

ORDINANCE NO. 25-19

AN ORDINANCE OF THE CITY OF KEY WEST, FLORIDA, AMENDING CHAPTER 74 OF THE CODE OF ORDINANCES, ENTITLED "UTILITIES", ARTICLE II ENTITLED "SANITARY SEWER SYSTEM," BY REPEALING SECTION 74-171 - GREASE, OIL AND SAND INTERCEPTORS; ADDING ARTICLE VI ENTITLED "FATS OILS AND GREASE MANAGEMENT" SECTION 74-245 THROUGH 74-261 TO PROVIDE REGULATIONS FOR UNIFORM MAINTENANCE AND MONITORING REQUIREMENTS FOR CONTROLLING THE DISCHARGE OF GREASE FROM FOOD SERVICE FACILITIES, AND GREASE HAULING; ADDING SECTIONS 74-250 - TITLE; SECTION 74-251 - PURPOSE; SECTION 74-252 - APPLICABILITY; SECTION 74-253 - DEFINITIONS; SECTION 74-254 - AUTHORITY; SECTION 74-255 - FACILITY INSPECTIONS; 74-256 - GREASE TRAPS & INTERCEPTORS; SECTION 74-257 - GREASE INTERCEPTOR AND TRAP ENFORCEMENT; SECTION 74-258 - GREASE HAULERS; SECTION 74-259 - FEES; SECTION 74-260 - ENFORCEMENT, APPEALS; AND SECTION 74-261 ADDITIONAL CRIMINAL OFFENSES; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF INCONSISTENT PROVISIONS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City of Key West Sanitary Sewer System operates pursuant to a consent order (OGC File No 21-0851), which requires the City to fully implement a documented Capacity, Management, Operation and Maintenance Program, which includes enacting a Fats, Oil and Grease (F.O.G.) Ordinance; and

WHEREAS, adding regulations for fats, oil and grease management to the Code of Ordinances will protect and improve operation of the city's sanitary sewer and stormwater systems; and

WHEREAS, enactment of a Fats, Oil and Grease ("FOG") Management ordinance will promote the health, safety and welfare of the citizens and visitors of the City of Key West.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF KEY WEST, FLORIDA:

Section 1: That Section 74-171 is hereby repealed from the Code of Ordinances in its entirety, as follows:

~~Sec. 74-171. - Grease, oil and sand interceptors.~~

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

**(Coding: Added language is underlined; deleted language is ~~struck through~~ at first reading. Added language is double underlined and ~~double struck through~~ at second reading.*

Section 2: That Chapter 74 of the Code of Ordinances is hereby amended, by adding Article II, Division VI as follows*:

CHAPTER 74 "UTILITIES",

ARTICLE II "SANITARY SEWER SYSTEM,"

DIVISION VI. "FATS OILS AND GREASE MANAGEMENT"

Sec. 74-250. Title.

This article shall be known and may be cited as the " Fats, Oil, and Grease (F.O.G.) Ordinance."

Sec. 74-251. Purpose.

This article establishes uniform maintenance and monitoring requirements for controlling the discharge of grease from food service facilities discharging into the city's treatment works and for regulation of grease haulers operating within the city limits. The objectives of this article are:

(1) To prevent the introduction of excessive amounts of grease into Key West's collection system.

(2) To prevent clogging or blocking of the city's sewer lines due to grease build-up causing sanitary sewer overflows onto streets, into stormwater systems or waterways and into residences and commercial buildings, resulting in potential liability to the city.

(3) To prevent maintenance and odor problems at wastewater pumping stations due to grease build-up.

(4) To implement a process to recover costs for any liability incurred by the city for damage caused by grease blockages resulting in sanitary sewer overflows.

(5) To establish fees for the recovery of costs resulting from the program established herein.

(6) To register grease haulers operating within the City of Key West.

(7) To establish enforcement procedures for violations of this article.

Sec. 74-252. Applicability.

(a) The provisions of this article shall apply to all food service facilities discharging into the city's treatment works and to all grease haulers doing business within the City of Key West.

(b) Where there is a conflict between this article and the Florida Building Code-Plumbing, as amended (current edition), the Florida Building Code-Plumbing, as amended (current edition) shall be applicable.

Sec. 74-253. Definitions.

For the purposes of this article, certain abbreviations, terms, phrases, words and their derivatives shall have the following meanings:

Director means the director of the Utilities department or his or her designee.

Food service facility or facility means any business or food service facility which prepares and/or packages food or beverages for sale or consumption. This does not apply to private residences. Food service facilities may include, but are not limited to, food courts, food manufacturers, food packagers, restaurants, grocery stores, bakeries, lounges, meat markets, hospitals, hotels, nursing homes, churches, schools, cafeterias, delicatessens, coffee shops, concession stands, and all other food service facilities not specifically listed above.

Food service facility owner or owner means in the case of individual food service facilities, the owner or proprietor of the food service facility. Where the facility is a franchise operation, the owner of the franchise is the responsible person or entity. Where the facility is owned by a partnership, corporation, or other type of business entity, the individual who is authorized to legally act on behalf of the business entity under Florida State law shall be the responsible person. Where two (2) or more food service facilities share a common grease interceptor, the owner shall be the individual who owns or assumes control of the grease interceptor or the property on which the grease interceptor is located. Owner shall also mean his or her duly authorized representatives, employees or agents.

FOG or F.O.G. inspector means a member of the staff of the City's Utilities or Code Enforcement Department, designated to assist in the management of the City of Key West F.O.G. Ordinance.

Gray water means all liquid contained in a grease interceptor that lies below the floating grease layer and above the food solids layer.

Grease means a material either liquid or solid, composed primarily of fats, oils or grease from animal or vegetable sources.

Grease hauler means a person who collects the contents of a grease interceptor or trap and transports it to an approved recycling or disposal facility.

Grease interceptor means an interceptor whose rated flow exceeds fifty (50) gpm or has a minimum storage capacity of seven hundred fifty (750) gallons or more and is a device located underground and outside of a facility. It is designed to collect, contain or remove food waste and grease from the wastewater while allowing the balance of the liquid waste to discharge to the wastewater collection system by gravity.

Grease trap means an interceptor whose rated flow is fifty (50) gpm or less and is a device located inside a facility and/or under a sink designed to collect, contain, or remove food wastes and grease from the wastewater while allowing the balance

of the liquid waste to discharge to the wastewater collection system by gravity.

Hydromechanical interceptor means a device that is installed at a food service facility, to prevent fats, oil and grease from entering the wastewater system, that may incorporate, in combination or separately, air entrapment, interior baffling and internal barriers.

Notice of code violation (NOCV) means a written notice informing a food service facility owner or grease hauler that a violation of the City of Key West F.O.G Ordinance has occurred, following an attempt at voluntary compliance.

Registered hauler means a grease hauler registered with the City of Key West in accordance with this article who is authorized to perform inspection, cleaning, and grease disposal for food service facilities.

Sanitary facilities mean bathrooms, bathroom fixtures, bathroom groups, hand sinks or other similar fixtures or facilities.

Sewage treatment plant means any arrangement of devices and structures used for treating sewage as defined in section 74-26 of the City of Key West Code.

Sec. 74-254. Authority.

(a) Pursuant to sections 74-29 of the City of Key West Code, the director, or his or her designee(s) shall have the

power, duty and responsibility to administer and enforce the provisions of this article.

(b) Pursuant to Chapter 2 Article VI of the City of Key West Code and F.S. Ch. 162, the F.O.G. inspector shall have full authority being designated and employed as a code enforcement officer.

Sec. 74-255. Facility inspections.

(a) Entry. Pursuant to section 74-29 of the City of Key West Code, each facility shall allow the director or his or her designee the right of entry upon real property for the purpose of inspection, observation, records examination, measurement, and sampling in accordance with the provisions of this article.

(b) Inspections. The F.O.G. inspector may inspect food service facilities periodically on either an unannounced or scheduled basis to verify continued compliance with the requirements of this article. The F.O.G. inspector shall inspect all grease traps or interceptors, the logbook and file, other pertinent data or take samples as necessary. The F.O.G. inspector shall record all observations in a written report. Any deficiencies shall be noted, including but not limited to:

(1) Failure to properly maintain the grease interceptor or trap in accordance with the provisions of this article.

(2) Failure to report changes in operations, or wastewater constituents and characteristics.

(3) Failure to maintain logs, files, records or access for inspection or monitoring activities.

(4) Inability of existing grease interceptor or trap to prevent discharge of grease into the city's treatment works.

(5) Any other inconsistency with or violation of this article.

(c) Re-inspections. The F.O.G. inspector shall inspect any repairs, replacements or other deficiencies and shall provide written notice of compliance or noncompliance. In the event of continuing noncompliance, re-inspections will be performed.

Sec. 74-256. Grease traps and interceptors.

(a) Permit required. Any food service facility that intends to erect, install, enlarge, alter, repair, remove, convert or replace any grease trap or interceptor is required by section 14-37 of the City of Key West Code of ordinances to make application to the building official and obtain the required permit. The facility shall submit with its permit application the appropriate design criteria in accordance with the Florida Building Code - Plumbing, as amended (current edition).

(b) Requirements. All food service facilities are required to have a grease interceptor or trap properly installed in

accordance with any and all applicable requirements of the Florida Building Code-Plumbing, as amended (current edition).

(1) New facilities. On or after the effective date of the City of Key West F.O.G. Ordinance, food service facilities which are newly proposed or constructed, or existing food service facilities which will be expanded or renovated to include a food service facility, where such a food service facility did not previously exist, shall be required to install a grease interceptor or trap according to the requirements of the Florida Building Code-Plumbing, as amended (current edition) and to operate and maintain the grease interceptor or trap according to the requirements contained in this article.

(2) Existing facilities. Food service facilities existing prior to the date of the City of Key West F.O.G. Ordinance shall be permitted to operate and maintain existing grease interceptors or traps provided their grease interceptors or traps are in good operating condition.

The city may require an existing facility to install a new grease interceptor or trap that complies with the requirements of the Florida Building Code-Plumbing, as amended (current edition) or to modify or repair any noncompliant plumbing or existing grease interceptor or trap when any, one (1) or more of the following conditions exist:

a. The facility is found to be contributing grease in quantities sufficient to cause line stoppages or necessitate increased maintenance on the wastewater collection system.

b. Grease concentrations exceed four hundred (400) mg/l on wastewater effluent as determined by sampling performed by the F.O.G inspector.

c. The facility does not have a grease interceptor or trap.

d. The facility has an irreparable or defective grease interceptor or trap.

e. Remodeling of the food preparation or kitchen waste plumbing system is performed which requires a plumbing permit to be issued by the City of Key West.

f. The facility is sold or undergoes a change of ownership.

g. The facility does not have plumbing connections to a grease interceptor or trap in compliance with the requirements of this article.

(c) Plumbing connections. Grease interceptors or traps shall be installed in accordance with Florida Building Code-Plumbing, as amended (current edition). Wastewater from sanitary facilities shall not be introduced into the grease interceptor or trap under any circumstances.

(d) Records maintenance. Each food service facility shall maintain a logbook in which a record of all interceptor maintenance is entered. Maintenance information shall include, but not be limited to, date and time of the maintenance, estimated gallonage removed from interceptor or trap, any defects in the grease interceptor or trap, details of any repairs required and dates of repair completion, changes in operations, or wastewater constituents and characteristics, receipts from grease haulers, plumbers, parts suppliers, plumbing layout, sizing or flow rate calculations for grease trap or interceptor, etc., and any other records pertaining to the interceptor. Each food service facility shall report to the City Utilities Department following each cleaning of its grease trap, interceptor, or similar device. Facilities with limited operations that do not require frequent cleanings shall report no less than twice per year. Each report shall include the date the trap was serviced, the size of the trap or receptacle, the name of the licensed hauler or an invoice from the hauler, and the manifest of the disposal site. A logbook containing this information shall be maintained by the facility and made available for inspection upon request by the City. Records shall be maintained for a period of one (1) year. Each facility shall provide, upon request of the F.O.G. inspector within ten (10) days, drawings of sufficient detail to depict the plumbing

layout of the facility.

(e) Grease interceptors. Grease interceptors shall be designed and installed in accordance with the Florida Building Code-Plumbing, as amended (current edition) and shall be operated and maintained as follows:

(1) Pumping and maintenance. Each food service facility shall be responsible for the costs of pumping, cleaning, and maintaining its grease interceptor. All food service facilities that have grease interceptors shall utilize a registered grease hauler. Pumping services shall include the complete removal of all contents, including floating materials, gray water, bottom sludge, and solids from the interceptor. Grease interceptor cleaning shall include scraping excessive solids from the walls, floors, baffles, and all piping.

It shall be the responsibility of the grease hauler to inspect an interceptor during, or immediately after the pumping procedure to ensure that the interceptor is clean and that all fittings and fixtures inside the interceptor are in working condition and functioning properly. If the interceptor is not functioning properly, the grease hauler shall notify the owner in writing. The notice shall include a sufficient description of the malfunction.

(2) Interceptor pumping frequency. Each food service facility shall have its grease interceptor pumped prior to

attaining any of the following criteria:

- a. When the settled solids layer exceeds the invert of the outlet pipe (typically eight (8) inches in depth);
- b. When the total volume of captured grease and solid material displaces more than twenty-five (25) percent of the capacity of the interceptor;
- c. When the interceptor is not retaining or capturing oils and greases;
- d. When a blockage or back up has occurred; or
- e. When sanitary sewer contents have been introduced or diverted into the grease retention system.

(3) Inspection. Grease interceptors shall be inspected periodically by a F.O.G inspector as necessary to ensure compliance with this article.

(4) Disposal. Waste removed from each grease interceptor shall be disposed of at a facility permitted to receive such waste. Grease, solid materials, or gray water removed from interceptors shall not be returned to any grease interceptor, private sewer line or to any portion of the city's treatment works.

(f) Grease traps. Grease traps shall be installed in accordance with the Florida Building Code-Plumbing, as amended, (current edition) and shall meet the following criteria:

(1) Flow control device. Grease traps shall be equipped with a device to control the rate of flow through the unit. The rate of flow shall not exceed the manufacturers rated capacity recommended in gallons per minute for the unit. Each food service facility is responsible for maintaining appropriate flow control devices.

(2) Venting. The flow-control device and the grease trap shall be vented in accordance with the Florida Building Code-Plumbing, as amended (current edition). The vent shall terminate not less than six (6) inches above the flood-rim level or in accordance with the manufacturer's instructions. Each food service facility is responsible for maintaining appropriate venting of the grease trap.

(3) Cleaning and maintenance. Each food service facility shall be solely responsible for the cost of grease trap cleaning and maintenance. Each facility may contract with a registered grease hauler or it may develop a written protocol and perform its own grease trap cleaning and maintenance procedures. Cleaning and maintenance must be performed before the total volume of captured grease and solid material displaces more than twenty-five (25) percent of the total volume of the grease trap. Each facility shall determine the frequency at which their grease trap shall be cleaned, but all grease traps shall be opened, inspected, cleaned, and maintained at a minimum

of once per week.

(4) Inspection. Grease traps shall be periodically inspected by a F.O.G inspector, as necessary, to ensure compliance with this article and to assure proper cleaning and maintenance is being performed.

(5) Disposal. Grease and solid materials removed from a grease trap shall be removed by a registered grease hauler unless the grease is in a solid, dry form, mixed with an oil absorbent in an enclosed bag or container, and does not exceed five (5) pounds.

(g) Additives. Any chemicals, enzymes, emulsifiers, live bacteria or other grease cutters or additives, used for the purpose of grease reduction shall be approved by the F.O.G. inspector prior to their addition to grease interceptors or traps. Applicable information concerning the composition, frequency of use and mode of action of the proposed additive shall be sent to the city together with a written statement outlining the proposed use of the additive(s). The city may request a sampling port installed by the food service facility at the facility's expense to demonstrate the additive will work. The city, upon evaluation of all of the information received, shall permit or deny the use of the additive in writing. Permission to use additives may be withdrawn by the city at any time.

(h) Alternative grease removal devices or technologies.
Alternative devices and technologies such as automatic grease
removal systems shall be subject to written permission by the
director prior to installation. Permission to use the device
shall be based on demonstrated and proven removal efficiencies
and reliability of operation. The city may permit these types of
devices depending on manufacturer's specifications on a case-by-
case basis. The food service facility may be required to furnish
analytical data demonstrating grease removal effectiveness, or
perform effluent monitoring. Permission to use alternative
devices and technologies may be withdrawn by the city at any
time.

Sec. 74-257. Grease interceptor and trap enforcement.

(a) Whenever the F.O.G. inspector determines that a grease
interceptor or trap is in need of pumping, repairs, maintenance,
or replacement, enforcement shall be as follows:

(1) Notice of code violation (NOCV). The F.O.G.
inspector conducting the inspection shall immediately notify the
Code Compliance Department and the food service facility owner
that a violation exists and may issue the owner a courtesy
notice or NOV stating the nature of the violation.

(2) Inspection and re-inspection. If a grease
interceptor or trap has to be re-inspected because of

deficiencies found during a previous inspection, and all of the deficiencies have been corrected, there shall be no charge for the re-inspection. If all of the deficiencies have not been corrected, a re-inspection fee shall be charged to the food service facility.

(3) Sampling fees. Fees for any sampling and analysis of wastewater discharges deemed necessary for the protection of the treatment works shall be charged to the food service facility owner in the amount per sampling event.

(4) Pump-out and cleaning. A violation involving the lack of proper cleaning and maintenance of a grease trap shall require the food service facility owner to clean out the trap(s) within twenty-four (24) hours of the NOV. If interceptor pumping frequency is not being met, the owner shall be required to have the interceptor pumped out within seventy-two (72) hours of the NOCV.

(5) Repairs and replacement. The food service facility owner shall be responsible for the cost and scheduling of all repairs to or replacement of its grease interceptor(s) or trap(s). Repairs and replacements required by a F.O.G. inspector shall be completed within a reasonable time as established in written guidelines prepared by the director. The time for corrective action shall commence on the date of receipt of the

notice. Written guidelines shall include provisions for time extensions if the owner responds with an acceptable plan for rectifying the situation.

(6) Noncompliance. If the food service facility owner continues to violate the provisions set forth in this article, or fails to initiate or complete corrective action in response to a NOCV, or a city approved plan to rectify a violation, the director may pursue one (1) or more of the following options at the director's sole discretion:

a. Pump the grease interceptor and seek reimbursement of the costs from the food service facility owner.

b. Assess further inspection fees as provided.

c. Refer any violation by any food service facility, or its owner, for enforcement by additional regulatory agencies for any or all applicable remedies.

Sec. 74-258. Grease haulers.

(a) Grease hauler registration. Any person, firm, or business desirous of collecting, pumping, or hauling grease interceptor or trap wastes from businesses located within the city limits shall be required to register with the city. It shall be unlawful for any grease hauler to clean or pump out grease interceptors or traps within the city limits without being

registered.

Registrations shall be effective for a period of one (1) years. The registration required by the city shall be in addition to any other permits, registrations, or occupational licenses required by federal, state, and local agencies having lawful jurisdiction. The registration is not transferable. The director shall issue stickers to all City of Key West registered grease haulers. The stickers shall be displayed in a visible location on all vehicles used to clean interceptors or traps.

(1) Application. To register with the city, a grease hauler shall submit a completed application form to the Utilities Department. The Department shall approve, deny, or approve with conditions all applications by written notice within forty-five (45) calendar days of the city's receipt of the completed application form. The grease hauler shall be registered prior to providing grease hauling services within the city limits.

The application shall require, but not be limited to, the following information:

a. List of all trucks or vehicles used to clean interceptors or traps, which include vehicle make, model, year, identification number, color, tank capacity, proof of insurance, and tag number.

b. List of all drivers or personnel used to

clean interceptors or traps, including proof of valid driver's licenses.

c. List of all disposal sites.

(2) Information update. Registered grease haulers shall update application information annually from the date of issuance of registration.

(3) Registration renewal. An application for registration renewal shall be submitted on the appropriate renewal form at least forty-five (45) calendar days prior to the expiration date of the existing registration by each applicant wishing to provide grease hauling services in the city limits.

(b) Spill reporting. Any accident, spill, or other discharge of grease, solids or gray water, which occurs within the city, shall be reported to the City of Key West Wastewater Treatment Plant by the grease hauler as soon as possible but not longer than twenty-four (24) hours after the incident. The grease hauler shall comply with all procedures and reporting requirements contained in federal, state and local regulations. The grease hauler shall be responsible for all clean-up procedures and costs.

(c) Record keeping. Grease haulers shall retain and make available for inspection and copying, all records related to grease interceptor or trap pumping and grease disposal. A City of Key West grease hauler manifest or approved form shall be

required to be signed by the grease hauler certifying the accuracy of the information on the manifest. The manifest shall include, but not be limited to, name, location, date and time of the facility serviced, estimated gallonage removed from interceptor or trap, disposal times, dates, locations, and amounts. These records shall remain available for a period of at least three (3) years. The failure to provide information to the city within ten (10) days of a written request is a violation of this article.

(d) Vehicle inspection. Grease haulers shall permit the city to inspect grease hauler's registered vehicles.

