water Protection Division
Attn: Brad Ammons
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
Ammons.Brad@epa.gov

Florida Department of Environmental Protection Southeast District – West Palm Beach 3301 Gun Club Road, MSC 7210-1 West Palm Beach, FL 33406 Attn: Compliance/Enforcement Section Sirena.Davila@dep.state.fl.us

RE: Consent Decree (Case: No. 1:12-cv-24400-FAM),
Reference DOJ Case No. 90-5-1-1-4022/1,
Section VI, - Fats, Oils and Grease ("FOG") Control Program Paragraph 19(a)
Eighth Annual FOG Control Program Review Report

Dear Sir/Madam:

In accordance with the FOG Control Program approved by the United States Environmental Protection Agency (EPA) and Florida Department of Environmental Protection (FDEP) on September 7, 2017, Miami-Dade County (County) is submitting the Eighth Annual FOG Control Program Review Report.

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.

Should you have any questions regarding this matter, please call me at (305) 372-6754.

Sincerely,

Lisa Spadafina

Director, Division of Environmental Resources Management

ec:

Anita Patel
Senior Assistant Attorney General, Complex Litigation
Office of the Attorney General
PL 01 The Capitol
Tallahassee, FL 32399-1050
(850) 414-3694
anita.patel@myfloridalegal.com

Florida Department of Environmental Protection Southeast District – West Palm Beach 3301 Gun Club Road, MSC 7210-1 West Palm Beach, FL 33406 Attn: Compliance/Enforcement Section Lisa.M.Self@dep.state.fl.us Viviana.Useche@FloridaDEP.gov Jonathan.Odjo@FloridaDEP.gov Sed.wastewater@dep.state.fl.us Antonio.Pernas@floridaDEP.gov

Paul Schwartz
Associate Regional Counsel
U.S. EPA, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303
Schwartz.Paul@epa.gov

Elizabeth Teegen
Chief Assistant Attorney General, Complex Litigation
Office of the Attorney General
PL-01, The Capitol
Tallahassee, FL 32399-1050
850-414-3808
Elizabeth.Teegen@mvfloridalegal.com

Jairo Castillo-Valenzuela
Dennis Sayre
Wastewater Enforcement Section
Water Enforcement Branch
Enforcement & Compliance Assurance Division
USEPA Region 461 Forsyth Street. S.W.
Atlanta, GA 30303
Castillo.Jairo@epa.gov
gunderson.andrew@epa.gov

Madame Mayor Daniella Levine-Cava Miami-Dade County 111 NW First Street 29th Floor Miami, Florida 33128 Daniella.Cava@miamidade.gov Eighth Annual FOG Control Program Review Report June 30, 2025 Page 3

Roy Coley, Office of the Mayor Miami-Dade County Chief Operations Officer 111 NW 1st Street 29th Floor Miami, FL 33128 Roy.Coley@miamidade.gov

Sarah Davis
Miami-Dade Assistant County Attorney
Miami-Dade County Attorney's Office
111 NW First Street Suite 2810
Miami, Florida 33128
Sarah.Davis@miamidade.gov

Amanda Kinnick (WASD)
Marisela Aranguiz-Cueto (WASD)
Billie Jo McCarley (WASD)
Frances G. Morris (WASD)
James B. Ferguson (WASD)
Juan Curiel (WASD)
Catalina Lopez-Velandia (WASD)
Francois Saint-Phard (WASD)
Miguel Jimenez (WASD)
Carlos A. Castro (WASD)
Rolando Roque (WASD)
Ana Caveda (WASD)
Jose Ortega (CAO)
Christine Wartman (WASD)

Lourdes Gomez (RER)
Marina Blanco-Pape (RER)
Rashid Istambouli (RER-DERM)
Galo Pacheco (RER-DERM)

Roger Williams (CD PMCM)

Jay J. Fink, Director Miami-Dade Water and Sewer Department 3071 SW 38th Avenue Miami, Florida 33146 Jay.Fink@miamidade.gov

Miami-Dade County FOG Control Program

8th Annual FOG Control Program Review Report

June 30, 2025

Prepared by

Division of Environmental Resources Management (DERM)

Miami-Dade County Department of Regulatory and Economic Resources

Prepared for:

United States Environmental Protection Agency and

Florida Department of Environmental Protection

THIS PAGE INTENTIONALLY LEFT BLANK

8th Annual FOG Control Program Review Report

PREPARED BY	/ :				
Division of	Environment	al Resources M	anagement (DERM)		
Miami-Da	de County De	partment of Re	gulatory and Economic Res	ources	
The information of	ontained in this docum	ent is solely for the use o	f the client identified on the cover sheet, and f	or the purposes specified herein.	
All rights reserved of DERM.	d. No section or elemen	t of this document may b	e removed from this document, reproduced, e	lectronically stored, or transmitted in a	ny form without the written permission
OT DERIVI.					
Status: F	inal				
Document	8 th Annual FO	G Control Program Re	view		
Ref:	Annual Repor	rt	Date:	06-30-2025	
Prepared by:	Galo Pacheco	, PE			
Revision Histo	ory				
				Autho	rized by:
				Galo Pacheco, P.E.	Galo Pacheco
Revision	Revision Date	Status	Revised by:	Water & Wastewater Division	Signature
		Final	Galo Pacheco, PE		

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

1.	Intro	oduction	3
2.	Perf	ormance Measures (PMs) and Key Performance Indicators (KPIs)	3
2.1	Col	lection System SSOs Primarily Caused by FOG	4
2.2	Nu	mber of FOG Generators without a FOG Control Device	10
2.3	Nu	mber of Breached FOG Control Devices	11
2.4	FO	G Program Workforce Analysis	11
	2.4.1	Routine Inspections	14
	2.4.2	Hot Spots & Complaints Inspections	16
	2.4.3	Construction Inspections	17
	2.4.4	FOG Disposal Facility Inspections	18
	2.4.5	eManifest Inspections	18
2.5	FO	G Construction Plans and Certificate of Use Reviews	18
2.6	FO	G Outreach and Education Events	21
3.	FOG	Control Program Review Committee	21
4.	Prop	osed FCO and FCP Revisions	23
5.	Conc	clusions	23

Charts

Chart 1a	2024 Sanitary Sewer Overflows for All Utilities
Chart 1b	2024 Sanitary Sewer Overflows Reported by Utility
Chart 1c	FOG-Related SSOs – Total Volumes per Year
Chart 1d	Total Utility Cost by Month for Maintenance of FOG-related incidents
Chart 1e	Total Utility Cost by Year for Maintenance of FOG-related incidents
Chart 2	Food Service Establishments without a Grease Interceptor
01 0	Normalism of ODO Otto

Chart 3 Number of GDO Sites

Chart 3a Number of Inactive and Active GDO Sites

Chart 4 Number of Inspections per Year

Chart 5 Total FOG Plan Reviews

Chart 6 Total FOG Occupational License, Certificate of Use Reviews

Chart 7 Total Engineering Reviews

Tables

Table 1	PMs & KPIs
Table 2	Prior, Current & Future Staffing
Table 3	Basis for Staffing Calculations
Table 4	Staffing FTEs
Table 5	FOG Compliance Team Activities and Targets
Table 6	Outreach Events
Table 7	Feedback from Utilities

Attachments

Attachment 1	Table of Organization
Attachment 2	Sample of Utility Accelerated FOG Maintenance (aFOG) Report
Attachment 3	City of Opa-locka and MDC WASD Feedback regarding the FOG Control
	Program

1. Introduction

The Miami-Dade County (MDC) Department of Regulatory and Economic Resources (RER), Division of Environmental Resources Management (DERM) prepared this Annual Fats, Oils, and Grease (FOG) Control Program Review Report (Report) pursuant to Miami-Dade County's FOG Control Program (FCP) and Ordinance (FCO) approved by the United States of America Environmental Protection Agency (EPA) and Florida Department of Environmental Protection (FDEP) on September 7, 2017. The FCO was approved by the Miami-Dade County Board of County Commissioners on February 21, 2018, and became effective on March 5, 2018.