(e) Disposal. Wastes removed from each grease interceptor or trap shall be disposed of at a grease disposal facility permitted to receive such wastes. Grease, solid materials, or gray water removed from interceptors or traps shall not be returned to any grease interceptor, trap, private sewer line, or to any portion of the city's treatment works.

(f) Grease hauler enforcement. Enforcement actions against grease haulers in violation of this article shall be as follows:

(1) Notice of code violation (NOCV). A NOCV may be issued to any grease hauler who is found to be in non-compliance with this article. Response to this notice must be received by the city within ten (10) calendar days of its receipt by the grease hauler. The grease hauler will be required to describe how the

violation occurred, verification that the violation has been corrected, and shall provide assurance that steps will be taken to prevent the re-occurrence of the violation.

(2) Registration revocation. Any registration issued pursuant to the provisions of this article may be modified, suspended or revoked in whole or in part during its term for cause shown including, but not limited to any one (1) of the following:

- a. Falsification of any information;
- b. Discharging any grease, liquid, or solid waste into a non-authorized location; or
- c. Failing to comply with this article.

Sec. 74-259. F.O.G. Ordinance Fees and Charges.

The city commission has the authority to establish, and shall establish and amend fees and related charges associated with this ordinance by resolution, as needed.

Sec. 74-260. Enforcement; appeals.

(a) Referral to code enforcement special magistrate. The director may enforce the violation of any provision of this article against an owner or grease hauler, pursuant to and in the manner provided by Chapter 2, Article VI of the City of Key West Code and the provisions of F.S. Ch. 162.

(b) Injunctive and other relief. The City Manager or designee, through the city attorney, may file a petition in the name of the city in the Circuit Court of the County or such other courts as may have jurisdiction seeking the issuance of an injunction, damages, or other appropriate relief to enforce the provisions of this article or other applicable law or regulation.

(c) Recovery of damages. When the discharge from a food service facility causes an obstruction, damage, or any other impairment to the wastewater collection system, or causes any expense, fine, penalty, or damage of whatever character or nature to the city, the director shall invoice the owner for same incurred by the city. If the invoice is not paid, the director shall notify the city attorney to take such actions as shall be appropriate to seek reimbursement.

(d) Remedies nonexclusive. The remedies provided for in this article are not mutually exclusive. The director may take any, all, or any combination of these actions against a noncompliant person or business.

(e) Appeal of revocation or denial of grease hauler registration. Any revocation or denial of grease hauler registration may be appealed in accordance with Section 2.642 of the City of Key West Code of Ordinances. The appellate officer designated to hear these matters shall be the special magistrate.

The grease hauler shall have fifteen (15) days from receipt of written notice of denial or revocation of the registration to file an appeal. Failure of the grease hauler to file an appeal within the fifteen (15) day time limit shall constitute acceptance of the decision to deny or revoke the registration.

Sec. 74-261. Additional criminal offenses.

(a) Falsifying information. Any person who knowingly makes any false statements, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this article, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under this article, shall, upon conviction, be subject to a penalty in an amount not to exceed five hundred dollars (\$500.00), or by imprisonment for not more than sixty (60) days, or by both. Each day on which a violation shall occur or continue shall be deemed a separate and distinct offense.

Section 3: If any section, provision, clause, phrase, or application of this Ordinance is held invalid or unconstitutional for any reason by any court of competent

jurisdiction, the remaining provisions of this Ordinance shall be deemed severable therefrom and shall be construed as reasonable and necessary to achieve the lawful purposes of this Ordinance.

Section 4: All Ordinances or parts of Ordinances of said City in conflict with the provisions of this Ordinance are hereby superseded to the extent of such conflict.

Section 5: This Ordinance shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

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Read and passed on first reading at a regular meeting held
this 6th day of August, 2025.

Read and passed on final reading at a regular meeting held
this 3rd day of September, 2025.


Authenticated by the presiding officer and Clerk of
the Commission on 4th day of September, 2025.

Filed with the Clerk September 4, 2025.

Mayor Danise Henriquez	<u>Yes</u>
Vice Mayor Donald "Donie" Lee	<u>Yes</u>
Commissioner Lissette Carey	<u>Yes</u>
Commissioner Aaron Castillo	<u>Yes</u>
Commissioner Monica Haskell	<u>Yes</u>
Commissioner Mary Lou Hoover	<u>Absent</u>
Commissioner Sam Kaufman	<u>Yes</u>


DANISE HENRIQUEZ, MAYOR

ATTEST:


KERI O'BRIEN, CITY CLERK



MEMORANDUM

Date: August 6, 2025

To: Honorable Mayor and Commissioners

Via: Brian L. Barroso
City Manager

cc: Todd Stoughton
Assistant City Manager

From: Matt Willman
Utilities Director

Subject: AN ORDINANCE OF THE CITY OF KEY WEST, FL, AMENDING CHAPTER 74 OF THE CODE OF ORDINANCES, ENTITLED "UTILITIES", ARTICLE II ENTITLED "SANITARY SEWER SYSTEM," BY ADDING ARTICLE VI ENTITLED "FATS OILS AND GREASE MANAGEMENT" SECTION 74-245 THROUGH 74-261 TO PROVIDE REGULATIONS FOR UNIFORM MAINTENANCE AND MONITORING REQUIREMENTS FOR CONTROLLING THE DISCHARGE OF GREASE FROM FOOD SERVICE FACILITIES, AND GREASE HAULING; ADDING SECTIONS 74-250 - TITLE; SECTION 74-251 - PURPOSE; SECTION 74-252 – APPLICABILITY; SECTION 74-253 – DEFINITIONS; SECTION 74-254 – AUTHORITY; SECTION 74-255 – FACILITY INSPECTIONS; 74-256 – GREASE TRAPS & INTERCEPTORS; SECTION 74-257 – GREASE INTERCEPTOR AND TRAP ENFORCEMENT; SECTION 74-258 – GREASE HAULERS; SECTION 74-259 – FEES; SECTION 74-260 – ENFORCEMENT, APPEALS; AND SECTION 74-261 ADDITIONAL CRIMINAL OFFENSES; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF INCONSISTENT PROVISIONS; PROVIDING FOR AN EFFECTIVE DATE.

Introduction

An Ordinance Of The City Of Key West, Fl, Amending Chapter 74 Of The Code Of Ordinances, Entitled "Utilities", Article II Entitled "Sanitary Sewer System," By Adding Article VI Entitled "Fats Oils And Grease Management" Section 74-245 Through 74-261 To Provide Regulations For Uniform Maintenance And Monitoring Requirements For Controlling The Discharge Of Grease From Food Service Facilities, And Grease Hauling; Adding Sections 74-250 - Title; Section 74-251 - Purpose; Section 74-252 –

Applicability; Section 74-253 – Definitions; Section 74-254 – Authority; Section 74-255 – Facility Inspections; 74-256 – Grease Traps & Interceptors; Section 74-257 – Grease Interceptor And Trap Enforcement; Section 74-258 – Grease Haulers; Section 74-259 – Fees; Section 74-260 – Enforcement, Appeals; And Section 74-261 Additional Criminal Offenses; Providing For Severability; Providing For Repeal Of Inconsistent Provisions; Providing For An Effective Date.

Background

Through a variety of “SSO’s” (Sanitary Sewer Overflows) prior to 2021, the City was issued a consent order (OGC File No 21-0851) with certain corrective measures required. Item 5.G of the order was to “fully implement a documented Capacity, Management, Operation, and Maintenance (CMOM) program”, which began in 2024.

A portion of said CMOM is the implementation of this proposed F.O.G. Ordinance.

Section 5.3 of the CMOM Document dated August 28, 2024, states the following:
FOG “hot spots” have been identified and have been added to an additional cleaning schedule in order to prevent buildup and SSOs. The largest hot spot is Duval Street where food service establishments are clustered around this tourist area. This area is also monitored for street and storm drain flooding during heavy rain event. Storm drains in the area are also cleaned prior to any forecasted heavy rain events. A written formal FOG program will be implemented by CKW by the end of 2025. The program may include updates to the Code of Ordinances, inspection details, and enforcement activities.

Procurement

Any expenses incurred are anticipated to be minimal. Existing City Staff shall provide the inspections required within the proposed ordinance.

There should not be any Business Impacts as this is already a process followed by compliant Licensees. Only violation fees may be enforced more frequently than current enforcement procedures.

Recommendation

The City Manager’s Office recommends the Mayor and Commission approve the Fats, Oil, and Grease (F.O.G.) Ordinance as proposed, authorizing the City Manager to execute all documents, and direct Staff to develop any new processes associated with managing the ordinance. Approval of this ordinance will have the City one step closer to compliance and closure of Consent Order OGC File No 21-0851.

Exhibits:

Exhibit A – CMOM



FLORIDA DEPARTMENT OF Environmental Protection

South District
PO Box 2549
Fort Myers FL 33902-2549
SouthDistrict@FloridaDEP.gov

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

August 24, 2022

Kelly M. Crowe, P.E., Utilities Director
City of Key West
3140 Flagler Ave
Key West, FL 33040
Email: kcrowe@cityofkeywest-fl.gov

Re: Monroe County – Domestic Wastewater
OGC Case No. 21-0581
Richard A. Heyman WWTP – Key West
Facility ID No. FLA147222

Dear Mr. Crowe:

Enclosed is the signed and entered Consent Order to resolve the above referenced case. This copy is for your records. Please note that all compliance dates begin from the date of entry of this Order, which is August 24, 2022.

Upon satisfactory completion of all conditions of the Order, we will close this case and place it in our inactive file.

If you have any questions, please contact Gary Hardie at Gary.Hardie@FloridaDEP.gov or 305-289-7074. Your cooperation in resolving this case is appreciated.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jennifer L. Carpenter".

Jennifer L. Carpenter
Acting District Director
South District Office
Department of Environmental Protection

Enclosure: Executed Consent Order

cc: Lea Crandall, FDEP Agency_Clerk@dep.state.fl.us

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF FLORIDA DEPARTMENT)	IN THE OFFICE OF THE
OF ENVIRONMENTAL PROTECTION)	SOUTH DISTRICT
)	
v.)	OGC FILE NO. 21-0581
)	
CITY OF KEY WEST)	
_____)	

CONSENT ORDER

This Consent Order (Order) is entered into between the State of Florida Department of Environmental Protection (Department) and City of Key West (Respondent) to reach settlement of certain matters at issue between the Department and Respondent.

The Department finds and Respondent admits the following:

1. The Department is the administrative agency of the State of Florida having the power and duty to protect Florida's air and water resources and to administer and enforce the provisions of Chapter 403, Florida Statutes (F.S.), and the rules promulgated and authorized in Title 62, Florida Administrative Code (F.A.C.). The Department has jurisdiction over the matters addressed in this Order.
2. Respondent is a person within the meaning of Section 403.031(5), F.S.
3. Respondent is the owner and is responsible for the operation of the Richard A. Heyman WWTP-Key West (Facility), an existing 10.0 million gallons per day (MGD), annual average daily flow (AADF) domestic wastewater treatment facility. The headworks consist of three mechanical bar screens at 10 MGD, AADF, two grit removal systems and an odor control system. The biological treatment units consist of: two aeration basins (total volume 3.33 MG), one anoxic basin (0.97 MG), and one re-aeration basin (0.11 MG). Solids are removed from the effluent by two clarifiers with a capacity of 10 MGD each and four cloth media filters. The ultraviolet disinfection system consists of two UV-reactors. The facility has two offline chlorine contact tanks (no chlorination). The residuals system consists of two sludge storage tanks (total volume 0.44 MG) and two belt-filter presses (fed at 600 - 900 pounds dry solids per hour). The

effluent disposal method is by an underground injection well system consisting of 2 Class V underground injection wells permitted under Department permit number(s) 327710-001-UO/5W and 327710-002-UO/5W discharging to Class G-III ground water. The Facility is operated under Wastewater Permit No. FLA147222 (Permit), which was issued on January 23, 2019 and will expire on January 22, 2024. The Facility is located at Trumbo Point Annex-Fleming Key, in Monroe County, Florida (Property). Respondent owns the Property on which the Facility is located.

4. The Department finds that the following violations occurred:

a) Respondent reported 9 unpermitted or unauthorized discharges not involving surface or groundwater quality violations. Spill details are in Exhibit B attached and incorporated to this Order. The Department finds that the discharges violated Rule 62-604.130(1), F.A.C., and Section 403.161(1)(a), F.S.

b) Respondent reported an additional 2 unpermitted or unauthorized discharges on September 13, 2020 that resulted in surface water quality violations at Flagler Avenue and the Trumbo Point Annex. Spill details are in Exhibit B attached and incorporated to this Order. The Department finds that the discharges violated Rules 62-604.130(1) F.A.C., Rule 62-302.530(6)(c) F.A.C., and Section 403.161(1)(a), F.S.

c) Respondent has sampling data indicating elevated levels of Enterococcus at various sampling locations within the City of Key West. The Department finds that these elevated levels of bacteria violate Rule 62-302.530(6)(c) F.A.C. and Rule 62-302.300(15) F.A.C. Sampling data was provided by the Respondent for the spills documented below:

1) Sampling data associated with two spills on December 23, 2019 at Front and Duval Streets and manholes on Flagler indicate levels of Enterococcus exceeding surface water quality standards at Linda Avenue, 15th Street, 18th Street, 11th Street and Venetian sampling locations.

2) Sampling data associated with the spill on September 13, 2020 at Flagler Avenue indicate levels of Enterococcus exceeding surface water quality

standards at canal outfalls at Linda Avenue, Riviera Canal boat ramp, and Riviera Street and 18th Street.

3) Sampling data associated with the spill on September 13, 2020 at Trumbo Point Annex indicate levels of Enterococcus exceeding surface water quality standards at Fleming Channel.

4) Sampling data associated with the spill on August 11, 2021 at Seminal and Thompson Streets indicate levels of Enterococcus exceeding surface water quality standards at the Jose Marti Lagoon, at Garrison Bight and Roosevelt and at Garrison Bight Bridge North sampling locations.

5) Sampling data associated with the spill on August 17, 2021 at Roosevelt and Kennedy Streets indicate levels of Enterococcus exceeding surface water quality standards at the Ibis Bay Lagoon, Parrot Key Bridge, Gulf View and Marriott Courtyard sampling locations.

d) Respondent failed to submit required notification to the Department in a timely manner for the unauthorized discharge on July 23, 2020. The discharge was reported on March 15, 2021. The Department finds that the failure to report in a timely manner violated Rule 62-604.550(2)(c) F.A.C.

e) Respondent failed to meet permit imposed effluent limitations for Ultraviolet Light Transmittance, Total Nitrogen, Total Suspended Solids (TSS), Ultraviolet Light Dosage, Total Phosphorus, Biological Oxygen Demand (BOD) and Fecal Coliform from April 2020 to June 2021. Each exceedance is a violation of Rule 62-600.410(1) F.A.C.

1) The Respondent had exceedances for Ultraviolet Light Transmittance in January 2021, December 2020, October 2020 and September 2020. Details are in Exhibit C attached and incorporated in this Order.

2) The Respondent had exceedances for Total Nitrogen in December 2020, November 2020, September 2020 and August 2020. Details are in Exhibit C attached and incorporated in this Order.

3) The Respondent has exceedances for TSS in November 2020, October 2020, and September 2020. Details are in Exhibit C attached and incorporated in this Order.

4) The Respondent had an exceedance for Ultraviolet Light Dosage in September 2020. Details are in Exhibit C attached and incorporated in this Order.

5) The Respondent had exceedances for Total Phosphorus in November 2020 and September 2020. Details are in Exhibit C attached and incorporated in this Order.

6) The Respondent had an exceedance for BOD in September 2020. Details are in Exhibit C attached and incorporated in this Order.

7) The Respondent had exceedances for Fecal Coliform in June 2021, September 2020, May 2020 and April 2020. Details are in Exhibit C attached and incorporated in this Order.

Having reached a resolution of the matter Respondent and the Department mutually agree and it is

ORDERED:

5. Respondent shall comply with the following corrective actions within the stated time periods:

(A) Respondent shall submit to the Department an evaluation conducted by a professional engineer registered in the state of Florida, of the UV disinfection system, to discover the cause or causes of the violations identified in paragraph 4 above, and design modifications to the UV disinfection system to prevent recurrence and improve reliability such that with the largest flow capacity unit out of service, the flow capacity of the remaining units shall be sufficient to handle the peak wastewater flow.	August 31, 2022
As an interim short-term corrective action to improve UV system	August 31, 2022

<p>reliability, Respondent shall install a working alarm system that immediately alerts operators to at least the following UV system malfunctions:</p> <ul style="list-style-type: none"> • Lamp/Ballast failure. • Low UV Dose. • Low UV Intensity. • Low UV Transmittance. 	
<p>(B) Respondent shall submit to the Department a plan and schedule (hereinafter, I&I Plan) to reduce infiltration and inflow (I&I) into the collection system. Referring to the EPA Quick Guide for Estimating Infiltration and Inflow dated June 2014 which is attached to this Order and also available at the following link: https://www3.epa.gov/region1/sso/pdfs/QuickGuide4EstimatingInfiltrationInflow.pdf, (copy provided as Attachment 1), the I&I Plan shall reduce ADW flow to less than 120.0 gallons per person per day (gppd), reduce infiltration rate in gallons per day per inch of diameter per mile of pipe (gpd/idm) to less than 1,500.0 gpd/idm, and reduce the Average WWF divided by the population served to less than 275.0 gallons per person per day (gppd).</p>	<p>September 30, 2023</p>
<p>The actions in the I&I Plan shall have a completion date no later than June 30, 2025.</p>	<p>June 30, 2025</p>
<p>If the Facility has not returned to compliance after completing the actions in the I&I Plan, Respondent shall, submit to the Department a permit application with a schedule to expand or upgrade the Facility to bring Respondent into compliance with Permit FLA147222 and Fla. Admin. Code Chapters 62-600, 62-604, 62-610, 62-620, and 62-640.</p>	<p>September 30, 2025</p>

<p>(C) Respondent shall submit a plan and schedule (hereinafter, Lift Station Plan) to the Department for approval to bring all of the Facility's lift stations into compliance with the standards specified in the "Recommended Standards for Wastewater Facilities," the current version of which is referenced in Rule 62-604.300(5)(g), Florida Administrative Code.</p>	<p>September 30, 2023</p>
<p>The Lift Station Plan shall have a completion date no later than June 30, 2025.</p>	<p>June 30, 2025</p>
<p>If the Facility has not returned to compliance after completing the actions in the Lift Station Plan, Respondent shall, submit to the Department a permit application with a schedule to expand or upgrade the system to bring Respondent into compliance with Permit FLA147222 and Fla. Admin. Code Chapters 62-600, 62-604, 62-610, 62-620, and 62-640.</p>	<p>September 30, 2025</p>
<p>(D) Develop and implement a Pollutant Reduction Plan to address elevated Enterococcus bacteria levels at Linda Avenue, Riviera Canal boat ramp, Riviera Street and 18th Street outfalls, and any other areas known to have elevated Enterococcus bacteria levels, such as the Jose Marti Lagoon and Venetian area. The Plan shall include measures to identify and eliminate sources of Enterococcus bacteria within the City of Key West and shall be submitted to the Department for review and approval.</p>	<p>June 30, 2023</p>
<p>(E) Conduct and submit quarterly sampling data for at least 1 year/4 quarters to the Department for the areas referenced in subparagraph 5 (D) above (minimum 2 stations per area) and other areas known to have elevated bacteria levels, such as the Jose Marti Lagoon and</p>	<p>September 30, 2022 December 31, 2022 March 31, 2023 June 30, 2023</p>

Venetian area. The sampling shall continue until bacteria levels fall within surface water quality criteria for at least two consecutive quarters.	And continue until elevated bacteria levels fall within surface water quality criteria for at least two consecutive quarters.
(F) Investigate the effluent exceedances to avoid violating permit limitations in the future and provide a report indicating what the City of Key West will do to prevent such future violations from occurring.	August 31, 2022
Corrective actions shall be completed by May 31, 2023.	May 31, 2023
(G) Fully implement a documented Capacity, Management, Operation, and Maintenance (CMOM) program in accordance with US EPA document 305-B-05- 002 dated January 2005 ("Guide for Evaluating Capacity, Management, Operation, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems").	September 1, 2024
(H) Document reasonable further progress in implementing the CMOM in semiannual reports in accordance with subparagraph 5 (G) of this order.	January 31, 2023 July 31, 2023 January 31, 2024 And so on until the CMOM program is fully implemented.
(I) Provide a report indicating the list of projects that the City of Key West is doing to improve aging infrastructure.	August 31, 2022
(J) Submit a list of all known pump stations and collection systems connected to the City of Key West that are not under the direct control of the City of Key West, including the portion(s) of the FKAA collection system and any private collection systems. Include	August 31, 2022

responsible party contact information, estimated flow from the pump station, the location of the pump station, and any known complaints or problems since September 2017/Hurricane Irma.	
(K) Submit in writing to the Department, every 6 months, a report containing information concerning the status and progress of projects completed under this Order. The report shall include projection of the work to be performed pursuant to this Order. The report shall include status update of any In-Kind projects.	September 30, 2022 March 31, 2023 September 30, 2023 And so on until the Consent Order is closed.
(L) Submit to the Department a Final Report demonstrating that all conditions and corrective actions required in this consent order have been completed.	December 31, 2025

6. Notwithstanding the time periods described in the paragraphs above, Respondent shall complete all corrective actions required by paragraph 5 on or before December 31, 2025, and be in full compliance with Section 403.161(1)(a), F.S., and Permit FLA147222, and Fla. Admin. Code Chapters 62-302, 62-600, 62-604, 62-610, 62-620, and 62-640, regardless of any intervening events or alternative time frames imposed in this Order.

7. Within 30 days of the effective date of this Order, Respondent shall pay the Department \$58,125.73 in settlement of the regulatory matters addressed in this Order. This amount includes \$57,625.73 for civil penalties and \$500.00 for costs and expenses incurred by the Department during the investigation of this matter and the preparation and tracking of this Order. The civil penalty in this case includes 8 violations that each warrant a penalty of \$2,000.00 or more.

8. In lieu of making cash payment of \$57,625.73 in civil penalties as set forth in paragraph 7 above, Respondent may elect to offset this amount by implementing an in-kind penalty project, which must be approved by the Department. An in-kind project must be either an environmental enhancement, environmental restoration or a capital/facility

improvement project and may not be a corrective action requirement of the Order or otherwise required by law. The Department may also consider the donation of environmentally sensitive land as an in-kind project. The value of the in-kind penalty project shall be one and a half times the civil penalty off-set amount, which in this case is the equivalent of at least \$86,438.60. If Respondent chooses to implement an in-kind project, Respondent shall notify the Department of its election by certified mail within 15 days of the effective date of this Consent Order. Notwithstanding the election to implement an in-kind project, payment of the remaining \$500.00 in costs must be paid within 30 days of the effective date of the Consent Order.

9. If Respondent elects to implement an in-kind project as provided in paragraph 8, then Respondent shall comply with all the requirements and time frames in Exhibit A entitled In-Kind Projects attached and incorporated to this Order.

10. Respondent agrees to pay the Department stipulated penalties in the amount of \$1,000.00 per day for each and every day Respondent fails to timely comply with any of the requirements of this Consent Order. Additionally, Respondent shall pay the Department stipulated penalties for any discharges of wastewater from the WWTF and/or collection/transmission system. Respondent shall pay penalties as follows:

<u>Amount p/day p/ discharge</u>	<u>Discharge Volume</u>
\$1,000.00	up to 5,000 gallons
\$2,000.00	5,001 to 10,000 gallons
\$5,000.00	10,001 to 25,000 gallons
\$10,000.00	25,001 to 100,000 gallons
\$15,000.00	in excess of 100,000 gallons

The Department may demand stipulated penalties at any time after violations occur. Respondent shall pay stipulated penalties owed within 30 days of the Department's issuance of written demand for payment, and shall do so as further described in paragraph 11, below. Nothing in this paragraph shall prevent the Department from filing suit to specifically enforce

any terms of this Order. Any stipulated penalties assessed under this paragraph shall be in addition to the civil penalties agreed to in paragraph 7 of this Order.

11. In lieu of making a cash payment of the amount required under paragraph 10 (stipulated penalties) above, the Department, at its discretion, may allow Respondent to offset this amount by implementing an in-kind project, which must be approved by the Department. An in-kind project must be either an environmental enhancement, environmental restoration or a capital/facility improvement project and may not be a corrective action requirement of this Consent Order or otherwise required by law. The Department may also consider the donation of environmentally sensitive land as an in-kind project. The value of the in-kind penalty project shall be one and a half times the portion of the stipulated penalty amount for which the approved project off-sets. The Respondent shall request consideration of applying stipulated penalties toward an in-kind project within 15 days of notification by the Department that stipulated penalties are being assessed under paragraph 10. If acceptable, the Respondent shall comply with all the requirements and timeframes in Consent Order Exhibit A, entitled In-Kind Projects. If not acceptable, the Respondent will pay the stipulated penalties within 30 days of receipt of the Department's notification that applying the stipulated penalties to an in-kind project is not acceptable.

12. In the event that Respondent elects to offset civil penalties, including stipulated penalties, by implementing an in-kind penalty project which is approved by the Department, during the period that this Consent Order remains in effect or during the effective date of any Department issued Permit to Respondent whichever is longer (Prohibited Transfer Duration), Respondent shall not transfer or use funds obtained by the Respondent from the collection of sewer rates for any purpose not related to the management, operation, or maintenance of the Sewer System or to any capital improvement needs of the Sewer System (hereinafter, Prohibited Transfer). Respondent shall annually certify to the Department using the Annual Certification Form located within Exhibit A to this Consent Order that no Prohibited Transfer has occurred. In the event of any Prohibited

Transfer, the In-Kind project option shall be forfeited, and entire civil penalty shall immediately become due and owing to the Department irrespective of any expenditures by the Respondent in furtherance of the In-Kind project.

13. Respondent shall make all payments required by this Order by cashier's check, money order or on-line payment. Cashier's check or money order shall be made payable to the "Department of Environmental Protection" and shall include both the OGC number assigned to this Order and the notation "Water Quality Assurance Trust Fund." Online payments by e-check can be made by going to the DEP Business Portal at: <http://www.fldepportal.com/go/pay/>. It will take a number of days after this order is final, effective and filed with the Clerk of the Department before ability to make online payment is available.

14. Except as otherwise provided, all submittals and payments required by this Order shall be sent to Gary Hardie, Environmental Specialist III, Department of Environmental Protection, 2796 Overseas Highway, Suite 221, Marathon, FL 33050, or via e-mail at Gary.Hardie@FloridaDEP.gov.

15. Respondent shall allow all authorized representatives of the Department access to the Facility and the Property at reasonable times for the purpose of determining compliance with the terms of this Order and the rules and statutes administered by the Department.

16. In the event of a sale or conveyance of the Facility or of the Property upon which the Facility is located, if all of the requirements of this Order have not been fully satisfied, Respondent shall, at least 30 days prior to the sale or conveyance of the Facility or Property, (a) notify the Department of such sale or conveyance, (b) provide the name and address of the purchaser, operator, or person(s) in control of the Facility, and (c) provide a copy of this Order with all attachments to the purchaser, operator, or person(s) in control of the Facility. The sale or conveyance of the Facility or the Property does not relieve Respondent of the obligations imposed in this Order.

17. If any event, including administrative or judicial challenges by third parties unrelated to Respondent, occurs which causes delay or the reasonable likelihood of delay in

complying with the requirements of this Order, Respondent shall have the burden of proving the delay was or will be caused by circumstances beyond the reasonable control of Respondent and could not have been or cannot be overcome by Respondent's due diligence. Neither economic circumstances nor the failure of a contractor, subcontractor, materialman, or other agent (collectively referred to as "contractor") to whom responsibility for performance is delegated to meet contractually imposed deadlines shall be considered circumstances beyond the control of Respondent (unless the cause of the contractor's late performance was also beyond the contractor's control). Upon occurrence of an event causing delay, or upon becoming aware of a potential for delay, Respondent shall notify the Department by the next working day and shall, within seven calendar days notify the Department in writing of (a) the anticipated length and cause of the delay, (b) the measures taken or to be taken to prevent or minimize the delay, and (c) the timetable by which Respondent intends to implement these measures. If the parties can agree that the delay or anticipated delay has been or will be caused by circumstances beyond the reasonable control of Respondent, the time for performance hereunder shall be extended. The agreement to extend compliance must identify the provision or provisions extended, the new compliance date or dates, and the additional measures Respondent must take to avoid or minimize the delay, if any. Failure of Respondent to comply with the notice requirements of this paragraph in a timely manner constitutes a waiver of Respondent's right to request an extension of time for compliance for those circumstances.

18. The Department, for and in consideration of the complete and timely performance by Respondent of all the obligations agreed to in this Order, hereby conditionally waives its right to seek judicial imposition of damages or civil penalties for the violations described above up to the date of the filing of this Order. This waiver is conditioned upon Respondent's complete compliance with all of the terms of this Order.

19. This Order is a settlement of the Department's civil and administrative authority arising under Florida law to resolve the matters addressed herein. This Order is not a settlement of any criminal liabilities which may arise under Florida law, nor is it a settlement

of any violation which may be prosecuted criminally or civilly under federal law. Entry of this Order does not relieve Respondent of the need to comply with applicable federal, state, or local laws, rules, or ordinances.

20. The Department hereby expressly reserves the right to initiate appropriate legal action to address any violations of statutes or rules administered by the Department that are not specifically resolved by this Order.

21. Respondent is fully aware that a violation of the terms of this Order may subject Respondent to judicial imposition of damages, civil penalties up to \$15,000.00 per day per violation, and criminal penalties.

22. Respondent acknowledges and waives its right to an administrative hearing pursuant to sections 120.569 and 120.57, F.S., on the terms of this Order. Respondent also acknowledges and waives its right to appeal the terms of this Order pursuant to section 120.68, F.S.

23. Electronic signatures or other versions of the parties' signatures, such as .pdf or facsimile, shall be valid and have the same force and effect as originals. No modifications of the terms of this Order will be effective until reduced to writing, executed by both Respondent and the Department, and filed with the clerk of the Department.

24. The terms and conditions set forth in this Order may be enforced in a court of competent jurisdiction pursuant to sections 120.69 and 403.121, F.S. Failure to comply with the terms of this Order constitutes a violation of section 403.161(1)(b), F.S.

25. This Consent Order is a final order of the Department pursuant to section 120.52(7), F.S., and it is final and effective on the date filed with the Clerk of the Department unless a Petition for Administrative Hearing is filed in accordance with Chapter 120, F.S. Upon the timely filing of a petition, this Consent Order will not be effective until further order of the Department.

26. Respondent shall publish the following notice in a newspaper of daily circulation in Monroe County, Florida. The notice shall be published one time only within 14 days of the

effective date of the Order. Respondent shall provide a certified copy of the published notice to the Department within 10 days of publication.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF CONSENT ORDER

The Department of Environmental Protection ("Department") gives notice of agency action of entering into a Consent Order with the City of Key West pursuant to section 120.57(4), Florida Statutes. The Consent Order addresses the unauthorized discharges to ground and surface waters, violations to water quality standards, failure to report required notification in a timely manner and effluent exceedances at Richard A. Heyman WWTP.

The Consent Order is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, South District Branch Office, 2796 Overseas Highway, Suite 221, Marathon, FL 33050, phone (305) 289-7070.

Persons who are not parties to this Consent Order, but whose substantial interests are affected by it, have a right to petition for an administrative hearing under sections 120.569 and 120.57, Florida Statutes. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition concerning this Consent Order means that the Department's final action may be different from the position it has taken in the Consent Order.

The petition for administrative hearing must contain all of the following information:

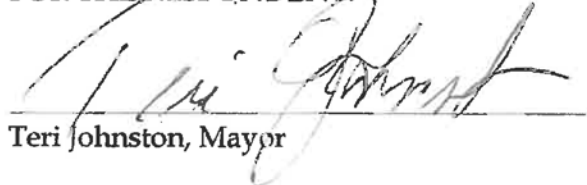
- a) The name and address of each agency affected and each agency's file or identification number, if known;
- b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- c) A statement of when and how the petitioner received notice of the agency decision;
- d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

- e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action;
- f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received) at the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS# 35, Tallahassee, Florida 32399-3000 or received via electronic correspondence at AgencyClerk@FloridaDEP.gov, within 21 days of receipt of this notice. A copy of the petition must also be mailed at the time of filing to the South District Branch Office at Department of Environmental Protection, South District Branch Office, 2796 Overseas Highway, Suite 221, Marathon, FL 33050 or via e-mail at SouthDistrict@FloridaDEP.gov. Failure to file a petition within the 21-day period constitutes a person's waiver of the right to request an administrative hearing and to participate as a party to this proceeding under sections 120.569 and 120.57, Florida Statutes. Before the deadline for filing a petition, a person whose substantial interests are affected by this Consent Order may choose to pursue mediation as an alternative remedy under section 120.573, Florida Statutes. Choosing mediation will not adversely affect such person's right to request an administrative hearing if mediation does not result in a settlement. Additional information about mediation is provided in section 120.573, Florida Statutes and Rule 62-110.106(12), Florida Administrative Code.

27. Rules referenced in this Order are available at
<http://www.dep.state.fl.us/legal/Rules/rulelist.htm>

FOR THE RESPONDENT:


Teri Johnston, Mayor

8/17/22
Date

DONE AND ORDERED this 24th day of August, 2022, in Lee
County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Jennifer L. Carpenter
Acting Director of District
Management South District Office

Filed, on this date, pursuant to section 120.52, F.S., with the designated Department Clerk,
receipt of which is hereby acknowledged.



Clerk

August 24, 2022

Date

Final Clerked Copies furnished to:
Lea Crandall, Agency Clerk
Mail Station 35

Exhibit A

In-Kind Projects

I. Introduction

Proposal

a. Within 60 days of the effective date of this Consent Order, or, of the Department's notification that applying stipulated penalties to an in-kind project is acceptable, Respondent shall submit, by certified mail, a detailed in-kind project proposal to the Department for evaluation. The proposal shall include a summary of benefits, proposed schedule for implementation and documentation of the estimated costs which are expected to be incurred to complete the project. These costs shall not include those incurred in developing the proposal or obtaining approval from the Department for the in-kind project.

Proposal Certification Form

b. The proposal shall also include a Certification by notarized affidavit from a senior management official for _____ (insert name of Respondent) who shall testify as follows:

My name is _____ (print or type name of senior management official) and do hereby testify under penalty of law that:

A. I am a person with management responsibilities for _____ (print or type name of Respondent) budget and finances. During the eighteenth month period prior to the effective date of Consent Order OGC Case No.: _____ there has not been any transfer or use of funds obtained by the _____ (print or type name of Respondent) from the collection of sewer rates for any purpose not related to the management, operation, or maintenance of the Sewer System or to any capital improvement needs of the Sewer System.

B. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly submitting false information in this certification.

Sworn to and subscribed before me, by means of ☐ physical presence or ☐ online notarization,
this ____ day of _____, 20__ by

Personally, known or by Production of the following Identification _____

Notary Public, State of Florida

Printed/typed or stamped name:

My Commission Expires: _____

Commission/Serial No.: _____

Annual Certification Form

My name is _____ (print or type name of senior management official) and do hereby
testify under penalty of law that:

A. I am a person with management responsibilities for _____ (print or type name of Respondent) budget and finances. During the twelve month period immediately preceding the notary date on this Certification, there has not been any transfer or use of funds obtained by the _____ (print or type name of Respondent) from the collection of sewer rates for any purpose not related to the management, operation, or maintenance of the Sewer System or to any capital improvement needs of the Sewer System.

B. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly submitting false information in this certification.

Sworn to and subscribed before me, by means of ☐ physical presence or ☐ online notarization,
this ____ day of _____, 20__ by

Personally, known or by Production of the following Identification _____

Notary Public, State of Florida

Printed/typed or stamped name:

My Commission Expires: _____

Commission/Serial No.: _____

c. If the Department requests additional information or clarification due to a partially incomplete in-kind project proposal or requests modifications due to deficiencies with Department guidelines, Respondent shall submit, by certified mail, all requested additional information, clarification, and modifications within 15 days of receipts of written notice.

d. If upon review of the in-kind project proposal, the Department determines that the project cannot be accepted due to a substantially incomplete proposal or due to substantial deficiencies with minimum Department guidelines; Respondent shall be notified, in writing, of the reason(s) which prevent the acceptance of the proposal. Respondent shall correct and redress all the matters at issue and submit, by certified mail, a new proposal within 30 days of receipt of written notice. In the event that the revised proposal is not approved by the Department, Respondent shall make cash payment of the civil penalties as set forth in paragraphs 7 and 10 above, within 30 days of Department notice.

e. Within 120 days of the effective date of this Consent Order, or, of the Department's notification that applying stipulated penalties to an in-kind project is acceptable Respondent shall obtain approval for an in-kind project from the Department. If an in-kind project proposal is not approved by the Department within 120 days of the effective date of this Consent Order, or, of the Department's notification that applying stipulated penalties to an in-kind project is acceptable then Respondent shall make cash payment of the civil penalties as set forth in paragraphs 7 and 10 above, within 30 days of Department notice.

f. Within 180 days of obtaining Department approval for the in-kind proposal or in accordance with the approved schedule submitted pursuant to paragraph (a) above, Respondent shall complete the entire in-kind project.

g. During the implementation of the in-kind project, Respondent shall place appropriate sign(s) at the project site indicating that Respondent's involvement with the project is the result of a Department enforcement action. Respondent may remove the sign(s) after the project has been completed. However, after the project has been completed Respondent shall not post any sign(s) at the site indicating that the reason for the project was anything other than a Department enforcement action.

h. In the event, Respondent fails to timely submit any requested information to the Department, fails to complete implementation of the in-kind project or otherwise fails to comply with any provision of this paragraph, the in-kind penalty project option shall be forfeited, and the entire amount of civil penalties shall be due from the Respondent to the Department within 30 days of Department notice. If the in-kind penalty project is terminated and Respondent timely remits the entire amount of civil penalties and stipulated penalties due, no additional penalties shall be assessed under paragraphs 7 and 10 for failure to complete the requirement of Exhibit A.

i. Within 15 days of completing the in-kind project, Respondent shall notify the Department, by certified mail, of the project completion and request a verification letter from the Department. Respondent shall submit supporting information verifying that the project was completed in accordance with the approved proposal and documentation showing the actual costs incurred to complete the project. These costs shall not include those incurred in developing the proposal or obtaining approval from the Department for the project.

j. If upon review of the notification of completion, the Department determines that the project cannot be accepted due to a substantially incomplete notification of completion or due to

substantial deviations from the approved in-kind project; Respondent shall be notified, in writing, of the reason(s) which prevent the acceptance of the project. Respondent shall correct and redress all the matters at issue and submit, by certified mail, a new notification of completion within 15 days of receipt of the Department's notice. If upon review of the new submittal, the Department determines that the in-kind project is still incomplete or not in accordance with the approved proposal, the in-kind penalty project option shall be forfeited, and the entire amount of civil penalty shall be due from the Respondent to the Department within 30 days of Department notice. If the in-kind penalty project is terminated and Respondent timely remits the entire amount of civil penalties and stipulated penalties due, no additional penalties shall be assessed under paragraphs 7 and 10 for failure to complete the requirement of Exhibit A.

Exhibit B

Table of Sanitary Sewer Overflows

SWO #	Incident Start Date	Incident End Date	Number of Days Discharging	Reached Surface Water?	Final Spill Volume (Gallons)	Reported Recovered Volume (Gallons)	Location	Spill Characteristic
2022-843	2/11/22	2/11/22	1	N	2,000	2,000	1620 Steven Ave	RAW WASTEWATER
2021-4549	8/17/21	8/17/21	1	Y	2,000	1,000	Roosevelt & Kennedy	RAW WASTEWATER
2021-4410	8/11/21	8/11/21	1	Y	450	350	Seminal & Thompson St	RAW WASTEWATER
2021-2919	6/5/21	6/5/21	1	Y	50,000	25,000	Trumbo Point Annex	Treated Effluent
2020-4863	9/13/20	9/13/20	1	Y	6,000	-	4 th and 16 th at Flagler Ave	RAW WASTEWATER
2020-4862	9/13/20	9/13/20	1	N	1,000	-	Amelia and Thomas Street	RAW WASTEWATER
2020-4861	9/13/20	9/13/20	1	Y	50,000	10,000	Trumbo Point Annex	Partially Treated
None	7/23/20	7/23/20	1	N	19,000	17,000	At Plant	Treated Effluent
2020-2024	4/17/20	4/17/20	1	Y	5,000	1,000	1329 Seminary Street (LS D)	RAW WASTEWATER
2019-7169	12/23/19	12/23/19		Y	1,000	-	Manholes at Front & Duval St	RAW WASTEWATER
2019-7168	12/23/19	12/23/19		Y	5,000	-	Manholes on Flagler	RAW WASTEWATER

Exhibit C

Effluent Exceedances						
Monitoring Group	Date	Description	Result	Limit	Units	Statistical Base
U-001	6/30/2021	Coliform, Fecal	1244	800.0	#/100mL	MB - Maximum
U-001	1/31/2021	Ultraviolet Light Transmittance	63	65.0	percent	ME - Minimum
U-001	12/31/2020	Ultraviolet Light Transmittance	62	65.0	percent	ME - Minimum
U-001	12/31/2020	Nitrogen, Total	8.02	6.0	mg/L	MB - Maximum
U-001	11/30/2020	Solids, Total Suspended	14	10.0	mg/L	MB - Maximum
U-001	11/30/2020	Nitrogen, Total	25.7	6.0	mg/L	MB - Maximum
U-001	11/30/2020	Nitrogen, Total	7.2	4.5	mg/L	WA - Weekly Average
U-001	11/30/2020	Phosphorus, Total (as P)	6.8	2.0	mg/L	MB - Maximum
U-001	11/30/2020	Phosphorus, Total (as P)	1.55	1.5	mg/L	WA - Weekly Average
U-001	10/31/2020	Solids, Total Suspended	22.5	10.0	mg/L	MB - Maximum
U-001	10/31/2020	Ultraviolet Light Transmittance	60	65.0	percent	ME -

U-001	9/30/2020	BOD, Carbonaceous 5 day, 20C	15	10.0	mg/L	MB - Maximum
U-001	9/30/2020	Ultraviolet Light Dosage	0	35.0	mW-s/sqcm	ME - Minimum
U-001	9/30/2020	Solids, Total Suspended	11	6.25	mg/L	MK - Monthly Average
U-001	9/30/2020	Solids, Total Suspended	45.1	7.5	mg/L	WA - Weekly Average
U-001	9/30/2020	Solids, Total Suspended	158	10.0	mg/L	MB - Maximum
U-001	9/30/2020	Ultraviolet Light Transmittance	26	65.0	percent	ME - Minimum
U-001	9/30/2020	Coliform, Fecal	1244	800.0	#/100mL	MB - Maximum
U-001	9/30/2020	Nitrogen, Total	7.41	6.0	mg/L	MB - Maximum
U-001	9/30/2020	Phosphorus, Total (as P)	2.7	2.0	mg/L	MB - Maximum
U-001	8/31/2020	Nitrogen, Total	4.7	4.5	mg/L	WA - Weekly Average
U-001	5/31/2020	Coliform, Fecal	1336	800.0	#/100mL	MB - Maximum
U-001	4/30/2020	Coliform, Fecal	1473	800.0	#/100mL	MB - Maximum

EPA New England Water Infrastructure Outreach provides tools, examples, and technical assistance for water infrastructure operators and managers, local officials, and other decision-makers for more effective and sustainable water infrastructure management. For more information see <http://www.epa.gov/region1/ssol/toolbox.html>

Quick Guide for Estimating Infiltration and Inflow For Region 1 NPDES Annual Reporting

June 2014

Addressing Permit Requirements to:

Submit a calculation of the annual infiltration and inflow (I&I), maximum daily, weekly, and monthly infiltration and the maximum daily, weekly, and monthly inflow for the reporting year. For further details on Infiltration and Inflow, see 'Guide for Estimating Infiltration and Inflow'.