Pursuant to Paragraph 19(a)(xv) of the Consent Decree (CD), Case No. 1:12-cv-24400-FAM, MDC's FCP includes an annual review process to evaluate the effectiveness of the FCP and FCO to achieve reductions in FOG discharges to the wastewater collection, transmission, and treatment systems (WCTTSs) and thereby reduce sanitary sewer overflows (SSOs) caused by FOG. Performance Measures (PM) and Key Performance Indicators (KPIs) are utilized for this evaluation.

On March 2025, the Miami-Dade County Department of Regulatory and Economic Resources reorganized operations in the FOG Control Program to improve environmental permitting and compliance inspections. As part of this process, the former FOG compliance team was divided into two groups, one for FOG Compliance inspections under the RER Code Compliance Division (CCD) and the second one for FOG Construction Inspections, under the RER Environmental Plan Review Division (EPRD). In addition, the FOG Engineering Team, in charge of plan reviews and certificate of use reviews was also transferred to the EPRD.

Some FCP functions remain with the Water & Wastewater Division (W&WWD) of MDC RER-DERM after the reorganization, including coordination of Accelerated FOG Maintenance Reports, follow-up of historic open enforcement actions and program reporting.

2. Performance Measures (PMs) and Key Performance Indicators (KPIs)

The following PMs and KPIs are being utilized to evaluate the effectiveness of the FCP and FCO and, with other factors, evaluate the need to revise the FCP and/or FCO (refer to *Table* 1).

РМ	КРІ	Method	DERM Target
Collection System SSOs Primarily Caused by FOG		MDWASD Monthly Report/Meeting	Annual Reduction
Collection System Blockages Primarily Caused by FOG		MDWASD Monthly Report/Meeting	Annual Reduction
	Number of FOG Generators without FOG Control Device	FOG Inspections	Annual Reduction None by 2018 ⁽¹⁾
	Routine FOG Inspection Frequency	FOG Inspections	100% Annually by September 2019 ⁽²⁾
	FOG Education (Residential)	Education	Six (6) Events Annually Implementation of the program by March 5, 2020 ⁽³⁾
	FOG Stakeholder Outreach (commercial/industrial)	Outreach	Six (6) Events Annually

- (1) New Date Proposed: 2025 Refer to Section 2.2.
- (2) New Date Proposed: 2025, Refer to Section 2.4.1
- (3) New Date Proposed: 2025, Refer to Section 2.4.6

Table 1. PMs & KPIs

A summary of select PMs, KPIs and other indicators are discussed below.

2.1 Collection System SSOs Primarily Caused by FOG

SSOs reported to DERM are monitored daily and logged for tracking and assessment (e.g., root cause, enforcement, and moratoriums). The total number of SSOs reported by the sixteen (16) Utilities (Miami-Dade Water & Sewer Department (MDWASD) + 15 Municipal Utilities) is presented in *Chart 1a*. The data presented in *Chart 1a* is primarily from MDWASD's reporting given the size of the MDWASD's system relative to that of the Municipal Utilities and the experience of MDWASD's identification and reporting capabilities acquired from prior consent decrees. DERM has been working with all Municipal Utilities to improve SSO identification and reporting capabilities and this has been discussed in Utility Round Table (URT) meetings. It is

believed, based on the most recent data, that Municipal Utility reporting has improved. It is therefore anticipated that as Municipal Utility reporting improves, the number of SSOs may increase, and that this increase may conceal actual improvements associated with the FCP. For this reason, SSOs will be presented collectively and by each utility as presented in *Chart 1b*.

Additionally, it is anticipated that several years of data will be required to establish reliable trends. That is, decreases or increases in SSOs may not reflect the impact of the FCP and FCO for several years after March 2018, the implementation date for the new FCP/FCO.

The following is a summary of findings related to FOG-related SSOs:

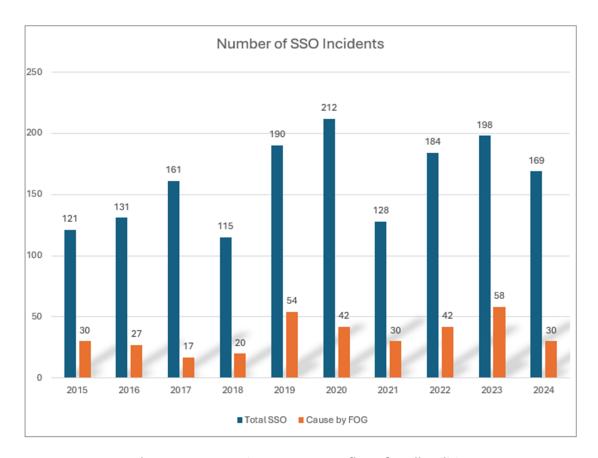


Chart 1a: 2024 Sanitary Sewer Overflows for All Utilities

 As shown in *Chart 1a*, the implementation of the FCO in 2018 and other requirements of the Consent Decree, triggered an increasing number of reported FOG-related SSOs in 2019. However, commercial activity was substantially reduced during 2020 and 2021 due to the Covid 19 Pandemic, and there was, consequently, a reduction in the number of SSO events caused by FOG. In 2022, when commercial activity started to normalize, the number of reported FOG-related SSOs increased, reaching another peak in 2023. In 2024 there was a significant reduction in the number of FOG-related SSOs, which could reflect the FCP efforts such as inspections, FOG control system design, plan review, permitting, SmartCovers monitoring, and utility maintenance and operation efforts.

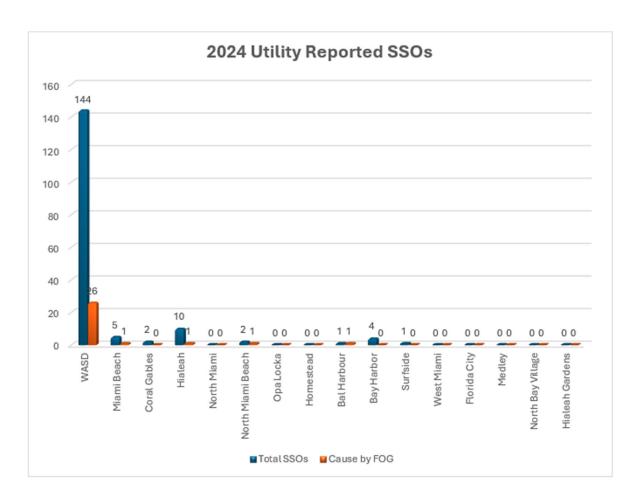


Chart 1b: 2024 Sanitary Sewer Overflows Reported by Utility

 As in previous years, Miami-Dade Water and Sewer Department (WASD), the largest sewer utility in Miami-Dade County, is also the utility that experiences more SSOs due to FOG and other causes. The total number of SSOs and FOG-related SSOs reported by each utility in 2024 are shown in *Chart 1b*. 3. **Chart 1c** shows the total volume per year of FOG-Related SSOs. The chart shows a fluctuation on the volume discharged, with two very noticeable outliers in 2020 and 2023, and another one, not as evident as the other two, in 2018.