Definitions

Infiltration

Groundwater that infiltrates a sewer system through defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from inflow. Infiltration is generally measured during seasonally high ground water conditions, during a dry period.

Inflow

Water other than sanitary flow that enters a sewer system from sources which include, but are not limited to, roof leaders, cellar drains, yard drains, area drains, drains from wet areas, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, stormwater, surface runoff (including leaking manhole covers), street wash-water, or drainage. Inflow does not include, and is distinguished from infiltration. Inflow is generally measured during wet weather.

Estimations for reporting:

Term	Definition or How to Calculate
Average Dry Weather (ADW) flow	Use highest 7 to 14 day average per day flow without precipitation and during high seasonal groundwater. Includes domestic wastewater and infiltration.
Groundwater Infiltration (GWI)	During ADW flow period, average the low nighttime flows (midnight to 6am) per day for the same time period, minus significant industrial or commercial flows.
Groundwater Infiltration (GWI)	Subtract GWI from ADW flow.
Maximum Daily Infiltration	Subtract BSF from highest daily flow after a dry period of three days or more during high seasonal groundwater.
Maximum Weekly Infiltration	Subtract BSF from highest 7 day average flow after a dry period of three days or more during high seasonal groundwater.
Maximum Monthly Infiltration	Subtract BSF from highest monthly flow during dry or minimal rain period during high seasonal groundwater.

Maximum Daily Inflow	Measured during wet weather. Determine infiltration rate for dry period preceding rain event. Subtract BSF plus infiltration rate from the highest daily flow during the event.
Maximum Weekly Inflow (includes delayed inflow)	Determine infiltration rate for dry period preceding rain event(s). Subtract BSF plus infiltration from the highest 7 day average wet weather flow.
Maximum Monthly Inflow	Determine infiltration rate for dry period preceding rain event(s). Subtract BSF plus infiltration rate from the highest monthly average flow.
Maximum Monthly Infiltration and Inflow	Subtract BSF from highest monthly average flow.
Average Annual Flow	The total annual volume divided by 365 days. The average annual flow can also be calculated by averaging the monthly average flows.
Average Annual Infiltration and Inflow	Subtract the BSF rate from the average annual flow.
Average Annual Infiltration	Average of the monthly minimum flows.
Average Annual Inflow	Subtract the BSF and average annual infiltration from the average annual flow.
Average Wet Weather Flow (Average WWF)	The average daily flow during a period of significant rainfall (excludes significant commercial and industrial flow).
Peak Hourly Wet Weather Flow (Peak WWF)	The highest one hour flow rate during a significant rain event.

Notes:

If your system experiences SSOs or backups, you may have excessive inflow, although infiltration also contributes to the problem. Even where a system is not suffering from SSOs, systems experiencing surcharging should be evaluating their I&I, as should systems where new growth is expected and existing collection system infrastructure may be inadequate or marginal for handling new customers.

Other calculations used by state agencies to determine whether infiltration and/or inflow are excessive include:

Is your Infiltration Rate Excessive?

Some states have an excessive infiltration criterion based on gallons per person per day (gppd) and other states use a criterion of gallons per day per inch of diameter per mile of pipe (gpd/idm).

To determine gppd, divide the ADW flow by the population served. If the ADW flow exceeds 120 gppd, your state agency may consider the infiltration excessive.

To determine gpd/idm, first determine your total inch diameter-miles of pipe (idm). As an example, for a sewer system that has 36 miles of 4 inch diameter laterals, 36 miles of 8 inch diameter, 6 miles of 10 inch diameter, and 6 miles of 12 inch diameter gravity sewers, the total number of inch – miles is:

$$36 \times 4 + 36 \times 8 + 6 \times 10 + 6 \times 12 = 564 \text{ inch diameter miles}$$

To determine gpd/idm, divide the dry weather infiltration rate during seasonal high groundwater (GWI from B above) by the total inch miles. In this example, if the GWI is 2 mgd, with 564 inch diameter-miles of pipe, then the gpd/idm would be:

$$2 \text{ mgd divide by } 564 \text{ idm} = 3546 \text{ gpd/idm}$$

Metcalf & Eddy's text "*Wastewater Engineering: Collection and Pumping of Wastewater*", suggests that infiltration rates for whole collection systems (including service connections) that are lower than 1500 gpd/idm are not usually excessive. The Massachusetts Department of Environmental Protection document "*Guidelines for Performing I/I Analyses*" recommends (as a rule-of-thumb) sewer subsystems of about 20,000 linear feet that exhibit infiltration rates above 4000 gpd/idm be investigated for contributing potentially excessive infiltration. For more information on design standards consult the Technical Report, "*Guidelines for the Design of Wastewater Treatment Works, New England Interstate Water Pollution Control Commission TR-16*".

Is your inflow excessive?

Divide the Average WWF by the population served to determine the gallons per person per day (gppd). If the Average WWF exceeds 275 gppd your state agency may consider the inflow excessive. This calculation should exclude major industrial or commercial flows.

A calculation for gpd/idm can also be determined for wet weather.

Estimating your cost to treat Infiltration and Inflow

Wastewater collection and treatment cost can range from \$2 to \$5 per thousand gallons. An annual I&I volume of 150 million gallons would cost between \$300,000 and \$750,000 per year to transport and treat. For many older collection systems infiltration can be quite substantial, and has been calculated as high as fifty percent of the flow.

If your treatment facility is at or near capacity and an upgrade will be necessary, the cost of reducing I&I to free up capacity at the existing treatment facility should be measured against the cost of building additional treatment capacity.

RESOLUTION NO. 22-180

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, APPROVING AND ACCEPTING THE ATTACHED "CONSENT ORDER" OGC FILE No. 21-0581 BETWEEN THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND THE CITY OF KEY WEST, TO SETTLE MATTERS RELATED TO VIOLATIONS IN CONJUNCTION WITH THE OPERATION OF THE RICHARD A. HEYMAN WASTEWATER TREATMENT PLANT (WWTP) AND THE SANITARY SEWER COLLECTIONS SYSTEM, AND AUTHORIZING THE MAYOR TO EXECUTE THE CONSENT ORDER ON BEHALF OF THE CITY; AUTHORIZING ANY NECESSARY BUDGET AMENDMENTS OR ADJUSTMENTS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the Richard A. Heyman Wastewater Treatment Plant (WWTP) is operated under State of Florida Domestic Wastewater Facility Permit No. FLA147222, with effluent disposal to two Class V underground injection wells permitted through FDEP Permit numbers 327710-001UO/5W and 327710-0020UO/5W. Through these permits, the City and Operations Management International, Inc. (OMI) are responsible for compliance with the permit requirements; and

WHEREAS, FDEP issued a draft Consent Order and the City issued comments on January 5, 2022, in response to certain violations of the permit allowances. In June 2022, City staff had a second opportunity to review the Order and issue comments related to the proposed compliance timeline. The purpose of the Consent Order is to establish an agreement on achievable terms to improve the City's sanitary sewer system and WWTP operations; and

WHEREAS, a penalty fee is established as a component of the Consent Order, however, FDEP at its discretion may allow the City to perform in-kind projects in lieu of payment of the penalty amount; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the attached "Consent Order" (OGC File No. 21-0581) between the State of Florida Department of Environmental Protection and the City of Key West, to settle matters related to violations in conjunction with the operation of the Richard A. Heyman Wastewater Treatment Plant and the Sanitary Sewer Collections System, is hereby approved and accepted, and the Mayor is authorized to execute the Consent Order on behalf of the City.

Section 2: Funds for the stipulated penalty in the amount of \$58,125.73, or in-kind services alternate in the amount of \$87,188.60, if approved by FDEP, shall be budgeted in wastewater and/or sewer accounts. Funding for future projects related to the corrective actions will be budgeted into the wastewater and/or sewer accounts within the appropriate fiscal year that funding is needed. Any necessary budget transfers or adjustments are hereby approved.

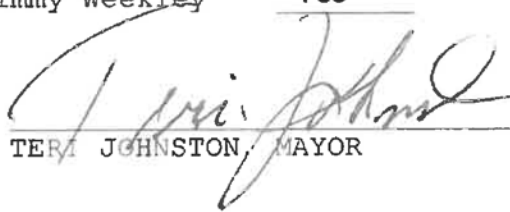
Section 3: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the Presiding Officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 16th day of August, 2022.

Authenticated by the Presiding Officer and Clerk of the Commission on 17th day of August, 2022.

Filed with the Clerk on August 17, 2022.

Mayor Teri Johnston	<u>Yes</u>
Vice Mayor Sam Kaufman	<u>Yes</u>
Commissioner Gregory Davila	<u>Yes</u>
Commissioner Mary Lou Hoover	<u>Yes</u>
Commissioner Clayton Lopez	<u>Yes</u>
Commissioner Billy Wardlow	<u>Yes</u>
Commissioner Jimmy Weekley	<u>Yes</u>


TERI JOHNSTON, MAYOR

ATTEST:


KERI O'BRIEN, DEPUTY CITY CLERK



City of Key West
Key West, FL

Capacity, Management, Operation and Maintenance (CMOM) Plan

Richard A. Heyman Wastewater Treatment Plant and Collection System

Prepared for:

City of Key West

August 28, 2024

Prepared by:

Jacobs

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Acronyms and Abbreviations

AADF	annual average daily flow
AWWA	American Water Works Association
ARV	air release valve
BOD	biological (or biochemical) oxygen demand
CCTV	closed-circuit television
CEU	continuing education unit
CIP	Capital Improvement Plan
CIPP	Cured-in-Place Pipe
CKW	City of Key West
CMMS	Computerized Maintenance Management System
CMOM	Capacity, Management, Operation, and Maintenance
CO ₂	carbon dioxide
CPI-U	Consumer Price Index for All Urban Consumers
DMR	discharge monitoring report
DOD	Department of Defense
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
FKAA	Florida Keys Aqueduct Authority
FOG	fats, oils, and grease
FSE	food service establishment
GI	grease interceptor
GIS	Geographic Information System
H ₂ S	hydrogen sulfide
HDPE	high-density polyethylene
I&C	instrumentation and controls
I/I	infiltration and inflow
IT	information technology
LF	linear feet
MG	million gallons
MGD	million gallons per day
NASSCO	National Association of Sewer Service Company
NPDES	National Pollutant Discharge Elimination System
O&M	operations and maintenance
OGI	oil/grease interceptor

OJT on-the-job training
OMI Jacobs Operations Management International
OSHA Occupational Safety and Health Administration
PACP Pipeline Assessment Certification Program
PNP Public Notice of Pollution
PVC polyvinyl chloride
RAHEPF Richard A. Heyman Environmental Protection Facility
ROW right of way
SCADA system control and data acquisition
SOP standard operating procedure
SORP sewer overflow response plan
SSES Sanitary Sewer Evaluation Survey
SSO Sanitary Sewer Overflow
SUO Sewer Use Ordinance
TMADF three-month average daily flow
TSS total suspended solids
TV television
UI underground injection
UV ultraviolet
USEPA United States Environmental Protection Agency
VCP vitrified clay sewer pipe
W/WW water/wastewater
WWTP wastewater treatment plant

1 Introduction and Purpose

The purpose of a Capacity, Management, Operations, and Maintenance (CMOM) plan is to assist wastewater utility owners and operators in providing a high level of service to customers and increase regulatory compliance. A CMOM is used to identify and incorporate industry-accepted practices to better manage, operate, and maintain collection systems. CMOM planning also helps to evaluate collection system capacity, respond to and ultimately reduce sanitary sewer overflows (SSOs).

This manual will assist the City of Key West (CKW) in the continuation and expansion of its maintenance program for the entire system; meet its goal to provide reliable, safe, and efficient wastewater services; and satisfy the United States Environmental Protection Agency's (USEPA) guidelines for CMOM activities. The CMOM plan helps CKW to meet USEPA and Florida Department of Environmental Protection (FDEP) regulatory requirements to protect water quality and the environment.

2 Collection System Description

CKW's wastewater collection system consists of more than 85,000 linear feet (lf) of force main and 330,000 lf of gravity main lines serving a population consisting of 26,000 residents and an approximate transient population of 26,000. Visitors to Key West are estimated at 52,000 on an average day. The system has 1,388 manholes and 26 wastewater lift stations. It also receives sewerage from 12 connection points with United States (US) Navy and Coast Guard facilities, and an additional connection with Fort Zachary Taylor State Park. Wastewater from the collection system is conveyed to the Richard A. Heyman Environmental Protection Facility (RAHEPF), a permitted domestic wastewater treatment facility located on Fleming Key. Tables 2.1, 2.2, and 2.3 below summarize the pipe diameter, material, and age distribution respectively for the collection system.

Table 2.1: City of Key West Wastewater Collection System Pipe Diameter Distribution

Pipe Diameter (in)	Force Main	Gravity Main
2-6	22%	0.5%
8-12	20%	85.5%
14-18	14%	7%
20+	44%	6%
Unknown		1%

Table 2.2: City of Key West Wastewater Collection System Pipe Material Distribution

Pipe Material	Force Main	Gravity Main
PVC	78%	99%
HDPE	22%	0.3%
Clay	0%	0.2%
DI	0%	0.5%

Table 2.3: City of Key West Wastewater Collection System Pipe Age Distribution

Pipe Age	Force Main	Gravity Main
0-25 years	78%	86%
26-50 years	22%	14%

Figure 2.1 below shows CKW's lift stations and lift station district boundaries.

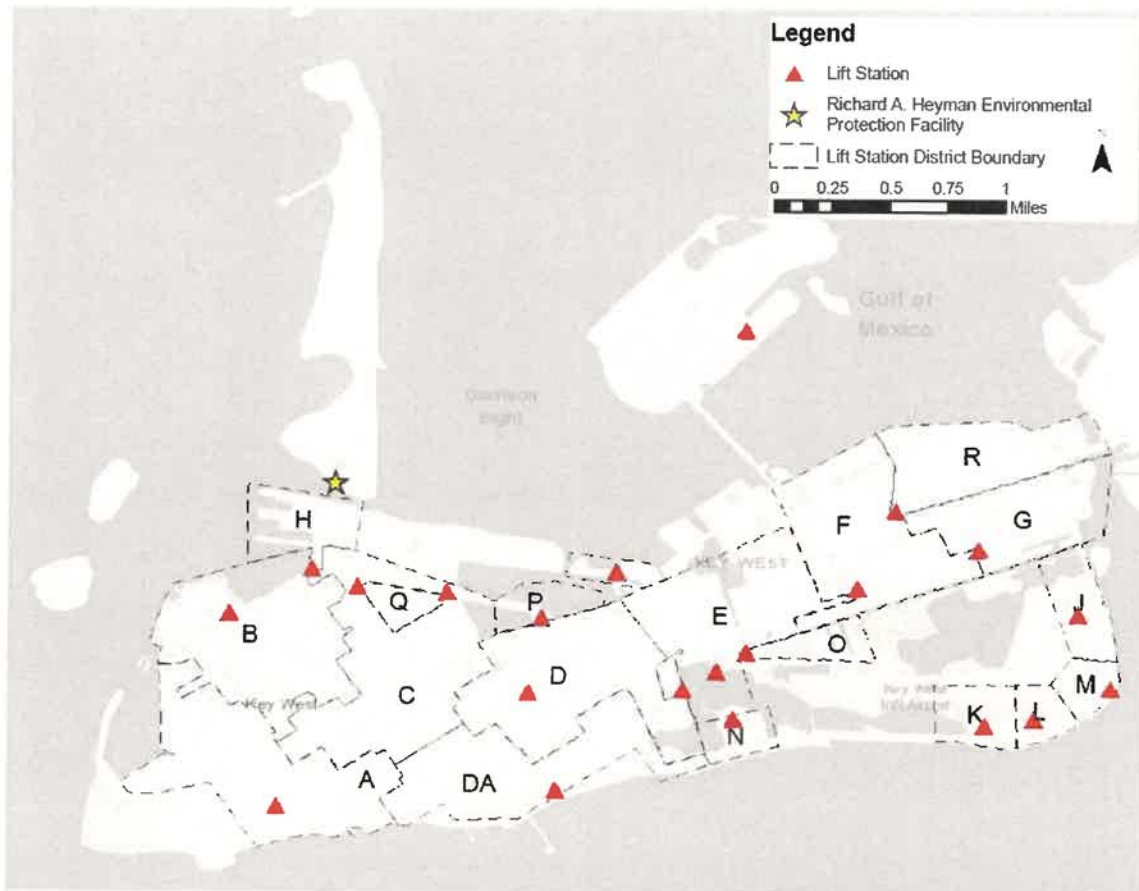


Figure 2.1. City of Key West Wastewater Lift Stations and Lift Station Districts.

City boundaries on Key West extend to adjacent US Navy and Coast Guard bases under separate jurisdiction. The US Navy and Coast Guard bases each have operating areas and residential areas located adjacent to, but outside of the City's boundary. City land-use is primarily residential and commercial. Hospitality is the dominant commercial activity includes hotels, short-term rentals, restaurants and bars servicing tourists arriving by automotive vehicles, aircraft, and boats/ships including large commercial cruise liners. The hospitality industry's impact on overall population on Key West is significant as single day event driven transient population can far exceed reported residential population.

RAHEPF has a 10.0 million gallons per day (MGD) Annual Average Daily Flow (AADF) permitted capacity extended aeration domestic wastewater treatment plant. The plant has an average daily flow for 2023 of 4.6 MGD. The plant consists of headworks of three mechanical bar screens and two grit removal systems. The biological treatment units include a 5-stage Bardenpho process with a 0.35 million gallon (MG) anaerobic zone, 0.87 MG anoxic zone, 2.61 MG aeration zone, 0.97 MG post-anoxic zone, and a 0.24 re-aeration zone. Solids are removed from the effluent by two clarifiers with a capacity of 10 MGD each and four cloth media filters. Two ultraviolet (UV) reactors are utilized for disinfection. The plant also includes two sludge storage tanks (total volume 0.44 MG) and two belt-filter presses. Effluent is discharged under permit to 2 underground injection well systems. (FDEP Permit FLA147222, 1/23/2024-1/22/2029)

3 Collection System Management

Wastewater collection systems are important major assets and represent a large capital investment. Utilities are responsible for managing these systems and should set goals to protect infrastructure investments, provide adequate capacity, reduce operations and maintenance costs, and reduce and rapidly respond to sanitary sewer overflows. Completing all preventative maintenance, timely upgrades, reduction of SSOs, and regulatory compliance are key goals for CKW. Protection of public health and the environment is a priority. CKW also has goals to increase sustainability, resilience, preparation for weather and disasters, and implementing new technology as appropriate. CKW has implemented proper procedures, operations and maintenance (O&M) management, and training to help reach these goals.

3.1 Organizational History and Structure

The City of Key West became an incorporated city in 1828. The territorial council of Florida granted the city a charter. CKW is governed by a mayor-council system with a 6-member city commission elected from individual districts. The city encompasses the 4-mile long and 1-mile-wide island of Key West and is the southernmost city in the contiguous United States. The city also encompasses several nearby islands, including a section of Stock Island. The Naval Air Station Key West, Truman Annex, and Trumbo Point Annex are all under jurisdiction of the US Navy.