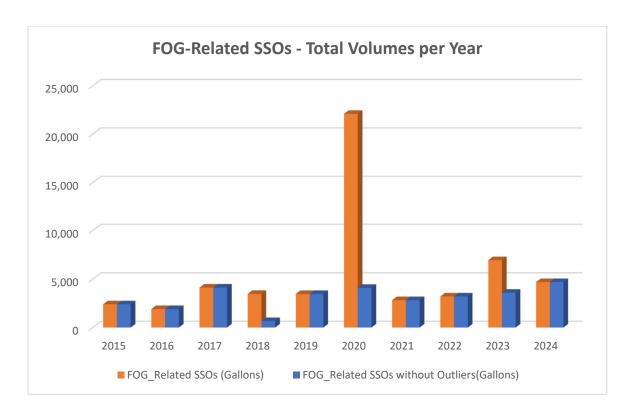


Chart 1c: FOG-Related SSOs – Total Volumes per Year

On May 27, 2020, an SSO occurred on a manhole of WASD's gravity collection system. The incident caused the release of 18,000 gallons of raw sewage from a 21-inch gravity pipe that was clogged with FOG and that received flow from three force mains. Due to the complexity of the connections, the overflow was stopped in 15 hours, but the actions taken by the utility allowed the recovery of 15,400 gallons of sewage. To prevent this type of SSOs, a SmartCover unit was installed within a manhole of that basin, on June 24, 2020, and no further incidents have been reported since then in that sewer system.

On January 19, 2023, a FOG-related SSO occurred in several manholes of a gravity sanitary sewer system owned by the City of Miami Beach. This sewer system serves a high-density residential area, where there are not permitted GDO (Grease Discharge Operating) facilities. However, the total volume discharged was 3,361 gallons, which is

unusual for a FOG related SSO in a gravity sewer not receiving flows from upstream pump stations.

On February 15, 2018, an SSO occurred on a WASD's gravity main, blocked by grease, that receives flow from a force main in a residential area. The total volume discharged in this incident was 2,800 gallons, and the discharge was stopped in 2 hours and 10 minutes.

These three events show the problems caused by piggyback systems (pump stations through force mains discharging to gravity systems) and the severity of FOG-related grease blockages in residential areas, where there are no GDO permitted facilities.

4. Chart 1c also includes FOG-related SSOs without the three outliers described above. This allows us to see substantial reductions on the total annual FOG-related SSO volumes on those three years, which in turn point to the underlying design, operational, maintenance and educational (residential FOG control education) challenges faced by the county.

The FCP strategies to reduce FOG-related SSOs included front-end (e.g., design standards, more efficient interceptors, and eManifest) and back-end (e.g., Accelerated Maintenance and Hot Spot reporting) process improvements. These along with the installation and monitoring of Smart Covers continue to be key factors for the prevention of SSOs in Miami-Dade County.

As previously reported, MDWASD had integrated a real-time level monitoring system (SmartCover) to minimize Hot Spot SSOs. By incorporating two-way communication devices at key manholes, MDWASD can deploy field teams to prevent an SSO based on preset wastewater level alerts and warnings (i.e., wastewater level above invert measured from the bottom of the manhole cover). MDWASD defines a Hot Spot as a location with three (3) or more SSOs in a period of two (2) years. MDWASD continues to use this system to minimize SSOs.

Municipal Utilities are required to notify RER of Hot Spots utilizing the Hot Spot Reports, FOG complaints (areas of concern), and monthly Accelerated Maintenance Reports. Some utilities did not consistently submit these reports during the year 2024. RER will continue using regulatory compliance tools to ensure that all the sewer utilities comply with the FCP requirements.

Currently, the FOG Compliance Team supervisors review complaints and prioritize inspections accordingly. A sample Accelerated Maintenance Report is included in *Attachment 2.* Accelerated Maintenance Reports provide the monthly costs by sewer utility for maintenance of FOG Hot Spots, and incidents due to FOG. For the year 2024, utilities reported a reduction in costs of roughly 40% compared to 2023. The total monthly and annual costs by utilities are included in *Chart 1d* and *Chart 1e* below.



Chart 1d: Total Utility Cost by Month for Maintenance of FOG-related incidents.

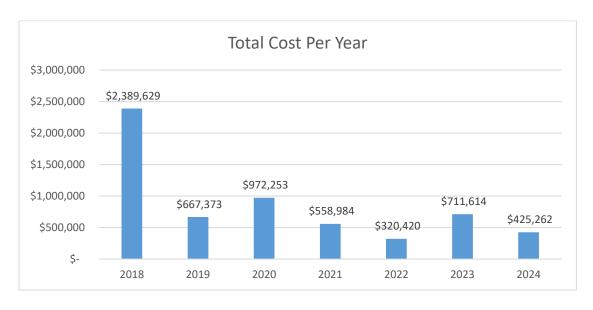


Chart 1e: Total Utility Cost by Year for Maintenance of FOG-related incidents.

In the last three years, DERM implemented a Pilot Program that added 426 SmartCover units in sanitary sewer manholes belonging to sewer basins located within Miami-Dade County's canal basins DA-1, C-4, C-5, C-6, C-7 and C-8, which drain to the Miami River and Little River Canal, and eventually to Biscayne Bay. These remote monitoring units are continually alerting sewer utilities of any variation in sewer levels within their systems, caused by different sources, including FOG. This pilot program is proving to be successful and SSOs have already been prevented thanks to this real-time level monitoring system. Notwithstanding the improvements made, additional focus is required to reduce SSOs, such as improving utility response time to the SmartCover high level alarms, improving compliance with cleaning of grease interceptors regularly, and enforcing that grease interceptors are properly sized for their current operations.

2.2 Number of FOG Generators without a FOG Control Device

With the implementation of the new FCP, a key goal has been the reduction in the number of FSEs operating without a grease interceptor (No Grease Interceptor, NGI). Inspection efforts have focused on bringing these sites into compliance. The goal is to have zero (0) NGI sites.

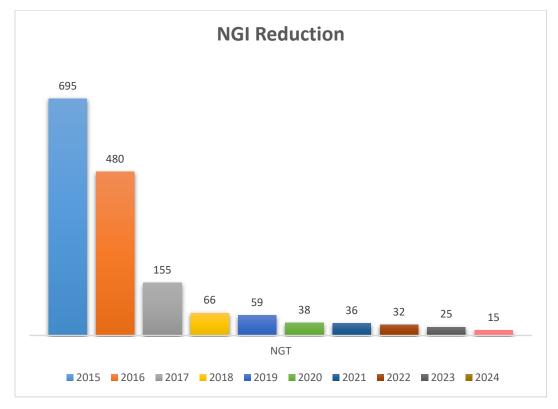


Chart 2: Food Service Establishments without a Grease Interceptor

The total number of NGI FSEs have decreased from **695** in 2015, to **15** in 2024 (refer to *Chart* **2**). This reduction is the result of a coordinated effort involving a significant number of resources working on compliance assistance, technical support, and enforcement. RER will continue to focus resources on accomplishing the goal of zero (0) NGI FSEs by 2025. Additionally, the County increased the cost of penalties for non-compliant facilities. This is expected to further encourage compliance.

2.3 Number of Breached FOG Control Devices

As the number of annual compliance inspections is expected to increase in 2025, breached grease interceptors, deficiencies and all other violations will be addressed and enforced during the routine inspections to be performed by the FOG Compliance Inspections Team.

2.4 FOG Program Workforce Analysis

Workforce resources and workload were evaluated to assess future staffing needs. The workload was analyzed by specific task/assignments and modified after the recent reorganization of the program. In March 2025, the Department of Regulatory and Economic Resources reorganized operations in the FOG Control Program to improve environmental permitting and compliance inspections. As part of this process, the former FOG compliance team was divided into two groups, one for FOG Compliance inspections under the Code Compliance Division and the second one for FOG Construction Inspections, under the Environmental Plan Review Division.

The FOG Compliance Inspections team currently has 15 inspector positions. This inspector positions are a broad group that includes multiple classifications performing routine inspections. To achieve the inspection goals for routine inspections, confirmation inspections, hotspot inspections and complaint inspections, the department will focus on filling all the 15 positions (7 are currently vacant) in the coming year. Additionally, the team has three supervisors, one manager and one Training & Outreach Coordinator. The FOG Construction inspections team previously had 4 field positions, and currently has 3, one of which is vacant. This reduction on the number of FOG Construction Inspectors is part of the overall reorganization that translates into a net increase in positions that support the FCP. *Table 2* (below) shows that the FCP staff has grown from 20 to 28 positions and that the overall inspector positions as increased from 16 to 18.

A comparison of staffing levels, past, present, and future, is shown below in Table 2.

1			2021	2022	2023	2024	2025	2026	2027	Change	
•	1	1	1	1	1	1	2 ⁽¹⁾	2	2	Increase proposed. Due to reorganization, the program is divided into two Divisions	
1	0	0	0	1	1	1	2 ⁽¹⁾	2	2	Increase proposed. Due to reorganization, the program now has two Manager positions.	
2	2	2	2	2	2	2	3 ⁽¹⁾	3	3	Increase proposed. Third Supervisor appointed in March 2025.	
10 1	10	10	10	12 ⁽³⁾	12	12	15 ⁽¹⁾⁽⁵⁾	15	15	Increase proposed due to RER reorganization	
2	2	4 ⁽²⁾	4	4	4	4	3 ⁽⁴⁾	3	3	Decrease due to reorganization. Staff conducting FOG Construction Inspections in Municipal projects.	
0	0	0	0	0	0	0	2 ⁽¹⁾	2	2	Increase proposed. Includes staff for Compliance & Construction inspection teams	
0	0	0	0	0	0	0	1 ⁽¹⁾	1	1	Increase proposed due to RER reorganization	
Blue used to depict estimated future values (1) Additional positions are proposed to address programmatic initiatives (2) Positions added to assist with pump stations (3) Positions added to support the FOG Compliance program. Excluding Public & Private Pump Station inspections and Hot Spot Inspections to be performed by SSO response & Prevention Program Staff. (4) The number of inspection staff reduced during reorganization. *Staff dedicated only to FOG Compliance Inspections. Construction inspections conducted by a different team. (5) Due to the RER reorganization, the SSO Prevention & Response staff was reasigned to other areas and the Hot Spot. Residential and Complaint FOG inspections will be performed by the FOG Compliance.											
Positions added to assist with pump stations Positions added to support the FOG Compliance program. Excluding Public & Private Pump Station inspections and Hot Spot Inspections to be performed by SSO response & Prevention Program Staff. The number of inspection staff reduced during reorganization. *Staff dedicated only to FOG Compliance Inspections. Construction inspections conducted by a different team.								s added to support the FOG Compliance programs and Hot Spot Inspections to be performed by the ber of inspection staff reduced during reorganizations. Construction inspections conducted by a displayed RER reorganization, the SSO Prevention & R	s added to support the FOG Compliance program. Exclusions and Hot Spot Inspections to be performed by SSO ber of inspection staff reduced during reorganization. *Sons. Construction inspections conducted by a different see RER reorganization, the SSO Prevention & Response	s added to support the FOG Compliance program. Excluding ins and Hot Spot Inspections to be performed by SSO responder of inspection staff reduced during reorganization. *Staff dens. Construction inspections conducted by a different team. The RER reorganization, the SSO Prevention & Response staff	

Table 2: Prior, Current & Future Staffing

Workload data (by inspection category/assignments) for previous years was reviewed and analyzed to estimate full-time equivalent workforce requirements. A discussion of each inspection category, tabulated summary, and assumptions (*Tables 3* and *4*) follows below.

Performance Measures for a Working Year							
Total Time Before Deductions:	52 weeks/ per year	260 working days/per year					
Type of Deduction	Weeks	Days					
Holidays	3.4	17					
Car Maintenance	0.2	1					
County Physical	0.2	1					
Annual Leave	2.8	14					
Sick Leave	2.4	12					
Training and Meetings	2.8	14					
Total Time Deducted:	11.8	59					
Total Working Time Remaining:	40.2	201					

201 Working Days x 6 Inspections per day =	1,206 inspections per year
Reinspection Ratio =	2.25/1
Number of GDOs Inspected per year/FTE =	536

Table 3: Basis for Staffing Calculations

			YEAR>	2021	2022	2023	2024 ⁽¹⁾	2025
Numbe	er of sites that nee	d Routine GDO	8,350	9,055	9,406	9,793	9,729	
			Construction>	882	1,104	1,349	1,317	1,330
			FOG Disposal>	62	62	62	62	62
			eManifest>	500	500	500	500	500
		Plan Review	& CU/OL/BTR>	7,842	9,143	9,007	10,192	10,396
Inspection Category	RER TEAM	Classifications	Task/FTE/Year	2021	2022	2023	2024	2025
Routine	FOG Compliance ⁽²⁾	Inspector	536	16	17	18	18	18
Construction	FOG Construction Inspections	Inspector	350	3	3	4	4	4
FOG Disposal	PRD	Inspector	200	0	0	0	0	0
eManifest	FND	Inspector	400	1	1	1	1	1
Plan Review/CU/OL/BTR	FOG	Engineering	2000	4	5	5	5	5
Inspec	tor:	Broad group that includes staff trained to perform field inspections. May include multiple classifications that may change based on program-specific requirements.						
(1)		Number of sites that require annual routine inspections was revised in 2024 to include facilities that have been notified of permit requirements.						
(2)		The number of Hot Spot, Residential and Complaint FOG Inspections have averaged 95 in the past 4 years. These inspections will be performed by the FOG Compliance Team.						

Table 4. Staffing FTEs

2.4.1 Routine Inspections

The FCP included performing routine inspections of facilities with Grease Discharge Operating (GDO) permits starting after *September 30, 2019*. The total number of GDO sites decreased at the start of the pandemic but has been increasing yearly thereafter (refer to *Chart 3*). Refer to *Chart 3A* for the total number of inactive and active GDO Sites.

Based on ongoing inspection efforts, the duration for an average routine inspection (factoring mobilization, transportation, inspection, and report preparation), and the number of re-inspections required, the number of full time equivalent (FTE) inspectors was recalculated. As shown in Chart 3A, the total number of active GDO sites is being considered to better address the annual inspection needs. Active sites include the permitted GDO facilities as well as the ones that have been notified of permit requirements, and others that need to be inspected to determine whether they are in operation or not. Refer to *Table 2*, and Charts *3, 3A,* and *4*. To achieve routine inspections of 90% of the active GDO sites by 2025 will require an increase on the level of service per FTE to 6 inspections per worked day and improvement of the inspection platforms, mobile applications and databases to enhance efficiency.