The city has 15 departments. The utilities department, falling under the assistant city manager, includes 3 divisions: Waste Water, Storm Water, and Solid Waste. Potable water is provided to the Florida Keys, including CKW, by the Florida Keys Aqueduct Authority (FKAA), independent of the city government. CKW organizational charts are shown below in Figures 3.1 and 3.2.

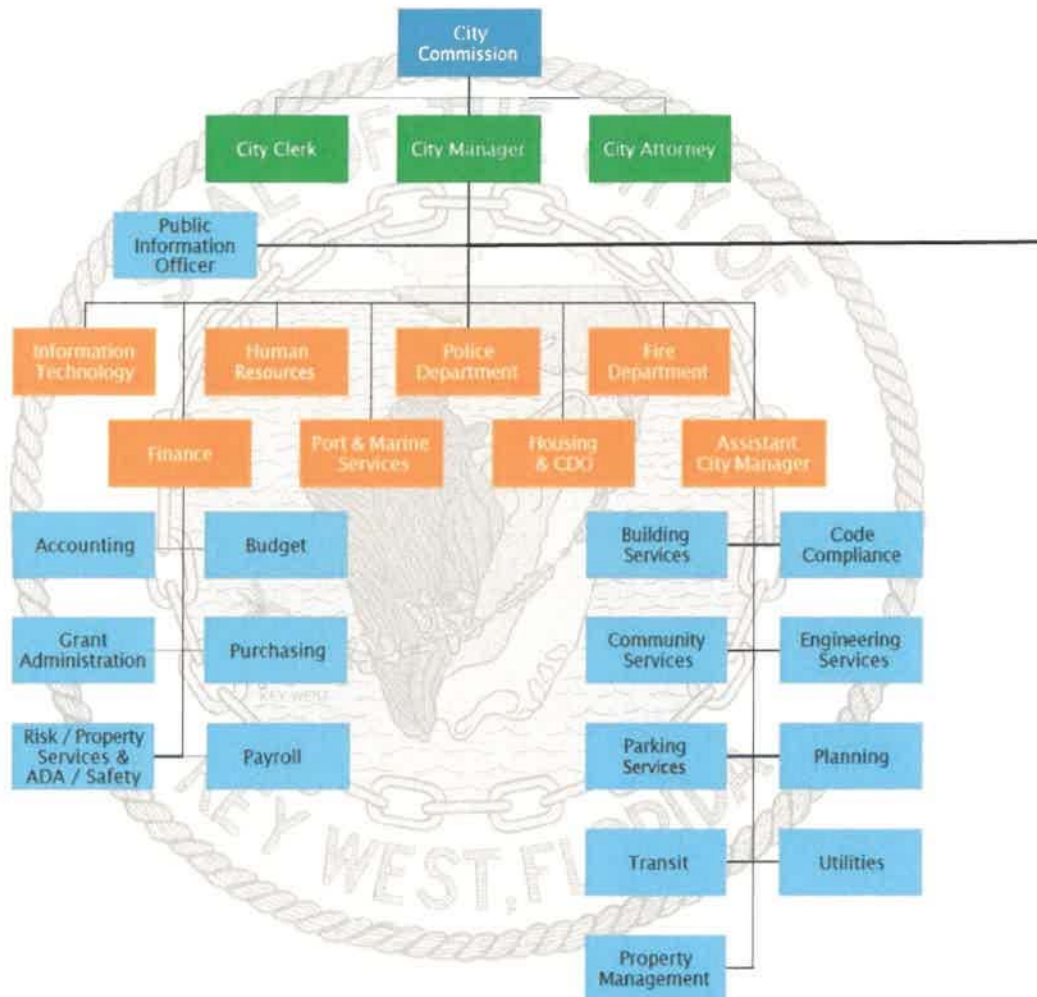


Figure 3.1. City of Key West Organization Chart 2024.

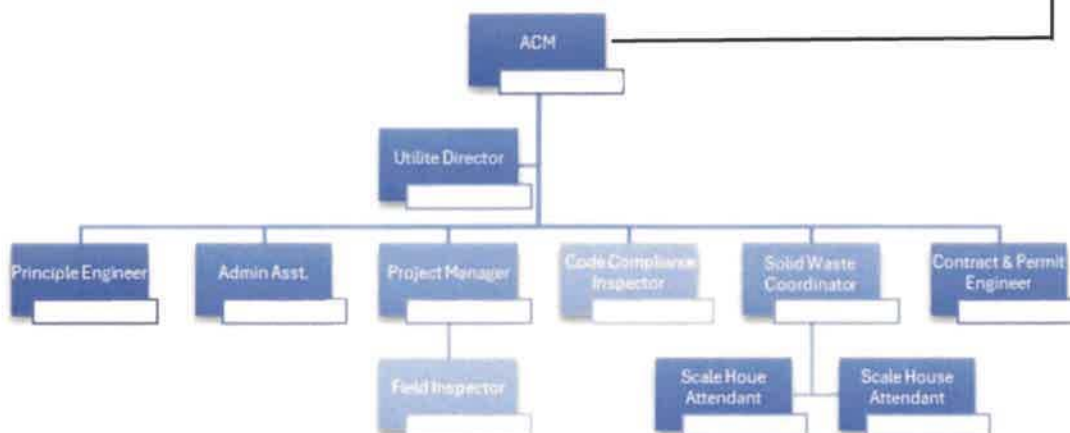


Figure 3.2. City of Key West Utilities Organization Chart 2024.

CKW has contracted Jacobs Operations Management International (Jacobs OMI) to operate, maintain, and manage the wastewater treatment plant (RAHEPF) and related facilities, including collection and

stormwater systems. Jacobs OMI includes a project manager, operations supervisor, maintenance supervisor, and collection system supervisor. Jacobs OMI organization chart is shown in Figure 3.3 below.

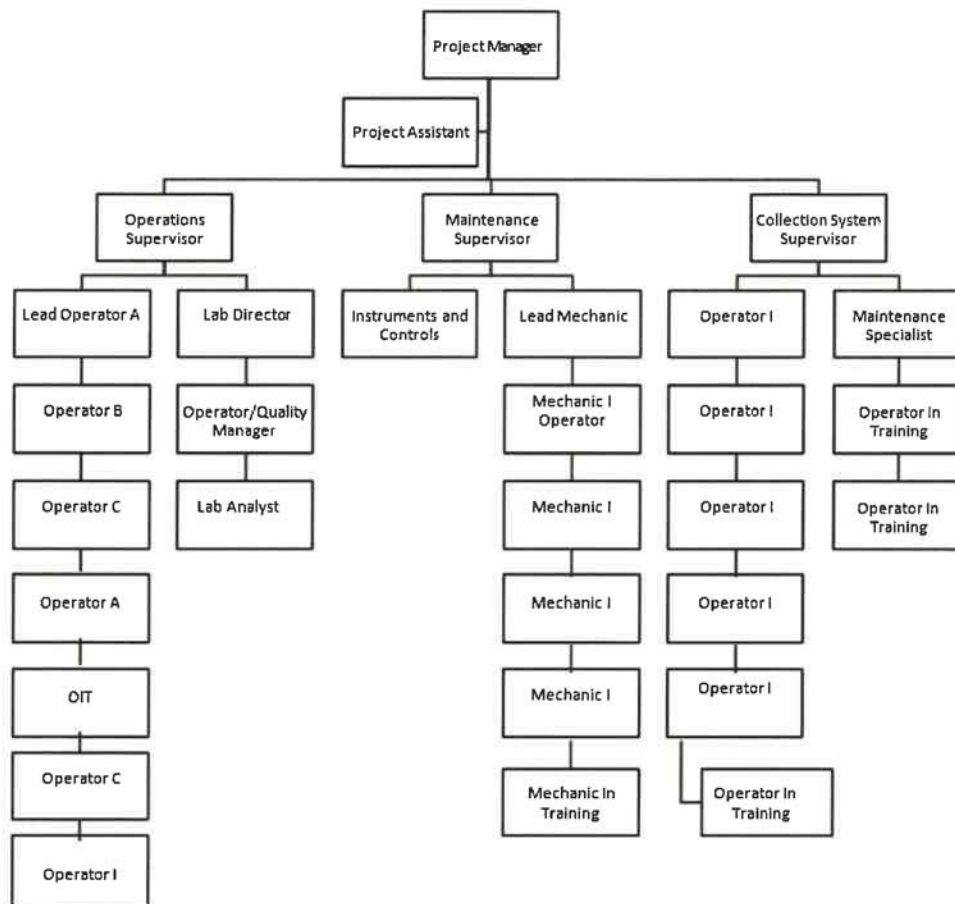


Figure 3.3. Jacobs OMI Organization Chart 2024.

3.2 Mission and Goals

As stated in the September 30, 2023, Annual Comprehensive Financial Report, CKW's vision is "A tropical island with unique community character in harmony with the diversity of its people and with its environment" and a mission of "honoring our past and embracing our future for a better Key West". A strategic plan was written for the years 2021-2024 (Key West Forward, The Strategic Plan for the City of Key West, 2021-2024 by Elisa Levy Consulting) that includes addressing affordable housing, rising sea levels, environmental protection, major projects, communication strategy, and an employee plan.

3.3 Staffing

CKW has 10 employees in the Utilities department, including the Utilities Director. The RAHEPF facility is staffed by 30 full time Jacobs OMI employees. These include supervisors, administrators, six operators, one lead operator, one laboratory analyst, one lead maintenance technician, and four maintenance technicians. The collection system also has an additional six operators and three maintenance specialists. An example job description is attached as Attachment 1.

The treatment plant is staffed 24/7 by a Class A operator as required by FDEP permit, while full operations and maintenance staff begins at 7:30 am daily. Maintenance staff rotates on call duties to

ensure coverage 24/7/365. During emergencies and predicted severe weather, staff may be contacted to provide additional support.

The wastewater treatment plant and collection system staff do not currently have open positions. Hiring new staff can be challenging due to limited qualified talent living and working with the south Florida Keys. The staff must be able to pass federal background checks, because the treatment plant, some assets, and offices are located on the Naval Air Station. When recruiting, staff vacancies can remain open for weeks.

Utility construction work and capital projects are contracted out. Some maintenance is also contracted for large projects, like smoke testing for the entire system. Small repairs and maintenance are handled by Jacobs OMI staff.

3.4 Safety and Training

CKW has a comprehensive Safety Manual for all employees. Policy and by Occupational Safety and Health Administration (OSHA) requirements are detailed in the manual. Jacobs OMI also has comprehensive safety manual and training for all wastewater treatment plant and sewer collection system operation and maintenance employees. Safety topics covered include PPE, materials, equipment, trenching, excavating, confined spaces, and others. Safety standard operating procedures (SOPs) are written and available to all employees. Staff also attends numerous safety training sessions throughout the year. An example Activity Hazard Analysis for a manhole inspection with rain pan insert is shown in Attachment 2.

CKW and Jacobs OMI utilize a combination of on-the-job skill training, self-study, and manufacturer and industry-wide training to meet its training needs and requirements. A First-Aid, CPR, and AED training class is offered periodically. Jacobs OMI training is provided to new employees at the time of hire and all staff review the document annually and document they are aware of the content by signing a training log. The training log is scanned and uploaded to the project's SharePoint site. Operator duties are also outlined in the Facility Operations Plan, which is updated annually. CKW also requires new employee training as appropriate for the specific position.

The Collections and Stormwater Departments maintain a budget for annual training consistent with the requirements mandated by the Florida Department of Environmental Protection (FDEP). This training ensures that the wastewater collection system staff maintain their professional certifications and also to continually improve their knowledge and skill set, as well as provides the opportunity to achieve advanced competency in the profession. Each of the wastewater collection staff members are expected to earn certification from the State of Florida. Staff is required to participate in at least 12 hours of continuing education or training every year to maintain their certifications and fulfill the Annual Project Business Plan training goals. Information on FDEP's operator certification program can be found at https://floridadep.gov/sites/default/files/ocp_handbook%20Nov%202022.pdf.

3.5 Communication

CKW and Jacobs OMI communicate on a regular basis with internal departments, each other, the general public, and regulatory agencies. Formal meetings are held monthly, but informal meetings occur frequently. This open communication between CKW and OMI staff allows for frequent and timely input and feedback. Jacobs OMI project manager and supervisors meet with the CKW utilities department frequently to discuss ongoing and upcoming projects, any issues, and future planning. Supervisors meet with their plant and collection system staff every weekday morning to discuss the day's schedule, any issues, projects, safety, and any feedback from the staff.

3.6 Customer Service

Customers have several avenues to contact CKW. Customers can call Jacobs OMI directly for questions or concerns with sewer. These calls are logged via paper. Any issues requiring service, repair, or investigation will be entered into the computerized maintenance management system (CMMS) and forwarded to the appropriate queue. For water issues, customers can call FKAA directly. For misrouted calls for Jacobs or FKAA, administrators forward the call log information to the appropriate party for follow-up. For emergencies or spills, calls are routed to Jacobs OMI. After hours, a live answering service receives the notification and contacts the collection system on-call contact according to procedures.

In addition, the City's Key West Connect online app helps residents reach CKW online or via their smartphone or tablet to request services or help fix issues. The system is not monitored 24/7, so issues related to public safety or those requiring immediate attention should be reported directly to the Key West Police Emergency Line.

The City of Key West has launched a mass notification solution powered by CivicReady. CivicReady is intended to be used to provide residents with critical information quickly in a variety of situations, such as severe weather, road closures, king tide flooding, evacuations, etc., that may have significant impacts. This service is available to citizens to receive emergency notification alerts via text message, email, pager or voice mail (in extreme cases), based on preference.

For public relations, public radio spots have been used. Topics have included no illegal dumping, nutrients, deep injection wells, cleanup of trash to protect waters, CivicReady app promotion, and clean boating. Smoke testing and construction notification are handled by CKW public relations and contractors. An example smoke testing door hangar and results form are shown in Attachment 3.

3.7 Regulatory

RAHEPF operates under Florida Department of Environmental Protection (FDEP) discharge permit number FLA147222 for a domestic wastewater treatment plant. FDEP is authorized to protect Florida's water resources and enforce provisions of Chapter 403, Florida Statutes, and Title 62, Florida Administrative Code.

For the WWTP discharge permit, the following is permitted:

Underground Injection U-001: An existing 10.0 MGD annual average daily flow permitted capacity underground injection well system consisting of 2 Class V underground injection wells permitted under Department permit number(s) 0327710-003 and 004-UO/SW and discharging to Class G-III ground water. Underground Injection Well System U-001 is located approximately at Latitude: 24°34' 5.412" N, Longitude: 81°47' 46.7988" W. Effluent samples are taken at 2 locations:

- a. EFF-01: After the UV reactors
- b. PPI-01: In the ultraviolet reactor

Monitoring requirements and limits are specified in the discharge permit, such as UV dosage, percent capacity, CBOD 5-day, total nitrogen, total phosphorus and total suspended solids (TSS).

3.8 Legal Authority

"The City of Key West, Florida (the "City") is a municipal corporation incorporated in 1828. Currently, the City of Key West is organized and exists under the provisions of Chapter 23374, Laws of Florida (1945), as amended. The City operates under a commission manager form of government. The City provides services authorized by its charter, including public safety, public welfare, public improvements, planning

and zoning, transportation, recreation, and general administrative services.” (City of Key West Annual Comprehensive Financial Report 2023.)

“In addition to its general government activities, the City provides sewer, solid waste, stormwater, marina, and mass transit services through enterprise funds.” (City of Key West Annual Comprehensive Financial Report 2023.)

4 Collection System Operation

Operation of the collection system includes operating, budgeting, monitoring, safety procedures, modeling, construction, and remediation. Successful operations are key to keeping the collection system operating as intended to convey wastewater and protect public safety, capital investment, and the environment. Sufficient funds need to be budgeted for continued normal and emergency operations.

4.1 Monitoring

4.1.1 Water quality

Salinity testing is performed weekly and as needed at the treatment plant, lift station wet wells, and at other locations within the collection system. Tidal influences play a role in high salinity levels in the CKW’s sewer collection system due to the City’s location surrounded by seawater, situated between the Gulf of Mexico to the Straits of Florida and Atlantic Ocean. King tides are unusually high tides that occur several times a year, usually in the fall, that can cause coastal tidal flooding, especially in low-lying areas. Salinity testing helps to identify infiltration and inflow (I/I) within the collection systems especially during king tides and storm events.

Effluent water quality monitoring is done at the WWTP after and within the UV reactors according to permit requirements as discussed in section 3.7. Effluent water is conveyed to underground injection wells.

4.1.2 Flow monitoring

Flow monitoring is utilized at the treatment plant. Flow monitors can be temporarily added to isolate issues. Lift station flow estimates were developed using pump runtime data during analysis for the 2023 Lift Station Plan by Jacobs. Lift station performance analysis showed that all lift stations had adequate capacity.

The assumed lift station capacities were calculated based on pump drawdown test results and pump capacity information available to the City and the estimated average and maximum daily flow from the lift stations. In addition, capacity utilization percentage was calculated for each lift station based on the average daily flow and the maximum daily flow over the data analysis period. These calculations are show below in Table 4.1 from the 2023 Lift Station Plan.

Table 4.1: City of Key West Lift Station Capacity and Daily Flow Summary. (Lift Station Plan. 2023)

Lift Station	Number of Pumps	Lift Station Capacity (gpm)	Average Daily Lift Station Flow (gpm)	Maximum Daily Lift Station Flow (gpm)	Average Capacity Utilized (%)	Maximum Capacity Utilized (%)	Maximum/Average Capacity Utilization Ratio
A	2	3,596	480	1,793	13%	50%	3.7
B	2	2,723	515	2,418	19%	89%	4.7
C	2	4,220	363	2,033	9%	48%	5.6
D	2	5,791	402	3,078	7%	53%	7.7

Lift Station	Number of Pumps	Lift Station Capacity (gpm)	Average Daily Lift Station Flow (gpm)	Maximum Daily Lift Station Flow (gpm)	Average Capacity Utilized (%)	Maximum Capacity Utilized (%)	Maximum/Average Capacity Utilization Ratio
E	2	5,114	354	1,262	7%	25%	3.6
F	2	4,365	615	3,590	14%	82%	5.8
G	2	2,681	179	910	7%	34%	5.1
H	2	499	25	254	5%	51%	10.0
J	2	626	65	376	10%	60%	5.8
K	2	240	10	63	4%	26%	6.6
L	2	280	27	104	10%	37%	3.8
M	2	260	7	80	3%	31%	11.4
N	2	514	28	128	5%	25%	4.6
O	2	415	29	205	7%	49%	7.1
R	2	4,418	422	2,242	10%	51%	5.3
S	2	495	9	240	2%	49%	25.8
T	2	400	47	382	12%	95%	8.0

4.1.3 Satellite Communities

Several satellite communities convey wastewater into the collection system. These connections are metered and checked monthly. These communities include Peary Court Apartments, Sigsbee Military RV Park, Fort Zachary Taylor State Park, and the Naval Air Station. Flows for the US Navy are summarized in Table 4.2 below. A sewer use agreement is in place for the US Navy. New connections are governed by the Code of Ordinance requirements and special agreements made for satellite communities and significant contributors.

Table 4.2: City of Key West Wastewater Collection System US Navy Flows. (I/I Plan. 2023)

Contract Station ID	AADF (gpd)	Downstream LS District
Trumbo Front Gate	54,987	C
Trumbo Backflow Preventer	4,499	C
Trumbo Back Gate	129,475	H
Emma & Amelia	5,421	A
Truman & Fort	40,008	A
Outer Mole	1,392	A
United & Whitehead	4,250	A
Sigsbee	112,483	RAHEPF
Medical Center	4,849	F
Navy Dive Center	1,155	N/A
Fort Zachary Taylor	4,078	A

4.2 Mapping

The CKW collection system is mapped within GIS (geographic information system), Esri's ArcGIS. Most of the collection system is mapped within GIS. Any new, missing, or incorrect assets within GIS can be reported by field personnel for updates by the GIS administrator. Figure 4.1 below shows the GIS map of CKW collection system including its main components.



Figure 4.1. City of Key West Wastewater Collection System. 2024.

4.3 Engineering

The CKW Utilities Department is responsible for implementing the capital improvement plan, coordinating and inspecting construction projects, designing in-house projects, and maintaining drawings and records of CKW's systems. Sewers constructed are required to be designed and constructed with industry standards and practices and implemented with preferred equipment vendors. Equipment must be designed to operate in island environment with potential exposure to saltwater.

New construction and rehabilitations are inspected by CKW both during and after construction are complete. CKW Code of Ordinances, building codes, plumbing codes, applicable city rules and regulations dictate requirements for size, slope, alignment, materials of construction of a sewer service lateral, in addition to the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench. Codes also state guidelines and specifications for repair and replacement of sewer laterals.

CKW has specific standards for new construction and for rehabilitation of existing sewer lines. The CKW Engineering Standard Details document includes design and construction requirements related to the

City's wastewater collection system. Engineering Standards are provided for sewer manholes, joint details, catch basins, service connections, encasements, trenches, concrete, and other details. The Jacobs OMI collections staff and the City Engineering staff from the City's Building and Utilities Departments work cooperatively to develop and improve design standards and specifications for new construction to ensure the most up to date and effective construction plans and specifications possible.

4.4 Lift Stations

Wastewater collection staff maintain the CKW's 26 lift stations. Four small lift stations that are not on telemetry are inspected daily. The remaining are inspected on a bi-monthly schedule. Bi-monthly maintenance activities include checking pump operation and clearing wet well debris. Lift station pump runtimes and trends are reviewed and monitored daily by operators at the treatment plant. If any alarms, issues or inconsistencies occur, operators notify maintenance for investigation. All inspections are saved in the CMMS.

Lift stations have permanent generators, except the 4 small stations that are not on telemetry. Ten mobile generators are also available as needed. Vacuum trucks are available to bypass stations. Most stations have pump redundancy to provide a consistent level of service during maintenance or pump failure.

As part of the Sewer Collection System Master Plan Development project, the Lift Station Plan was finalized in December 2023 by Jacobs. The objective of this Plan is to use data obtained from the lift stations and the sewer collection system to estimate the lift station utilization versus the available capacity to identify undersized lift stations and to develop a plan, if needed. The results of the lift station performance analysis showed that all lift stations had adequate capacity, though seven lift stations potentially operated over 50% of the total lift station capacity. CKW has been prioritizing and implementing recommendations, both from the 2015 Wastewater Pump Stations Conditions Report recommendation list and the 2023 Lift Station Plan.

5 Collection System and Equipment Maintenance

5.1 Planning

Proper maintenance is crucial to managing infrastructure costs and improving the operation of the collection system. Preventative maintenance (PM) schedules have been created in the CMMS. Work orders are generated from the PM schedules and ensure the maintenance staff are meeting the maintenance schedule for most assets.

Initially, PMs are created within the CMMS according to the manufacturer's recommendations. PMs are updated as equipment is rehabilitated, replaced, or requires additional maintenance. Any trouble areas have maintenance scheduled more frequently. Lift stations are inspected bi-monthly with other preventative maintenance scheduled as needed.

5.2 Scheduling

Scheduling for preventative maintenance, staffing, and on-call duty is done by the supervisors. During emergencies, king tides, and severe storms, all staff are working or on call to identify and resolve any issues as long as it is safe to do so. Preventative maintenance and projects are on hold until the situation is resolved.

5.3 Pretreatment and Fats, Oils, and Grease (FOG)

Wastewater pretreatment rules and regulations are detailed in Section 74-166 of the Key West, FL Code of Ordinances document. A portion of the pretreatment ordinance for industrial users is included in

Attachment 4. No significant industrial users are located within the City, though ordinances exist for any contributors to the sewer system. Special agreements are made for any new significant contributors that will dictate any pretreatment requirements. Requirements will be specific to the effluent and the City's regulations.

Section 307(b) of the Federal Water Pollution Control Act, as amended, requires all municipal sanitary sewers with major contributing industries to comply with the pretreatment standards of 40 CFR 128. Therefore, the sewer use ordinances of all municipalities which have received a grant under PL 92-500 must require this compliance. The CKW Ordinance also defines specific prohibited discharges, including hazardous materials, pH and temperature ranges, obstructive items, and potentially harmful wastes.

Additional regulations are detailed for any industrial users with wastes containing fats, oil, or grease (FOG). These users are required to have an Oil/Grease Interceptor (OGI) as determined by the director. New building code also details requirements for OGIs. Figure 5.1 below shows an example of a gravity OGI. Establishments are required to maintain and clean out grease traps as needed. Manifests are kept of these activities.

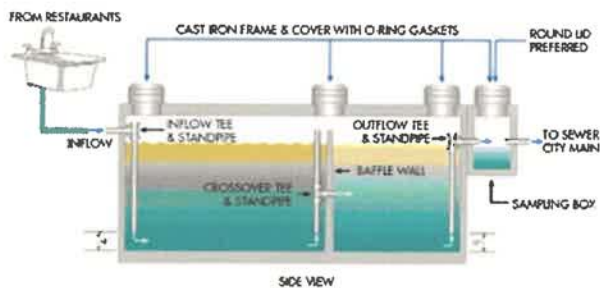


Figure 5.1. Gravity Oil and Grease Interceptor Example.

The Special Magistrate has authority to impose administrative fines and other noncriminal penalties, and inexpensive method of enforcing any codes and Ordinances in force in the City where a pending or repeated violation continues to exist.

FOG "hot spots" have been identified and have been added to an additional cleaning schedule in order to prevent buildup and SSOs. The largest hot spot is Duval Street where food service establishments are clustered around this tourist area. This area is also monitored for street and storm drain flooding during heavy rain events via live video feed. Storm drains in the area are also cleaned prior to any forecasted heavy rain events. A written formal FOG program will be implemented by CKW by the end of 2025. The program may include updates to the Code of Ordinances, inspection details, and enforcement activities.

5.4 Parts

Spare parts are kept at a storage shed at the treatment plant. Parts are cataloged and reordered as needed. Specialized parts may need to be ordered. Lead times and shipping times are considered when keeping spare parts on hand. Maintenance has authorized credit cards in order to make emergency purchases for supplies and small parts. Complete parts inventory is done yearly.

5.5 Equipment and Tools

Equipment is owned by CKW and operated by Jacobs OMI. Vacuum trucks are used for spills or during rehabilitation or replacement activities. Bypass pumps and equipment are also available during construction projects or for inflow during storm surges or other spills. Equipment can be exposed to corrosive salt during use, so additional spray and cleaning is done after use to extend the life of equipment. Table 5.1 below shows CKW owned heavy duty equipment and used by Jacobs OMI for operations and maintenance.

Table 5.1: City of Key West Wastewater Heavy-Duty Equipment

Asset Name	Classification
2002 Ford/ Vactor (COLL) # 206	Heavy-Duty Truck
2008 Yale Forklift (COLL)	Forklift
2022 Kenworth Vactor (COLL) #2370	Heavy-Duty Truck
2015 Navistar Vactor (COLL) #6146	Heavy-Duty Truck
2018 Vactor (COLL) #863	Heavy-Duty Truck
2020 Kenworth (COLL) #8057	Heavy-Duty Truck

6 Sewer System Evaluation Survey (SSES)

An evaluation of existing sanitary sewer collection systems must be performed on a periodic basis to identify the condition of sewers, pump stations, manholes, and other collection system components to identify infiltration and inflow (I/I), aging or failing infrastructure, and plan for preventative maintenance and replacement or renewal. Preventive maintenance refers to regular, routine maintenance to help keep equipment up and running, preventing unplanned downtime and SSOs and expensive costs from unanticipated failures.

SSES metrics are shown in Table 6.1 below.

Table 6.1: City of Key West Sewer System Evaluation Survey Metrics

Collection System	Frequency
Gravity – Cleaning (lf/year)	49,500
Gravity – Smoke Testing	System wide 2021. Priority 1 repeat 2024.
Gravity - CCTV	As needed
Force Main Assessments	25% per year
Lift Station Inspections	Bi-monthly
Manhole Inspections	During cleaning cycles and smoke testing
ARV Inspections	25% per year

6.1 CCTV

The collection system is inspected using closed circuit television (CCTV) by wastewater collection operators. The equipment is owned by CKW and utilized by OMI staff as needed. Staff places the CCTV camera into a gravity sewer line and transmit video of the sewer line to a device. Visual inspection of the video is used to identify issues and defects.

Using this information, operations staff assist CKW in evaluating and prioritizing problems areas for future Capital Improvement Project (CIP) replacement, maintenance, overall mainline condition and inflow/infiltration (I/I) evaluations. Staff utilizes several CCTV programs, including:

- Sanitary sewer overflow inspections
- Preventative maintenance inspections
- I/I investigations
- Basin inspections
- CIP mainline replacement program

- New construction

6.2 Cleaning

To ensure uninterrupted wastewater flows and to reduce or eliminate stoppages or sanitary sewer overflows, preventive and area maintenance is scheduled and completed in each of the City's flow basins. Review of the effectiveness of past maintenance practices have led to the preventive maintenance programs that are in place today.

The preventative cleaning and area maintenance activities for the sanitary sewer are performed by two Vactor trucks sewer combination units and multiple wastewater collection operators. Approximately 49,500 linear feet, or 1/6th, of the collection system, is cleaned annually on the Preventive Maintenance program. The entire system is cleaned every 6 years, though the current strategy is to target a complete island wide gravity pipe cleaning per year as well as more frequent maintenance of "hot spots" or areas that routinely require additional attention due to settling of debris, grease, or organics. Over 7,000 feet of the collection system is on periodic additional preventive maintenance schedules with a frequency ranging from two months to 12 months.

6.3 I/I reduction plan

Intrusion from saltwater can be isolated and identified through salinity level testing, which is done consistently during high and king tides. During maintenance and cleaning activities, visible white mossy slicks also can indicate saltwater intrusion. When detected, repairs, rehabilitation, and/or customer education can be utilized to eliminate the source.

In 2023, the Infiltration and Inflow Plan was finalized by Jacobs. This plan prioritized lift stations and lift station districts to target for reduction in I/I. The prioritization map is shown below in Figure 6.1. The lift stations were prioritized based on the following logic and are color-coded in the map accordingly:

- Priority 1: Areas with historical SSOs caused by wet weather and high salinity. Even though Lift Station H does not have any historical SSOs, it was included because of high salinity and its tributary to Lift Station B which is categorized as a Priority 1 area.
- Priority 2: Areas with historical SSO with lower salinity but high I/I values, or areas with higher salinity and no historical SSO.
- Priority 3: Areas serving a larger population with high I/I values and lower salinity or areas serving a larger population with a historical SSO but lower salinity and lower I/I values.
- Priority 4: Areas serving a smaller population with high I/I values.
- Priority 5: Areas that do not exhibit high I/I values.

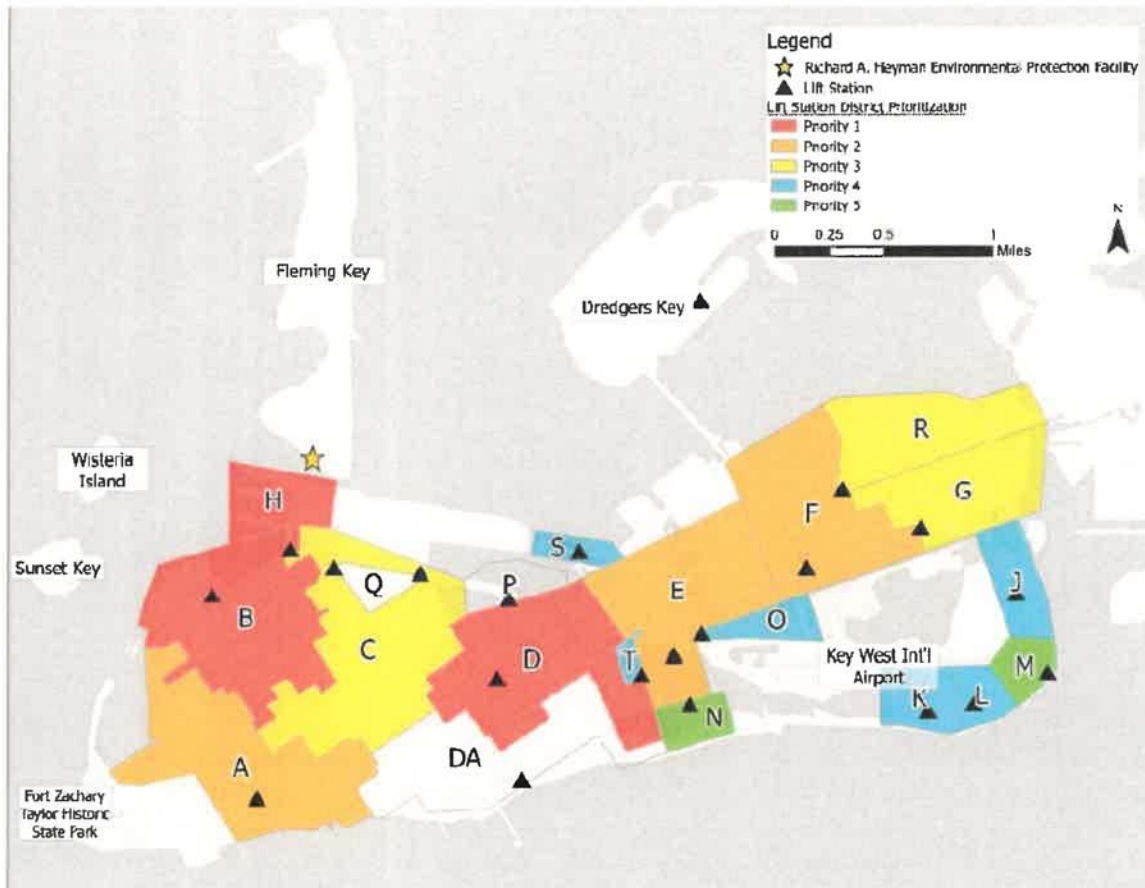


Figure 6.1. City of Key West Collection System Priority Lift Station District Map. I/I Plan. 2023.

6.4 Smoke testing

A smoke test is a sewer inspection method that forces nontoxic smoke into sewer system access points. Smoke testing is utilized to identify breaks which may allow I/I into the collection system. An example of a customer notice of smoke testing is in Attachment 2. Smoke testing was completed throughout the entire system in 2021. Results were utilized for the Key West Infiltration and Inflow Plan from 2023. Collection system smoke testing has begun for 2024 for the Priority 1 lift station districts, which includes visual inspection of manholes in these areas and “midnight” flow observation. Manholes with visible I/I will be scheduled for relining and leak sealing.

6.5 Manhole inspection

Manhole inspections are completed during preventative maintenance and cleaning activities throughout the year. Any issues or defects noted are entered into the CMMS for repair or future rehabilitation. GIS data will be migrated to the CMMS in 2025. Once migrated, manhole inspections will be scheduled in CMMS that will include procedures and required equipment lists.

6.6 Capacity

Richard A. Heyman Environmental Protection Facility (RAHEPF) is permitted for 10 MGD. The plant’s annual average daily flow (AADF) has been between 4.0 MGD and 4.6 MGD. Daily flows are monitored and reported per permit requirements. Growth and development are limited in Key West due to the State of Florida’s hurricane evacuation clearance time for permanent residents is less than 24 hours.

The Lift Station Plan uses data obtained from the lift stations and the sewer collection system to estimate the lift station utilization versus the available capacity to identify undersized lift stations and to develop a plan, if needed. The results of the lift station performance analysis showed that all lift stations had adequate capacity, though seven lift stations potentially operated over 50% of the total lift station capacity.

CKW will be developing a hydraulic model of the collection system by the end of 2026.

7 Sanitary Sewer Overflow Response

7.1 Sanitary Sewer Overflow Response Plan

Jacobs OMI utilizes their Spill Emergency Response Plan for response to any SSO. The plan was last reviewed in 2023 and is included in Attachment 5. The Response Plan includes standard procedure for responding to SSOs. The document covers the standard response plan from the initial possible SSO report and dispatch of personnel to correction, containment, and cleanup procedures.

Large SSOs for the treatment plant and collection system have mainly been caused by extreme rain events or unpredicted equipment failures. Jacobs OMI is continuously looking for and implementing strategies to handle extreme rain events. Minor SSOs have been caused due to equipment failures and contractor line breaks.

7.2 Emergency Preparedness and Response

7.2.1 Response

Reporting procedures are also detailed in the Spill Emergency Response Plan, along with supervisors' responsibilities.

7.2.2 After Hours and Monitoring

For after-hours emergency response, at least one operator is on duty at the treatment plant. At least one mechanic and one operator are on call for emergency response. They are on-call for one week, then rotate among other staff. Alerts come from SCADA or incoming calls to the answering service from customers, FKAA, or other entities. After hours, calls can also come in from the FKAA Stock Island Call Center or the Florida City Call Center.

7.2.3 Equipment

CKW has vacuum trucks that are used for SSOs. Lime disinfection is used. Other companies can be called in to help haul wastewater to a different pump station, collection system or further downstream if a station is being overloaded. Staff usually perform line repairs, equipment repairs and replacements, or contract out if needed.

7.2.4 Lift Stations

If a lift station is the source for an active SSO, maintenance personnel are dispatched to the station immediately. All but four lift stations are monitored and have alerts configured to identify issues quickly. The stations can be shut down remotely if required. Some lift stations have deep enough wells that can be shut down if needed to help with isolating an area with an active SSO. Emergency procedures can include using portable generators for temporary power outages and bypass pumping until operations are fully restored.

7.2.5 Emergency Operations

The Florida Keys are vulnerable to large rain events, king tides, and hurricanes. Storm surges pose a potential threat to the islands. Evacuations are sometimes required for intense hurricanes that could cause significant damage and threaten public safety. During these events, Jacobs OMI follows the guidelines as detailed in the Procedures for Severe Weather section of the Facility Emergency Response Plan, updated April 2024. Crews can be in place or on call to quickly respond to disruptions in service, SSOs, and other issues if safe for them to do so.

7.3 SSO Notifications

Reporting is completed by the CKW interim utilities director to FDEP according to their requirements. SSOs greater than 1000 gallons or that may threaten the environment or public health must be reported to the State Watch Office immediately. The State Watch Office is a 24-hour hotline. All SSOs must be reported through DEP's online business portal, which also allows a Public Notice of Pollution (PNP) to be created.

Reporting requirements are 24-hour verbal notice and 5-day written report. After reports are submitted to the business portal, notice via email is sent to the local FDEP office and the FDEP Southeast District office.

FDEP has provided photos that are used to help determine spill volumes. The FDEP guidance for estimating SSO volumes is shown in Attachment 6.

Notifications to the public for SSOs, boil water notices, hurricane preparedness alerts, and news alerts are put on the CKW website and sent to anyone subscribed to CivicReady. Public Notice of Pollution (PNP) can be submitted through FDEP's website at <https://floridadep.gov/pollutionnotice>. A copy of the PNP form is shown in Attachment 7. Spill areas will be secured and marked with appropriate signage until spills are contained, cleaned, and disinfected.

8 Wastewater Treatment Plant

Richard A. Heyman Environmental Protection Facility (RAHEPF) is a 10.0 MGD annual average daily flow (AADF) permitted capacity with an annual average daily flow of 4.6 MGD complete mix activated sludge domestic wastewater treatment facility including influent screening, grit removal, aeration, secondary clarification, aerobic sludge digestion and dewatering facility. Residual solids are sent to Medley landfill. Figure 8.1 below shows a Google Earth map of RAHEPF located on Fleming Key on the Naval Air Base Trumbo Point Annex.

Disposal of treated wastewater is by 2 Class V underground injection wells rated at 18.6 MGD AADF each. Disposal is permitted under permit number 0327710-003 and 004-UO/5W.

The underground well system U-001, with wells IW-1 and IW-2, is located at 24°34' 00" N Latitude and 81°47'45" W Longitude, Trumbo Point Annex, Fleming Key, Key West FL 33040.

An Operations Plan has been updated by Jacobs OMI in March 2024. This plan includes staffing, design specifications, permit requirements, control strategy, and process details for the treatment plant. Operator duties and sampling requirements and procedures are also included in both the Operations Plan and SOPs.



Figure 8.1. Richard A. Heyman Environmental Protection Facility.

8.1 Monitoring

All systems are monitored through SCADA, which sends alerts and alarms when an event occurs that may require an operator.

8.2 Effluent compliance

Effluent limits are defined under discharge permit FLA147222 and include limitations for flows, total phosphorus and nitrogen, total suspended solids (TSS), CBOD, and fecal coliform. Limits are established for underground injection. Monitoring and sampling help to ensure compliance with permitted levels. An example FDEP Discharge Monitoring Report (DMR) for effluent to the underground injection wells is shown in Attachment 8. Similar reports are required for effluent for biosolids quantity and daily sample reports.

8.3 Maintenance

Operators and mechanics keep daily logbooks that include operation and maintenance activities, tests performed, sampling, results, and any repairs completed. Preventative and corrective maintenance activities are logged in the CMMS.

8.4 Training/Licensure

Operators must be a Certified Operator holding a Florida DEP license for wastewater treatment plants. Operators and mechanics have in-house training, along with other technical training either online or offsite. Online classes are utilized for continuing education units (CEUs).

9 Capital Improvement Plan and Budgeting

CKW maintains an ongoing five-year financial plan that is updated annually. The plan will include projections of existing revenue and expenses as well as operating costs and revenue of future capital improvements included in the capital budget. Operational costs have increased due to the effects of the COVID-19, and operational budgets reflect the increase. Feedback for inclusion in the CIP planning is received from CKW staff and Jacobs OMI.

Capital planning occurs during March and April each fiscal year. Potential project lists are submitted by CKW Utilities staff and Jacobs OMI. Priorities are evaluated for inclusion in the current CIP cycle. Jacobs OMI supervisors and staff meeting every 2 weeks to discuss potential projects to be added to capital planning. Critical assets are identified in the CMMS. Renewal and replacement projects for critical assets are given priority in capital planning.