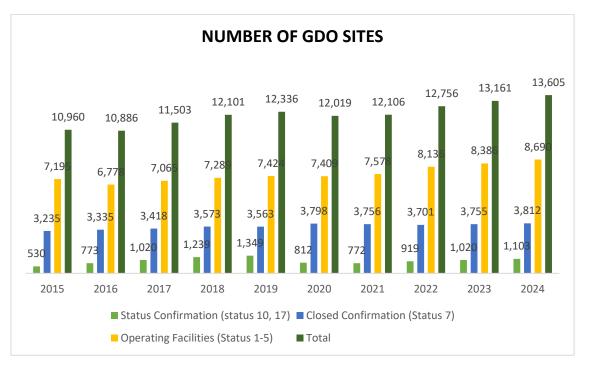


Chart 3: Number of GDO Sites

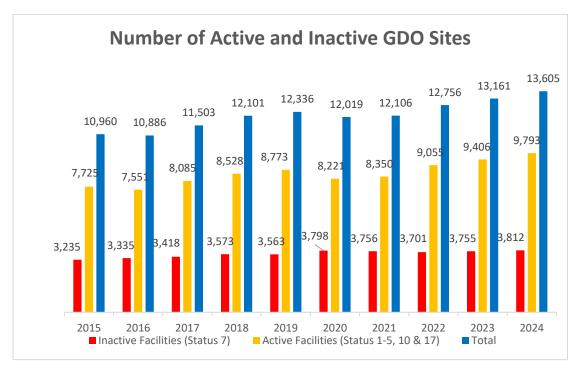


Chart 3A: Number of Inactive and Active GDO Sites

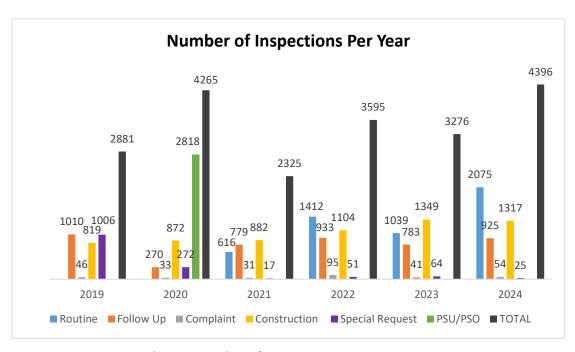


Chart 4: Number of Inspections per Year

With respect to the 2025 FOG Compliance Work Plan, the following goals have been defined for planning purposes.

- 1. Maintain compliance with the Consent Decree requirements
- 2. Increase FSE (Food Service Establishment) compliance rates
- 3. Reduce the number and severity of FOG-related SSOs (Sanitary Sewer Overflows)
- 4. Enhance public outreach and FSE education
- 5. Improve data management and trend analysis.

To achieve the goals for the year 2025, the following core activities and targets have been proposed. (refer to *Table 5*).

ACTIVITY	DESCRIPTION	TARGET/METRIC
FSE Inspections	Conduct inspections for compliance with FOG control ordinance	≥ 10,000 inspections/year
FOG Control Device (FCD) Verification	Verify sizing and maintenance of FCDs during inspections	100% of newFSEs90% of existing
Complaint Investigations	Rapid response to FOG-related complaints and SSO investigations	Response within 24 hours
Outreach & Host educational sessions Training • Host educational sessions • Distribute materials		12 sessions/yearNew pamphlets and digital content
Data and Reporting	Maintain records and prepare quarterly/annual reports	100% reporting compliance

Table 5. FOG Compliance Team Activities and Targets

2.4.2 Hot Spots & Complaints Inspections

Hot Spots inspections result from requests from the Utilities to determine possible facilities causing FOG discharges in specific areas. Complaint inspections are conducted based on private, utilities, and municipal complaints.

DERM has successfully implemented the use of real-time level monitoring systems that added 426 SmartCover units in sanitary sewer systems within Miami-Dade County's Canal Basins DA-1, C-4, C-5, C-6, C-7 and C-8. This pilot program is proving to be a success.

Since its implementation, DERM and sewer utilities have been alerted by the monitoring units when levels increase in the sanitary sewers, and several potential SSOs have already been prevented. DERM's team continually receives notifications from the SmartCover units, and fluid communication has been established with the sewer utilities where the units have been installed. Information provided by sensors allows us and the utilities to identify sections of the system prone to blockages (FOG, debris and rags), inflow, and even illegal discharges into the system.

The Hot Spots inspections will be performed by the FOG Compliance Team in coordination with the utilities.

2.4.3 Construction Inspections

Starting in March 2018, with the approval of the FCO, DERM began performing construction inspections to confirm compliance with approved plans. These inspections have demonstrated to be invaluable in that they provide an opportunity to identify and correct problems during the construction phase and prior to final inspection and issuance of a Certificate of Occupancy (or Completion) issued by the Municipal Building Department. Correcting problems after a CO or CC has proven to be extremely difficult, in part because a contractor has typically been paid in full and has demobilized from the site. During 2024, 1,317 construction inspections were conducted. (refer to **Chart 4**).

During 2024, the FOG Inspection program had enough positions but had several vacancies. In March of 2025, the FOG program was part of a Departmental (RER) reorganization to improve the inspection and plan review process. The FOG Compliance team was transferred to the Code Compliance Division of RER, and the FOG Plan Review and the Construction Inspection Teams were transferred to the Environmental Plan Review Division of RER.

With this change, the number of staff for construction inspections was reduced from four (4) PCI 1s (Pollution Control Inspector 1) to three (3) PCI 1 positions. As of May 2025, the program has two PCI1 and one vacant position. These inspectors will report to a Professional Engineer who will also supervise the FOG engineers conducting plan reviews. These changes are part of the RER reorganization that resulted in an overall net increase in positions supporting the FCP. The addition of supervisors, FOG compliance

inspectors and other supporting FCP positions is expected to enhance the inspection capabilities and performance of the program.

2.4.4 FOG Disposal Facility Inspections

A new Regional Fats, Oils and Grease (FOG) facility at the South District Wastewater Treatment Plant (SDWWTP) is currently under construction and is expected to begin operations in the first half of 2026. Once operational, the facility will be capable of separating FOG from other liquid wastes received at the SDWWTP. Currently, inspections are randomly performed by the DERM Liquid Waste Program to identify deficiencies in the manifests submitted by operators, verify the correct use of decals identifying permitted haulers, and detect vehicle malfunctions during waste hauler discharge at the SDWWTP.

2.4.5 eManifest Inspections

Liquid waste haulers and GDO facilities are required to submit information to DERM using the eManifest system. The system generates reports that are manually cross-referenced with the monthly reports submitted by haulers and the usage reports generated by the SDWWTP. Data analysis is currently conducted using three separate data sources in a largely manual process. However, enhancements to the e-manifest process are expected to be completed within the next two years, which would improve the ability to track the liquid waste hauling data and improve the performance of the program.

Additionally, random sampling of hauled waste is performed by MDWASD, in part to deter improper disposal. When waste exceeds local limits, follow-up is required to trace the source, which may include septic-served or industrial facilities.

2.5 FOG Construction Plans and Certificate of Use Reviews

An indicator of future increases (or declines) in the total number of GDO facilities is the number of construction plans and certificate of use submittals. Construction plan submittals continue showing an increasing trend as shown in *Chart 5* below. The certificate of use applications show an increase in 2024 (*Chart 6*). A combined chart depicting all engineering reviews is included as *Chart 7*.



Chart 5: Total FOG Plan Reviews

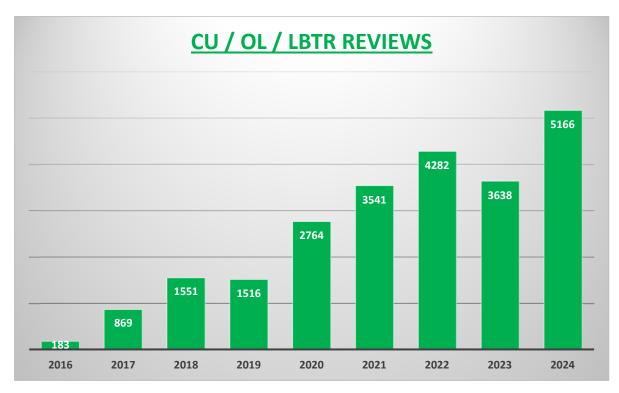


Chart 6: Total FOG Occupational License, Certificate of Use Reviews

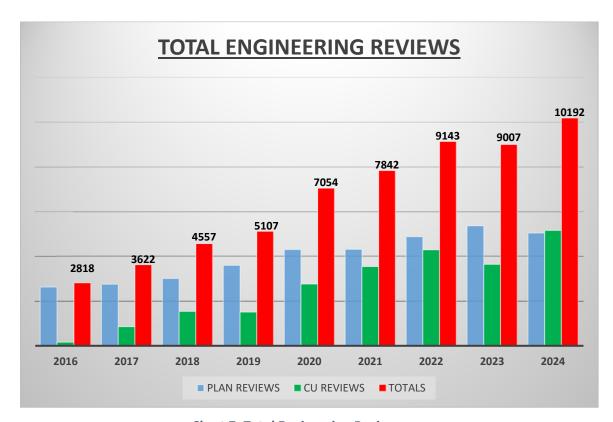


Chart 7: Total Engineering Reviews

The significant increase in reviews may be a function of the improved coordination and shift to an electronic review process making it less likely that a Municipality would skip the DERM (FOG) review process. How this increased activity will manifest itself in GDO permits is unknown. However, the overall increase in reviews suggests that the number of permitted facilities (GDOs) will continue to expand.

At the beginning of 2024, the program had four engineers conducting plan reviews. A fifth position was added during the first quarter of 2024. Currently, the program seems to be sufficiently staffed; however, as previously shown in Table 2, additional staff could be added based on the analysis of the program needs. Our plan review goal remains at 24- to 48-hour reviews, which requires that we constantly monitor performance and staffing needs. The county's goal is to ensure that development reviews, including FCP engineering reviews, are completed expeditiously, and to that extent, staffing needs are constantly analyzed and being addressed.

2.6 FOG Outreach and Education Events

DERM has focused on FOG outreach and education since 2014 and has exceeded the FCP target of six (6) stakeholder outreach events per year (refer to *Table 6*) through 2024.

As shown in *Table 2*, there is a new Training and Outreach Coordinator position that will organize FOG outreach and education events. The program plans to host twelve Outreach events during 2025 and enhance educational materials and digital content.

YEAR	NON- RESIDENTIAL	RESIDENTIAL OUTREACH	TOTAL NUMBER
2014	15	0	15
2015	20	0	20
2016	16	2	18
2017	12	0	12
2018	19	0	19
2019	17	2	19
2020	12	0	12
2021	16	0	16
2022	20	3	23
2023	16	0	16
2024	5	0	5

Table 6: Outreach Events

3. FOG Control Program Review Committee

The effectiveness of the FCP and FCO are continuously evaluated at the DERM Division Level (i.e., DERM Water and Wastewater Division) and by receiving feedback from the stakeholders listed below.

- DERM Water and Wastewater Division (formerly the Wastewater Permitting Section)
- DERM Director or Director's Designee
- RER Administration
- Miami-Dade County Water and Sewer Department, Wastewater Collection and Transmission Line Division
- Volume Sewer Customers (Municipal Utility)

This annual activity will continue in the upcoming years to have a better understanding of the performance of this program. This, along with the constant analysis of program performance and staffing needs allows us to timely address any program challenges.

For 2024, input was requested from the above stakeholders. Their feedback is included in this report. The City of Opa-Locka and the Miami-Dade Water and Sewer Department (WASD) provided feedback regarding the FOG Program on April 25, 2025. Their responses to the questionnaire are included below (*Table 7*) and the received forms are included in *Attachment 3*.

Questions	City of Opa-Locka	Miami-Dade Water and Sewer Department
What is Your No. 1 FOG Concern?	Main line clogs and wet wells being impacted by FOG	Heavy FOG affects the integrity of the sewer system, due to corrosion. Also, FOG causes Sanitary Sewer Overflows (SSOs), sewer line blockages & back-ups. All these results in higher maintenance and operational costs.
If you can change one thing, what would it be?	Have large apartment complexes install grease traps to mitigate grease in the public collection system.	I wouldn't change anything.
Are PM/KPI good indicators? Y/N	Yes	Yes. Performing Monthly FOG reports allows us to keep records of maintenance performed and identify recurrent FOG points in the sewer system.
Should we add New PM/KPI? Y/N	No	I believe it is not necessary to add a new PM/KPI.
Other Comments	We are having good results with mitigating our system FOG concerns, with the In-Pipe treatment solution which utilizes microbes in the cleaning process.	N/A.

Table 7: Feedback from Utilities

The Department of Regulatory and Economic Resources has taken into consideration the recommendations from the City of Opa-Locka and the Department of Water and Sewer of Miami-Dade County and will continue monitoring all the performance indicators to ensure that we have an effective Fog Control Program.

4. Proposed FCO and FCP Revisions

The FCO became effective in March 2018 and no changes are currently proposed. DERM will continue to monitor all areas of the FCO (e.g., design standards, plan review, construction inspections, operating permits, etc.) routinely, to ascertain if any changes are required. Prior to making any changes to the FCO, which would require Board of County Commissioner approval, an Ordinance Revision Plan (ORP) will be submitted to FDEP and EPA for review and approval. The ORP would include, at a minimum, the regulatory and technical basis for the proposed changes and implementation schedule (e.g., public outreach, public comment, legislative timeframes, and code implementation timeline with change applicability and grandfathering criteria). Based on the knowledge gained by implementing the FCP, the key focus for the program is to be fully staffed by 2026 to accomplish all FCP requirements.

DERM's inspection protocol for 2019 to 2021 included focusing primarily on Hot Spots and Complaints and starting to transition more staff resources to conduct routine inspections. The FOG Team initiated annual routine inspections on permitted facilities on October 2021. Given the level of effort required to address Hot Spots and Complaints, expanding SDWWTP inspections, eManifest enforcement/inspections, construction inspections/reinspections, and the staff shortages caused by the COVID-19 Pandemic, shifting resources to annual inspections in 2021 was not fully realized. However, for year 2025, the county will continue with its ongoing efforts of constantly monitoring the performance of the program and adding resources to achieve the current goal of inspecting 90% of the existing facilities.

5. Conclusions

RER-DERM implemented the FCP to reduce FOG discharges to the WCTTS, thereby minimizing FOG-related SSOs. Since the approval of the FCP and the FCO in 2018, RER-DERM has made significant progress in enhancing key program components, including the design and review process for new grease interceptors, compliance and construction inspections, FOG manifesting (e.g., eManifest), and public outreach.

Utilities have implemented proactive cleaning of the collection system and have installed SmartCover units to prevent SSOs. During the year 2024, there was a reduction in the costs associated with Accelerated FOG Maintenance of 40% compared to the year 2023.

With the recent reorganization of RER, the FCP inspection staff, is now positioned to conduct in 2025, inspections of approximately 90% of existing facilities. This increased inspection coverage is expected to enhance compliance rates and contribute to a measurable reduction in both the number and severity of FOG-related SSOs.