CKW budgets for operations and maintenance under the Sanitary Sewer System Fund, which accounts for the activities of the treatment plant, lift stations, and collection system. The Sewer Fund includes professional services for engineering, studies, and permitting. Jacobs OMI operations and maintenance contract falls under the treatment plant operation department, which also includes rate studies, plant repairs, and plant construction projects. A separate department exists for renewal and replacement, which includes repairs, maintenance, equipment, and construction projects. Stormwater utility fund is separate from sewer.

Sewer usage rates are evaluated yearly through an annual rate study and presented to the City Commission in July. CKW's current rate structure has a base charge that provides revenue independent of usage and offsets some of the operational costs. Any rate increases are evaluated with the rate study and with the June Miami Consumer Price Index for all Urban Consumers (CPI-U) each year in order to compensate for inflation. Wastewater rates were increased by the annual inflation adjustment of 3% in both 2023 and 2024, lower than CPI-U. This decision to not raise wastewater rates the full amount of CPI-U for those 2 years is due to a sensitivity towards the financial pressures faced by customers. For 2024, CKW will raise rates 10% as a catch up for the lower rate increases, in order to fund planned capital projects. Table 9.1 lists the Miami CPI-U for years 2020-2024.

Table 9.1 Miami, FL, CPI-U 12-month percent changes, all items index, not seasonally adjusted. (US Bureau of Labor Statistics)

	2020	2021	2022	2023	2024
JUNE	0.7	5.1	10.1	6.9	3.5

10 Information Technology

CKW Information Technology group and Jacobs OMI are responsible for all business software, telephone and radio networks and the data information network that runs the length of the system. Jacobs OMI staff have Jacobs issued laptops in addition to CKW network equipment used for operations.

Jacobs OMI utilizes a computerized maintenance management system (CMMS) for tracking work orders, maintenance operations, and repair activities. The CMMS software program used is Accruent's Maintenance Connection. Dashboards and reports are utilized for tracking progress for work orders and PMs. Monthly reports are generated for CKW to show maintenance activities.

ESRI GIS is utilized by CKW and Jacobs OMI for mapping of wastewater assets and attributes. The CMMS is used to create, schedule, and prioritize work orders and preventative maintenance. Secure external access is configured for CMMS and GIS.

Jacobs OMI currently has an open position for an asset manager, who will help with asset management and expand use of the current CMMS. A GIS connector will be added to Maintenance Connection which adds a GIS Viewer into the asset and work order modules.

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<https://www.cityofkeywest-fl.gov>

Attachment 1: Example Job Description

Jacobs / OMI Key West, FL

Title: Operator - Wastewater

Reports to: Operations Manager
Operator

General Statement

Performs a variety of tasks in the operation and maintenance of a water/wastewater treatment plant including maintenance of equipment, quality control/testing and day-to-day activities on an assigned shift.

Essential Duties and Responsibilities

- Performs any combinations of tasks pertinent to controlling operations of the wastewater treatment plant
- Operates, performs minor repairs, and maintains the wastewater treatment plant facility
- Operates pumps, engines, and generators to control and adjust flow and processing of wastewater, sludge and effluent
- Monitors gauges, meters, and control panels
- Observes variations in operating conditions and interprets meter and gauge readings
- Operates valves and gates either manually or by remote control
- Maintains shift log and records meter and gauge readings
- Takes samples and performs laboratory process tests and analyses when needed or on call weekend duty
- Performs routine maintenance functions and custodial duties
- Makes operating decisions in the absence of Operator 1
- Works safely and adheres to established safety procedures
- Follows written and oral instructions
- Ability to carry and respond to pages as requested by management
- Ability and willingness to work on-call shifts, as requested, including being fit and able to respond to call-ins in a timely manner
- Monitor plant and pump station SCADA notify proper personnel of all alarms and verify that the response was adequate to clear the alarm condition
- Performs other duties as assigned

Working Conditions and Physical Requirements:

- The work area can involve a working environment indoors as well as outdoors, which could cause exposure to outdoor elements; proper environmental attire will be required. Some areas can have loud noise, active machinery, high pressure fluid systems, electrical equipment, confined spaces, heights and depths, fumes, airborne particles, noxious gases, pathogens and various chemicals. The use of appropriate safety equipment will be mandatory in these areas to prevent hazardous contact.
- Must be able to sit, stand, stoop, twist and bend at the waist, turn, kneel, squat, raise arms above shoulder height, grasp, reach, perform repetitive hand movements and fine coordination to work on equipment, have vision sufficient to read blueprints;

have hearing in the normal range with or without correction. In a 10-hour shift must be able to transport self across the facility, ascend and descend stair steps, lift objects up to 50 pounds from floor level to waist height, climb and work off of a ladder or scaffold; use arms and back to tighten and loosen nuts and bolts; carry a 50-pound toolbox up a flight of stairs; work in confined spaces and wear and use appropriate safety equipment.

I have read and understand my job description.

Employee Signature

Date

Attachment 2: Activity Hazard Analysis

ACTIVITY HAZARD ANALYSIS

Job/Task Name: Manhole Inspection (with Rain Pan Insert) (No Entry)		Date: 08/03/2020
Personal Protective Equipment: Safety Glasses, Safety Vest, Leather Gloves		Project Name & Job/Task Location: FL03 / Key West, FL
Project Manager / Dept. Supervisors: Rick Cleaver, PM / Ralph Estevez, Michael Martinez		Reviewed by / Approved by: Safety Team
Revision # ___x___ NEW or ___ REVISED	Departments: All Stormwater & Collections Employees	

Section 1

Work Activity Sequence (Identify the principal steps involved and the sequence of work activities)	Potential Health and Safety Hazards (Analyze each principal step for potential hazards)	Hazard Controls (Develop specific controls for each potential hazard)
LOCATE MH FOR INSPECTION	TRAFFIC	SET UP PROPER M.C.T., USE ALL NECESSARY PPE (SAFETY VEST, SAFETY GLASSES, ETC.)
OPEN MH WITH HOOK	SLIP, TRIP, FINCH, BACK STRAIN, FLYING DEBRIS	BE AWARE OF TRAFFIC, USE PROPER LIFTING TECHNIQUES, USE ALL NECESSARY PPE (SAFETY VEST, SAFETY GLASSES, ETC.)
CHECK RAIN PAN FOR ANY DAMAGE BEFORE REMOVAL	FLYING DEBRIS	BE AWARE OF TRAFFIC, USE ALL NECESSARY PPE (SAFETY VEST, SAFETY GLASSES, LEATHER GLOVES, ETC.)
PULL OUT RAIN PAN THEN PERFORM VISUAL INSPECTION (DO NOT ENTER)	SLIP, TRIP, FINCH, BACK STRAIN, FLYING DEBRIS	BE AWARE OF TRAFFIC, USE PROPER LIFTING TECHNIQUES, USE ALL NECESSARY PPE (SAFETY VEST, SAFETY GLASSES, ETC.)
INSERT RAIN PAN BACK INTO MH RING	SLIP, TRIP, FINCH, BACK STRAIN, FLYING DEBRIS	BE AWARE OF TRAFFIC, USE ALL NECESSARY PPE (SAFETY VEST, SAFETY GLASSES, LEATHER GLOVES, ETC.)
CLOSE MH BY SLIDING MH COVER BACK INTO PLACE, CHECK FOR PROPER SEAL	SLIP, TRIP, FINCH, BACK STRAIN, FLYING DEBRIS	BE AWARE OF TRAFFIC, USE PROPER LIFTING TECHNIQUES, USE ALL NECESSARY PPE (SAFETY VEST, SAFETY GLASSES, ETC.)
CLEAN UP WORK AREA AND LEAVE SITE	TRAFFIC, FLYING DEBRIS	BE AWARE OF TRAFFIC, USE ALL NECESSARY PPE (SAFETY VEST, SAFETY GLASSES, LEATHER GLOVES, ETC.)

Print	Signature	Date/Time:
Supervisor Name: Ralph Estevez, Michael Martinez		
Safety Rep or PM: Rick Cleaver		7/24/2020
Employee Names:		

Attachment 3: Smoke Testing Notification and Results Form



SEWER LINE SMOKE TEST TO BE CONDUCTED IN YOUR AREA

Contracted by your utility provider

**Weekdays 8 a.m. to 5 p.m.
Weather permitting**

You do not need to be home during the testing, which will take about 15 minutes.

Why This Test is Commonly Used

This routine, preventative maintenance test will help identify leaks, defects and stormwater inflows in the sewer system, thereby improving wastewater treatment operations and efficiency.

What to Expect

If you just received this door hanger you should expect to see a smoke test crew in your area in the next few days. While smoke can be expected to be visible coming out of manhole covers and vent stacks in roofs, it **should not enter homes. To reduce the likelihood of smoke entering a building, it is recommended that you pour 2-3 gallons of water into seldom-used sinks and floor drains, where the smoke could arise due to lack of water pressure. This may be done at any time prior to the test.**

How the Test Works

The test consist of forcing safe smoke oil into the sewer lines and observing where it escapes in order to determine the location of leaks and defects. Odorless and safe, the smoke leaves no residuals or stains and has no adverse effect on people, plants or animals. The test generally last about 15 minutes from start to finish.

If Problems are Found

You may be notified upon completion of the project if there are any problems found on your property.

Special Requests

While smoke testing is safe, residents with heart or respiratory conditions may contact USSI at 1-888-645-9570 or 941-926-2646 between the hours of 9am to 4pm to inquire about testing schedules and have a call ahead placed, only if needed.

Contractors

Work is being performed by USSI LLC crews in easily recognizable uniforms.

For ESL and more information and videos that pertain to smoke testing please visit www.ussiusa.com.



Select "I just received a Door Hanger notice about smoke testing-Click Here" OR use your smart phone and scan the QR code for additional information.





Smoke Test Report for Key West
Lift Station:LSD ;Address:2118 Harris Ave



LastUpdateBy	Robert
isActive	True
Date	2024-08-13
State	Florida
Comments	None
Type of Defect	Laterals
Type of cleanout	Schedule 40 PVC
What size is the cleanout?	4 inch
What kind of lateral defect is this?	Open 4 inch CO
Does a Hub Need to be replaced	Yes 4"
Can an LDL be Installed	Yes
Area Directly Around Defect	Grass
How large is the defect?	Large
What is the elevation of the defect?	Low Elevation - Great Chance Of Water Pooling
Defect Location	Front Right
Rate the defect value on a scale of 0 (Lowest) to 6 (Highest)	Five
GPSLoc	24.558384810548354,-81.77884009768398
Surveyor	Robert
Public or private?	Public
Is this a Compliance Issue	No
Estimate Cost To Repair	\$100
Dish Size Outside Diameter	

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Attachment 4: Industrial User, FOG, Pretreatment Ordinances

(Sec. 74-166 – 74-175)

Sec. 74-166. - Additional requirements for major contributing industries.

- (a) Section 307(b) of the Federal Water Pollution Control Act, as amended, requires all municipal sanitary sewers with major contributing industries to comply with the pretreatment standards of 40 CFR 128. Therefore, the sewer use ordinances of all municipalities which have received a grant under PL 92-500 must require this compliance.
- (b) Any major contributing industry within the city as defined by 40 CFR 128.124 shall comply with 40 CFR 128 and any other regulation as shall from time to time be established by the Environmental Protection Agency or other appropriate regulating governmental agency.

(Code 1986, § 74.09)

Sec. 74-171. - Grease, oil and sand interceptors.

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

(Code 1986, § 74.37)

Sec. 74-172. - Preliminary treatment for flow-equalizing facilities.

Where preliminary treatment for flow-equalizing facilities are provided for any waters or wastes pursuant to this article, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(Code 1986, § 74.38)

Sec. 74-175. - Special agreements between city and industrial users.

No statement contained in this article shall be construed as preventing any special agreement or arrangement between the city and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the city for treatment, subject to payment therefor by the industrial concern.

(Code 1986, § 74.41)

Attachment 5: Spill Emergency Response Plan

Jacobs / Operations Management International, Inc.

Key West, Florida

Spill Emergency Response Plan

Review September 2023

Awareness

OMI maintains an emergency contact list showing whom to contact in case of emergency. All associates are subject to being called in response to any emergency repairs after regular business hours, on weekends, or on holidays. OMI "On-Call" personnel are provided with pagers, and or handheld radios, and Nextel cellular phones for immediate response.

Response

When a wastewater spill problem has been identified that could be a potential hazard to the environment established standard procedures are followed. Immediately upon notification of a spill:

- On-Call personnel respond to the reported spill site to assess conditions.
- If in fact there is a legitimate sewage spill, conditions causing the spill are determined and immediate action is taken to stop all sewage flow contributing to the spill.
- The WWTP operator is contacted who utilizes radio telemetry to disable all pumping stations that may be contributing to the problem.
- Additional personnel are contacted and mobilized for assistance. The number of people called is determined by the associate initially responding to the spill.
- If the Vactor sewer combination truck is needed, a minimum of two people are required. If the spill was minor, it is possible for a single associate to clean the area with our portable water vacuum unit.
- If the spill was caused by a broken force main, gravity main, or any other infrastructure failure, construction repair personnel are mobilized with appropriate equipment to begin repair assessment. If the spill was caused by pumping station equipment failure, OMI Maintenance personnel are mobilized with all equipment typically utilized in this instance.
- If, upon determining the exact cause of the spill, additional assistance is needed, all OMI staff is available 24/7 upon notification.
- After all required information is ascertained, FDEP is contacted by the plant operator, and if not already involved in the incident, all pertinent supervisors and the project manager are notified, and the client contact is informed.
- Post spill cleanup is performed using granulated Lime, wash down water, and the Vactor sewer combination vehicle. All material and liquid removed from the site is transported to the WWTP for containment and ultimate disposal.

Unless specified otherwise in a wastewater permit, notifications are required for any unauthorized wastewater spill to surface waters or ground waters of the state, or for any other unauthorized discharge to surface waters or ground waters of the state that may endanger health or the environment.

It is the policy of OMI Key West to conduct an ecologically based assessment of aquatic receptors of wastewater spills to assess any possible impacts on Key West's nearshore water regardless of whether the spill has been categorized as major or minor. To fully assess the impact of a sewer spill on the aquatic environment physical, chemical, and biological parameters are examined. Each of these parameters provides additional information on the assimilative capacity of the point of spill and thus an indication of remedial measures required. All but the most minor (100 gallons or less) spills are deemed to be significant in terms of physical impact to the environment and are reported to the Florida DEP, regardless of their initial classification. Minor spills that reach nearshore waters are always reported to the FDEP and sampling procedures are followed as they would be for a major spill.

Field investigations are accomplished through a cooperative effort between OMI Laboratory and Collection System Maintenance Department personnel. Physical and chemical parameters up to and including the full suite of water quality parameters may be used if deemed necessary. All biological sampling follows state guidelines and protocols for both fish and macro invertebrates sampling. Investigations of fish kills follow the state guidelines for fish kill assessments. Appropriate sections of the FDEP operating procedures for rapid bio assessment are referenced when evaluating physical conditions. The field observations, assessments and lab results are reviewed, and a determination made of the severity of the spill. Spill site cleanup procedures beyond the procedures already performed by OMI personnel that are deemed appropriate to the severity of the spill are performed.

Official Notification

To comply with State law, spills of raw wastewater, whether they originate from a manhole, a broken line, or through a designated bypass, are reported to the FDEP. Notification of a spill to the FDEP is made when all pertinent information is gathered and found to be accurate; through the toll-free Dispatch Center (during off-duty hours) or through the appropriate Zone Supervisor, the Division Manager or Operations Group Manager (during regular duty hours) immediately. All sewer backup calls are immediately assessed to determine if there is a related spill.

The FDEP requires direct notification to its Compliance Section in the event of sewer spills that reach a body of water from the City of Key West sewer lines. Whenever a wastewater spill is over 1,000 gallons, or circumstances may endanger health or the environment, the required notification must be provided using the State Warning Point's toll-free number, (800) 320-0519. For example, a surface water discharge of inadequately disinfected domestic wastewater should be reported using the toll-free number for the State Warning Point since this represents a potential public health threat.

If the spill is deemed a major spill, a formal report is provided to the Compliance Section including identification of the cause of the spill; a description of activities required to eliminate the spill; an estimate of the total volume of the spill; an evaluation of the impact of the spill; what will be done to eliminate the reoccurrence of a similar event in the future, and a description of the continuing monitoring program necessary to identify any future impacts. This monitoring effort normally includes testing the impacted outfall for enterococcus, pH, dissolved oxygen, and temperature. This testing is performed daily for 3 days or until uncontaminated results are achieved following the spill. If a spill volume is less than 1,000 gallons, no formal report is required after the initial notification to the Compliance Section; however, the event must be included in a monthly summary provided to the Compliance Section.

Reporting

Reporting Requirement

Any spills, except spills listed in 1.42, which discharge to Waters of the State of becoming aware of the spill. The cause of the spill shall be investigated as soon as possible but in no

case less than during the first 48 (forty-eight) hours after becoming aware of the spill. Within 5 (five) calendar days of becoming aware of the spill a written report shall be sent to the regulatory contact which includes the following information:

1. Date of the spill.
2. Location of the spill.
3. Description of what was spilled.
4. Cause of the spill.
5. Estimated volume discharged and name of receiving waters
6. Corrective action(s) taken to mitigate or reduce the adverse effects of the spill
7. Actions take to prevent similar spill in the future.
8. Contact information.

As a minimum report shall be made to:

Notify regulatory agency, (EPA, EPD, DEP etc. In some cases, both the state and the federal regulatory must be notified check local requirements).

Report the incident to the Health Department for the areas affected by the incident. Additional agencies may need to be notified based on local requirements check permit and local guidance.

Florida SSO Reporting Requirements

Rule Highlights

- Spills / Sanitary Sewer Overflows greater than 1,000 gallons must be reported to the **STATE WATCH OFFICE**, formerly known as STATE WARNING POINT (800 320 0519) within 24 hours of learning of the spill SSO.
 - Spills / Sanitary Sewer Overflows that endanger public health or the environment must be reported to the **STATE WATCH OFFICE**, formerly known as STATE WARNING POINT (800 320 0519) within 24 hours of learning of the spill SSO
 - Spills / Sanitary Sewer Overflows less than 1,000 gallons must be verbally reported to the FDEP within 24 hours of learning of the spill SSO
 - Written report describing the spill SSO must be provided to the FDEP within five days
 - A written report is not required if the FDEP was notified within 24 hours and the spill SSO has been corrected and did not endanger public health or the environment.
- **The preferred method for reporting is electronically using the following link:**
<http://dep.state.fl.us/pollutionnotice/>.
 - Reporting entities may also report via e-mail using the [Pollution Notice Form](mailto:pollution.notice@dep.state.fl.us) and e-mailing it to pollution.notice@dep.state.fl.us.

- Reporting entities should be aware that, while submission of a notice through this website complies with the requirements of Section 403.077, F.S., it does not relieve them of any obligation to report to the [State Watch Office](#).

In addition to the above notifications the following abnormal event form needs to be submitted to the Marathon Office and the FDEP Southeast District.

Note: Any written report intended to go to a regulatory agency must be reviewed and approved by the PM, the Director of Environmental Compliance, or his designee and by the PM's direct supervisor prior to issuance.

Gases

Inert Gases unless released in sufficient quantities to a confined space, to include interior rooms, in sufficient to pose suffocation potential.

Flammable gases in quantities that do not exceed the Lower Explosive Limit LEL in the environment to which it is released.

Oxygen to the atmosphere

Nitrogen –see inert gases.

Wastewater

Spills of less than 25 gallons provided that cleanup occurs within 24 hours of becoming aware of the spill.

Spills that are to areas that are completely lined with impermeable surfaces (such as concrete or plastic liner) which are returned in its entirety to the treatment system provided that the spill is not accessible to the public or the spilled area is attended to by personnel onsite to protect the public until the spill is removed.

Spills of less than 25 gallons if they do not leave the plant site.

Water

Spills of source water (raw water) from wells, lakes, or streams provided that no addition of any chemical or substance occurred after removal from the source and prior to the spill site.

Spills of potable water from the distribution line that does not cause a public nuisance or erosion sufficient to impact public health or potential for additional infrastructure damage.

Sludge

Spills less than 1 cubic yard if spilled to public right away if both a) the sludge is stabilized to meet either class A or class B under 40 CFR 503 and b) the sludge is removed within 24 hours of the actual spill.

Note : All sludge spills to an unapproved area shall be removed immediately upon discovery, including sludge spilled to areas within an approved sludge disposal site in areas not intended to receive sludge.

Additional Reporting Requirements

If a spill reaches a surface water the project shall post notice as close to where the spill occurred as possible and along waterway if applicable, the notice shall include at a minimum the information in 1-8 of 1.41

Spills shall be reported (via email or telephonically –depending on legal aspects of release) to the JACOBS OMI Director of Environmental Compliance or the Manager of Laboratory, IPP and NPDES Permit Compliance and to the applicable area manager, RBM or RDO (within 8 hours of finding)

Additional reporting requirements, based on Permit requirements may apply based on a case-by-case basis.