While the FCP and all its requirements for FOG-generating commercial activities have been implemented and are showing changes that improve the goal of reducing and preventing the effects of FOG in the Miami-Dade County's sanitary sewer collection and transmission system, data analyzed for this report shows that the residential education component of the FCP needs to be strengthened. The newly added position of Training and Outreach Coordinator will contribute to attaining this goal.

RER will continue to make progress implementing the FCP and enforcing the FCO, and when applicable, propose changes to the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP).

ATTACHMENT 1

Table of Organization

THIS PAGE INTENTIONALLY LEFT BLANK

LEGEND:

Vacancies in GREEN: (vacated by)

WATER AND WASTEWATER DIVISION

Galo Pacheco Interim Division Chief

Estelle Anorga Administrative Secretary

Vacant (Galo Pacheco) Senior Professional Engineer

Sandra Callico Electronic Document Technician

Betsy Olmino Engineer 2
Frank Agras Engineer 2

Water Distribution & Wastewater Collection & Transmission Systems [Engineering, Reporting, Operation, and Monitoring]

Oscar Aguirre	Engineer 3
Pablo Asencio	Engineer 2
Karina Lopez	Engineer 2
Gloria Suarez	Engineer 2
Matthew Lopez	Engineer 1
Lucas Ruano	Engineer 1

Leyla Vargas Gonzalez RER P&P Representative

Water & Wastewater Compliance Section

Manager, DERM Environmental Section Laura Castillo **Tadeo Monterrubio Env. Spec. Supervisor** Anthony Cuba P.C. Inspector 1 P.C. Inspector 1 Daniela Sabillon JO# 90426 Vacant (Matthew Lopez) P.C. Inspector 1 **Daira Marrero** P.C. Inspector 2 P.C. Inspector 1 Orestes Cecilia Perez Jorge Perez P.C. Inspector 1 JO# 89535 Vacant (Eduardo Castillo) P.C. Inspector 1



ENVIRONMENTAL PLAN REVIEW DIVISION

Cristian Guerrero RER Division Chief
Brenda Hernandez Administrative Secretary

FOG Program

Vacant Position Professional Engineer

Richard Rojas Engineer 3 (Interim Supervisor)

FOG Engineering Plan Review Team

Carlos Lincheta Engineer 2
Victor Cabrera Engineer 2
Jhon Garcia Valencia Engineer 2
Gabriel Paan Engineer 1
Rodolfo Espinoza Engineer 1

FOG Construction Inspections Team

Brenda Melendrez
Pollution Control Inspector 1
William Pinger
Pollution Control Inspector 1
Vacant Position
Pollution Control Inspector 1

Jeanne Pouparina Cabrera RER Permit & Plans Representative

CODE COMPLIANCE DIVISION

Jaselyn Paula RER Division Chief (Interim)

Yureisy Alvarez FOG Compliance Manager (Interim)

Vacant Position Administrative Support

Vacant Position Training and Outreach Coordinator

FOG Compliance Team

Vanessa Clayton Env. Spec. Supervisor
Cecil Bennett Env. Tech. 2

Cedric McQueen Env. Tech. 2
Elveste Sistra Env. Tech. 2
Nicholas Padgett Env. Tech. 2

Taina Dumont RER Compliance Officer 1

Eddie Gonzalez Env. Spec. Supervisor

Vacant Position
Vacant Position
Vacant Position
Vacant Position

Erika Perez Environmental Technician 2 (Interim Supervisor)

Laughlan Lloyd Env. Tech. 2
Michael Abreu Env. Tech. 2
Tracy Niclasse Env. Tech. 2

Vacant Position
Vacant Position

Vacancies in GREEN:

LEGEND:

ATTACHMENT 2

Sample of Utility Accelerated FOG Maintenance (aFOG) Report

THIS PAGE INTENTIONALLY LEFT BLANK

Accelerated FOG Maintenance (aFOG)[™] Report MDC Code Section 24-42.6(13)

Utility Name: City of Miami Beach

Month Reported: 04/01/24

Completed by: Kristina Nunez

Utility Code	Date of Maintenance mm/dd/yyyy	Maintenance Location (address)	ZIP code	X, Coordinate (Feet)	Y, Coordinate (Feet)	Causes ^{*2}	Maintenance Initial MH #	Maintenance Final MH #	Length of Pipe Cleaned (Feet)	Description of Maintenance Performed ^{*3}	List of complete name of Chemicals added	Volume Recovered for Disposal (gallons)*4	Liquid Waste Transporter DERM Permit LW-ST #	Disposal Ticket No. ^{*5}	Maintenance Cost ^{*6} Labor	Maintenance Cost*6 Equipment	Maintenance Cost ^{*6} Materials/Supplies	Maint	otal tenance Cost	Event Id (DERM use only)
2	04/04/24	1680 Mihchigan Avenue	33139	80.1392	25.7917	FOG	SWR_LTR_15625	SWR_LTR_15625	38	Hydro Jetting	Sodium Hypochlorite	38	372	456678	\$ 59.8	9 \$ 35.82		\$	95.71	2453861680 Mihchigan Avenue
2	04/04/24	842 1st Street	33139	80.1369	25.7696	FOG	SWR_MNH_15789	SWR_MNH_15820	950	Hydro Jetting	Sodium Hypochlorite	950	372	456678	\$ 181.6	\$ 340.40		\$	522.04	245386842 1st Street
2	04/07/24	1100 6th Street	33139	80.1401	25.7751	FOG & Rags (FROG)	SWR_MNH_16947	SWR_MNH_17102	550	Hydro Jetting	Sodium Hypochlorite	550	372	456678	\$ 261.0	\$ 340.40		\$	601.44	2453891100 6th Street
2	04/10/24	2899 Collins Avenue	33140	80.1249	25.8042	FOG	SWR_MNH_23004	SWR_MNH_23005	37	Hydro Jetting	Sodium Hypochlorite	37	372	456678	\$ 81.1	\$ 170.20		\$	251.34	2453922899 Collins Avenue
2	04/10/24	1100 6th Street	33139	80.1401	25.7751	FOG & Rags (FROG)	SWR_MNH_16947	SWR_MNH_17102	419	Hydro Jetting	Sodium Hypochlorite	419	372	456678	\$ 81.1	\$ 170.20		\$	251.34	2453921100 6th Street
2	04/11/24	1100 6th Street	33139	80.1401	25.7751	FOG & Rags (FROG)	SWR_MNH_16947	SWR_MNH_17102	35	Hydro Jetting	Sodium Hypochlorite	35	372	456678	\$ 44.7	5 \$ 170.20		\$	214.96	2453931100 6th Street
2	04/16/24	1418 20th Street	33139	80.1441	25.7953	FOG	SWR_LTR_11274	SWR_LTR_11274	31	Hydro Jetting	Sodium Hypochlorite	31	372	456678	\$ 45.6	5 \$ 85.10		\$	130.75	2453981418 20th Street
2	04/25/24	1100 6th Street	33139	80.1401	25.7751	FOG & Rags (FROG)	SWR_MNH_16947	SWR_MNH_17102	630	Hydro Jetting	Sodium Hypochlorite	630	372	456678	\$ 46.1	\$ 170.20		\$	216.30	2454071100 6th Street
2	04/26/24	414 71st Street	33141	80.1227	25.8558	FOG	SWR_MNH_29045	SWR_MNH_14482	300	Hydro Jetting	Sodium Hypochlorite	300	372	456678	\$ 207.6	3 \$ 251.06		\$	458.74	245408414 71st Street
2	04/26/24	1100 6th Street	33139	80.1401	25.7751	FOG & Rags (FROG)	SWR_MNH_16947	SWR_MNH_17102	450	Hydro Jetting	Sodium Hypochlorite	450	372	456678	\$ 93.5	\$ 170.20		\$	263.74	2454081100 6th Street
2	04/26/24	820 Ocean Drive	33139	80.1314	25.7784	FOG	SWR_MNH_18332	SWR_MNH_17824	65	Hydro Jetting	Sodium Hypochlorite	65	372	456678	\$ 93.5	\$ 170.20		\$	263.74	245408820 Ocean Drive
2	04/29/24	700 Collins Avenue	33139	80.1328	25.7771	FOG	SWR_MNH_17740	SWR_MNH_17797	450	Hydro Jetting	Sodium Hypochlorite	450	372	456678	\$ 92.2	\$ 170.20		\$	262.40	245411700 Collins Avenue
2	04/29/24	1100 6th Street	33139	80.1401	25.7751	FOG & Rags (FROG)	SWR_MNH_16947	SWR_MNH_17102	150	Hydro Jetting	Sodium Hypochlorite	150	372	456678	\$ 92.2	\$ 170.20		\$	262.40	2454111100 6th Street

NOTES

*1 Cleaning performed by utilities to prevent sanitary sewer overflows caused by FOG blockages in sanitary sewer systems, including but not limited to laterals, gravity mains, pump stations, and air release valves
*2 Causes

FOG FOG & Rags (FROG) FOG & Roots

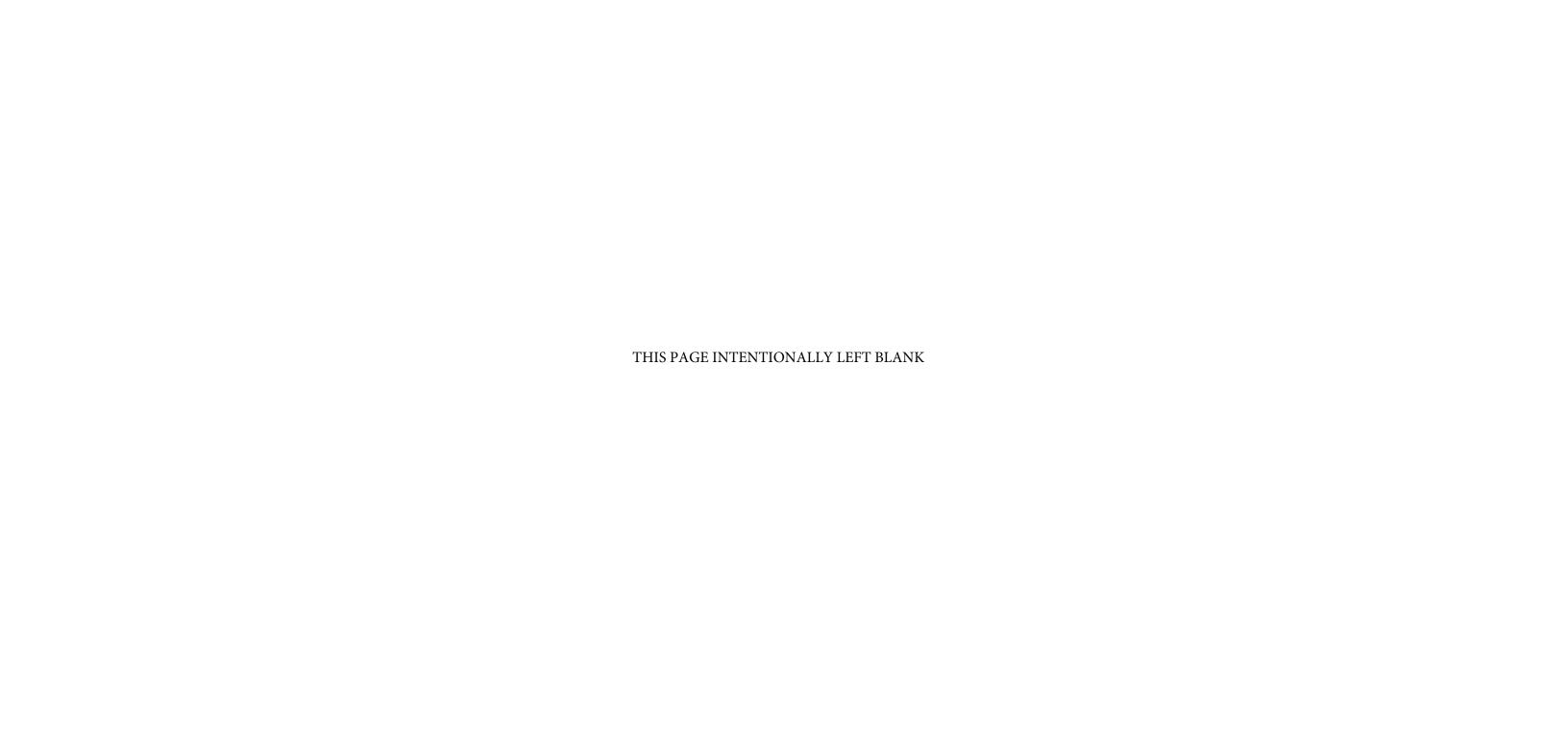
FOG & Roots
Other

*3 Description of accelerated FOG maintenance performed:
Hydro Jetting
Pipe replaced due to grease solidified
Chemicals added
Other

*4 Quantities of waste removed, recovered, collected or treated to prevent a sanitary sewer overflow

*5 Disposal Ticket No., Must be reported from the Manifest form used to bring the waste to the disposal facility (Treatment plant). See sample form in the next TAB "Sample Disposal Manifest Form"

*6 Cost of accelerated FOG maintenance including labor, equipment, and materials. Labor shall include field and office staff



ATTACHMENT 3

City of Opa-Locka and Miami-Dade Water & SewerDepartment Feedback Regardingt he FOG Control Program THIS PAGE INTENTIONALLY LEFT BLANK

^{8th} Annual FOG Control Program Review March 31, 2025

	Airia Austin Public Works Director	City of Opa-locka						
Committee Member:		Agency:						
What is Your	Main line clogs an wet wells being impacted by FOG							
No. 1 FOG Concern?								
If you can change One	Have large apartment complexes install grease	traps to mitigate grease in the public collection system.						
thing, what would it be?								
Are PM/KPI good	Yes							
indicators? Y/N								
Should we add New	No							
PM/KPI? Y/N								
Other Comments	We are having good results with mitigating our	system FOG concerns, with the In-Pipe treatment solution which						
	utilizes microbes in the cleaning process.							

^{8th} Annual FOG Control Program Review March 31, 2025

Committee Member:	Agency: <u>Miami-Dade County/WASD/WWCTLD</u>
What is Your	Heavy FOG affects the integrity of the sewer system, due to corrosion. Also, FOG causes Sanitary Sewer Overflows
No. 1 FOG Concern?	(SSOs), sewer line blockages & back-ups. All these results in higher maintenance and operational costs.
If you can change One	I wouldn't change anything.
thing, what would it be?	
A DAA/VDI	Ver Derferming Marshly 500 areas to library and a final state of a single state of a
Are PM/KPI good	Yes. Performing Monthly FOG reports allows us to keep records of maintenance performed and identify recurrent
indicators? Y/N	FOG points in the sewer system.
Should we add New	I believe it is not necessary to add a new PM/KPI.
PM/KPI? Y/N	
Other Comments	N/A.