Many states require reporting spill incidents to local media. Check local requirements. Spill reports to media shall include as a minimum the items 1-8 in section 1.41 above. (Should this requirement be in effect, reporting to local media should only be performed through coordination with the Communications group)

Failure to Adhere to Policy

Failure to adhere to this policy will be treated as a falsification of records and is subject to potential DML or termination.

Monitoring

Wastewater

- Spills of wastewater external to the plant must be sampled and tested for BOD, TSS, pH and bacterial testing (refer to permit and test for same parameters required in permit i.e. Fecal coliform, total coliform, e-coli). Additional monitoring may be required by state requirements, or the permit refer to these testing and monitoring requirements.

Chemical

- Notify Fire Department (when available HAZMAT Department), Director of Environmental Compliance and Project Manager Supervisor.
- Notify Regional Safety Coordinator, Kevin Savage

After consultation proceed to cleanup if so instructed.

Water

- Spills of potable water which enter a surface water shall be immediately tested for chlorine content and pH.

- Spills of water which enter a surface water shall also be tested for fluoride content if fluoridation is practiced.
- Cleanup

Wastewater

- Remove debris and rags and dispose of as per normal permit requirements for these materials.
- Use lime to increase pH in area of spill to reduce potential for human pathogens.
- When possible, use vac truck to remove ponded wastewater.

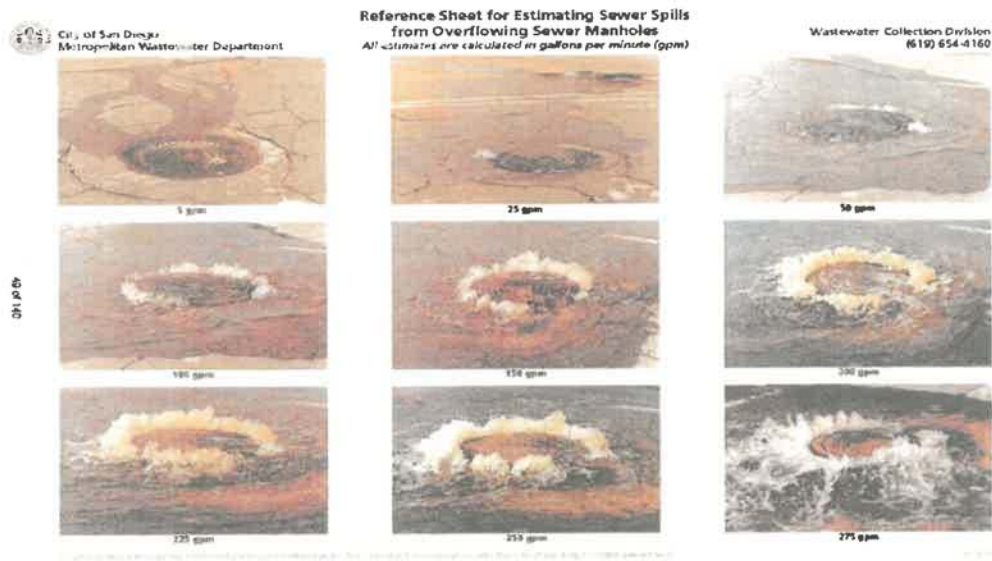
Sludge

- For solid sludge remove all sludge from area and dispose of as Class B sludge or landfill.
- For liquid sludge remove all sludge and lime area. Dispose of as Class B sludge or landfill.
- Do not dispose of spilled sludge as a Class A sludge, unless sludge can be returned to treatment system, ~~retreated~~ and recertified as Class A

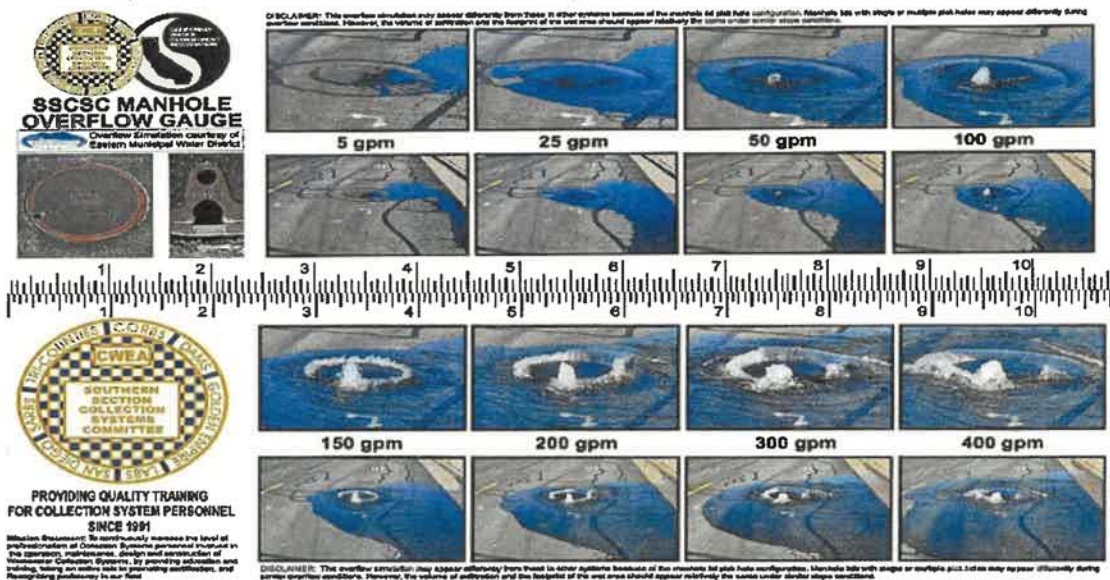
Attachment 6: Estimating SSO Volumes

FDEP provides guidance in estimating SSO volumes. Below are 5 slides detailing how to estimate SSO volume.

Visual Estimate –Overflowing Manhole



Visual Estimate –Pick Holes

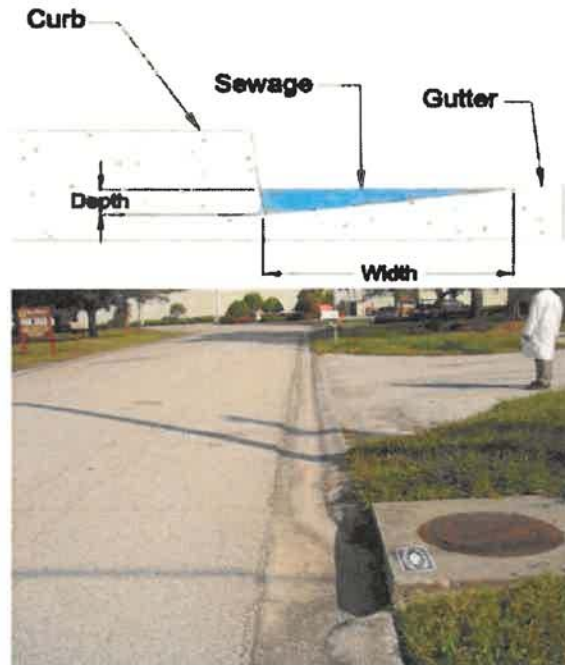




Volume Estimate -Roadway Gutter

1. Measure the length of the gutter containing the overflow.
2. Measure the depth and width of the overflow in the gutter.
3. Convert all measurements to feet.
4. Calculate the overflow volume:

Volume Spilled (gal)= Length X
Width X Depth X 3.74



Pooled Area Estimate

Area = 200 square feet

Average Pooled Depth = 2
inches

[Convert depth to feet:

$2\text{ inches} / 12 = 0.167\text{ feet}$

$200\text{ ft}^2 \times 0.167 = 33.4\text{ cubic feet}$

$33.4\text{ cft} \times 7.48\text{ gpcf} = \sim 250$
gallons spilled





Connections Served Estimate

1. Determine the number of connections served.
2. Calculate: 200 gallons /household per day x duration of the SSO event.

[78 homes @ 200 GPD= 15,600
gpd 15,600 gpd / 1440]
Minutes=10.8 gpm]

Estimated spill duration 150
minutes X 10.8 gpm =

1,620 gallons spilled



Attachment 7: Public Notice of Pollution



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Pollution Notice

You are submitting a Public Notice of Pollution in accordance with [Section 403.077, F.S.](#) which is intended to prevent harm to human health, welfare, or property by assisting the control of pollution. This rule specifies that "reportable releases" are required to be reported to the Department.

Please be aware that while submission of a Notice through this form complies with the requirements of Section 403.077, F.S., it does not relieve you of any obligation to report to the State Watch Office or other authority required by your permit or state law.

Fields marked with * are necessary to implement the Subscription service required by statute. After completion, please e-mail the form to pollution.notice@dep.state.fl.us.

If you are reporting a new release, please select "Initial Notice" below.

If you have previously reported this incident, have obtained a DEP Incident ID, and wish to update your Notice, please select "Updated Notice of Pollution" and enter the DEP Incident ID.

NOTICE TYPE *

☐ Initial Notice of Pollution

☐ Updated Notice of Pollution

If this is an updated Notice, DEP Incident ID: _____

INCIDENT INFORMATION

Please enter a name for the Incident: _____

State Watch Office Incident Number or Case ID: _____

Incident Report (Please enter the information provided to the State Watch Office. If you have a summary e-mail from the State Watch Office, you may copy that and paste it here): *

Page 1

Please select all counties directly affected by the Incident: *

<input type="checkbox"/> Alachua	<input type="checkbox"/> Duval	<input type="checkbox"/> Holmes	<input type="checkbox"/> Miami-Dade	<input type="checkbox"/> Seminole
<input type="checkbox"/> Baker	<input type="checkbox"/> Escambia	<input type="checkbox"/> Indian River	<input type="checkbox"/> Monroe	<input type="checkbox"/> St. Johns
<input type="checkbox"/> Bay	<input type="checkbox"/> Flagler	<input type="checkbox"/> Jackson	<input type="checkbox"/> Nassau	<input checked="" type="checkbox"/> St. Lucie
<input type="checkbox"/> Bradford	<input checked="" type="checkbox"/> Franklin	<input type="checkbox"/> Jefferson	<input type="checkbox"/> Okaloosa	<input type="checkbox"/> Sumter
<input type="checkbox"/> Brevard	<input type="checkbox"/> Gadsden	<input type="checkbox"/> Lafayette	<input type="checkbox"/> Okeechobee	<input type="checkbox"/> Suwannee
<input checked="" type="checkbox"/> Broward	<input checked="" type="checkbox"/> Gilchrist	<input checked="" type="checkbox"/> Lake	<input type="checkbox"/> Orange	<input checked="" type="checkbox"/> Taylor
<input type="checkbox"/> Calhoun	<input type="checkbox"/> Glades	<input type="checkbox"/> Lee	<input type="checkbox"/> Osceola	<input type="checkbox"/> Union
<input checked="" type="checkbox"/> Charlotte	<input checked="" type="checkbox"/> Gulf	<input checked="" type="checkbox"/> Leon	<input type="checkbox"/> Palm Beach	<input checked="" type="checkbox"/> Volusia
<input type="checkbox"/> Citrus	<input type="checkbox"/> Hamilton	<input type="checkbox"/> Levy	<input type="checkbox"/> Pasco	<input type="checkbox"/> Wakulla
<input checked="" type="checkbox"/> Clay	<input type="checkbox"/> Hardee	<input checked="" type="checkbox"/> Liberty	<input checked="" type="checkbox"/> Pinellas	<input checked="" type="checkbox"/> Walton
<input type="checkbox"/> Collier	<input type="checkbox"/> Hendry	<input type="checkbox"/> Madison	<input type="checkbox"/> Polk	<input type="checkbox"/> Washington
<input checked="" type="checkbox"/> Columbia	<input checked="" type="checkbox"/> Hernando	<input checked="" type="checkbox"/> Manatee	<input checked="" type="checkbox"/> Putnam	
<input type="checkbox"/> DeSoto	<input type="checkbox"/> Highlands	<input type="checkbox"/> Marion	<input type="checkbox"/> Santa Rosa	
<input type="checkbox"/> Dixie	<input checked="" type="checkbox"/> Hillsborough	<input type="checkbox"/> Martin	<input type="checkbox"/> Sarasota	

Start Date and Time of Incident: * (MM/DD/YYYY) (HH) (MM) am (am/pm)

Is the Incident on-going? * ☐ Yes ☐ No

If No, End Date and Time of Incident: (MM/DD/YYYY) (HH) (MM) am (am/pm)

Has the pollution migrated off-site from the Incident? * ☐ Yes ☐ No

If Yes, please select any county(ies) to which the Incident has migrated: *

<input type="checkbox"/> Alachua	<input type="checkbox"/> Duval	<input type="checkbox"/> Holmes	<input type="checkbox"/> Miami-Dade	<input type="checkbox"/> Seminole
<input type="checkbox"/> Baker	<input type="checkbox"/> Escambia	<input checked="" type="checkbox"/> Indian River	<input type="checkbox"/> Monroe	<input type="checkbox"/> St. Johns
<input type="checkbox"/> Bay	<input type="checkbox"/> Flagler	<input type="checkbox"/> Jackson	<input type="checkbox"/> Nassau	<input type="checkbox"/> St. Lucie
<input type="checkbox"/> Bradford	<input type="checkbox"/> Franklin	<input type="checkbox"/> Jefferson	<input type="checkbox"/> Okaloosa	<input type="checkbox"/> Sumter
<input type="checkbox"/> Brevard	<input type="checkbox"/> Gadsden	<input type="checkbox"/> Lafayette	<input type="checkbox"/> Okeechobee	<input type="checkbox"/> Suwannee
<input checked="" type="checkbox"/> Broward	<input type="checkbox"/> Gilchrist	<input checked="" type="checkbox"/> Lake	<input type="checkbox"/> Orange	<input checked="" type="checkbox"/> Taylor
<input type="checkbox"/> Calhoun	<input type="checkbox"/> Glades	<input checked="" type="checkbox"/> Lee	<input type="checkbox"/> Osceola	<input type="checkbox"/> Union
<input checked="" type="checkbox"/> Charlotte	<input type="checkbox"/> Gulf	<input type="checkbox"/> Leon	<input type="checkbox"/> Palm Beach	<input checked="" type="checkbox"/> Volusia
<input type="checkbox"/> Citrus	<input type="checkbox"/> Hamilton	<input type="checkbox"/> Levy	<input type="checkbox"/> Pasco	<input type="checkbox"/> Wakulla
<input type="checkbox"/> Clay	<input type="checkbox"/> Hardee	<input type="checkbox"/> Liberty	<input type="checkbox"/> Pinellas	<input type="checkbox"/> Walton
<input type="checkbox"/> Collier	<input type="checkbox"/> Hendry	<input type="checkbox"/> Madison	<input type="checkbox"/> Polk	<input type="checkbox"/> Washington
<input type="checkbox"/> Columbia	<input type="checkbox"/> Hernando	<input type="checkbox"/> Manatee	<input type="checkbox"/> Putnam	
<input type="checkbox"/> DeSoto	<input type="checkbox"/> Highlands	<input type="checkbox"/> Marion	<input type="checkbox"/> Santa Rosa	
<input type="checkbox"/> Dixie	<input type="checkbox"/> Hillsborough	<input type="checkbox"/> Martin	<input type="checkbox"/> Sarasota	

INCIDENT LOCATION

Please enter the location of the incident. If you are entering Directions, please put "See Directions" in Address Line 1.

Facility/Installation Name: *

Address Line 1: *

Address Line 2: *

Directions: *

City: *

State: * FL

Zip Code: *

Incident Location (in Decimal Degrees – e.g., Latitude: 30.43813621, Longitude: -84.28134377):

Latitude: * Longitude: *

To find the lat/long of your incident, click [here](#). After you select a location, the lat/long will be in the information box in the upper right corner of the screen.

REPORTER DETAILS

Name: *

Title: *

Phone: * Ext: *

E-mail Address: *

Relationship: * ☐ Operator of the Facility/Installation ☐ Owner of the Facility/Installation

☐ Other: *

CONTACT DETAILS

Name: *

Phone: * Ext: *

E-mail Address: *

Attachment 8: FDEP DMR Example

Discharge Monitoring Report Example for Effluent to Underground Injection Wells

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: <http://www.fldepportal.com/go/>

PERMITTEE NAME:	City of Key West	PERMIT NUMBER:	FLA147222-015-DW1P	REPORT FREQUENCY:	Monthly
MAILING ADDRESS:	1300 White Street Key West, Florida 33040-	LIMIT:	Final	PROGRAM:	Domestic
FACILITY:	Richard A Heyman WWTP - Key West	CLASS SIZE:	N/A		
LOCATION:	Trumbo Point Annex-Fleming Key Key West, FL	MONITORING GROUP NUMBER:	U-001		
		MONITORING GROUP DESCRIPTION:	Injection Well System, with Influent		
		RE-SUBMITTED DMR:	<input type="checkbox"/>		
COUNTY:	Monroe	NO DISCHARGE FROM SITE:	<input type="checkbox"/>		
OFFICE:	Southeast District	MONITORING PERIOD	From: _____ To: _____		

Parameter		Quantity or Loading	Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
BOD, Carbonaceous 5 day, 20C	Sample Measurement									
PARM Code 80082 Y	Permit Requirement				5.0	(An.Avg.)	mg/L		5 Days/Week	24-hr FPC
Mon. Site No. EFF-1										
BOD, Carbonaceous 5 day, 20C	Sample Measurement									
PARM Code 80082 1	Permit Requirement			10.0	7.5	6.25	mg/L		5 Days/Week	24-hr FPC
Mon. Site No. EFF-1	Requirement			(Max.)	(Max.Wk.Avg.)	(Mo.Avg.)				
Ultraviolet Light Dosage	Sample Measurement									
PARM Code 61938 J	Permit Requirement			35			mW-s/cm		Daily; 24 hours	Meter
Mon. Site No. PPI-1	Requirement			(Min.)						
Solids, Total Suspended	Sample Measurement									
PARM Code 00530 Y	Permit Requirement				5.0	(An.Avg.)	mg/L		5 Days/Week	24-hr FPC
Mon. Site No. EFF-1										
Solids, Total Suspended	Sample Measurement									
PARM Code 00530 1	Permit Requirement			10.0	7.5	6.25	mg/L		5 Days/Week	24-hr FPC
Mon. Site No. EFF-1	Requirement			(Max.)	(Max.Wk.Avg.)	(Mo.Avg.)				
Ultraviolet Light Transmittance	Sample Measurement									
PARM Code 51043 J	Permit Requirement			65			percent		Daily; 24 hours	Meter
Mon. Site No. PPI-1	Requirement			(Min.)						

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 the 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.

NAME TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Richard A Heyman WWTP - Key West

MONITORING GROUP

U-001

PERMIT NUMBER: FLA147222-015-DW1P

NUMBER:

MONITORING PERIOD

From:

To:

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Coliform, Fecal	Sample Measurement										
PARM Code 74055 Y Mon. Site No. EFF-1	Permit Requirement				200 (An.Avg.)			≠100mL		5 Days/Week	Grab
Coliform, Fecal	Sample Measurement										
PARM Code 74055 I Mon. Site No. EFF-1	Permit Requirement				200 (Mo.Geo.Mn.)	800 (Max.)		≠100mL		5 Days/Week	Grab
Ultraviolet Light Intensity	Sample Measurement										
PARM Code 49607 I Mon. Site No. PPI-1	Permit Requirement				Report (Min.)			mW/cm²	0	Daily; 24 hours	Meter
pH	Sample Measurement										
PARM Code 00400 I Mon. Site No. EFF-1	Permit Requirement				6.0 (Min.)	8.5 (Max.)		n.p.		Continuous	Meter
Nitrogen, Total	Sample Measurement										
PARM Code 00600 Y Mon. Site No. EFF-1	Permit Requirement				3.0 (An.Avg.)			mg/L		5 Days/Week	24-hr FPC
Nitrogen, Total	Sample Measurement										
PARM Code 00600 I Mon. Site No. EFF-1	Permit Requirement				6.0 (Max.)	4.5 (Max.Wk.Avg.)	3.75 (Mo.Avg.)	mg/L		5 Days/Week	24-hr FPC
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 Y Mon. Site No. EFF-1	Permit Requirement				1.0 (An.Avg.)			mg/L		5 Days/Week	24-hr FPC
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 I Mon. Site No. EFF-1	Permit Requirement				2.0 (Max.)	1.5 (Max.Wk.Avg.)	1.25 (Mo.Avg.)	mg/L		5 Days/Week	24-hr FPC
Flow	Sample Measurement										
PARM Code 50050 Y Mon. Site No. FLW-1	Permit Requirement		10.0 (An.Avg.)	MGD						Continuous	Flow Totalizer
Flow	Sample Measurement										
PARM Code 50050 I Mon. Site No. FLW-1	Permit Requirement	Report (Mo.Avg.)	Report (3Mo.Avg.)	MGD					0	Continuous	Flow Totalizer

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Richard A Heyman WWTP - Key West

MONITORING GROUP U-001

PERMIT NUMBER: FLA147222-015-DW1P

NUMBER: _____
MONITORING PERIOD From: _____ To: _____

[illegible]



THE CITY OF KEY WEST
1300 WHITE ST.
KEY WEST, FL 33040

BUSINESS IMPACT ESTIMATE
PURSUANT TO F.S. 166.041(4)

Meeting Date: September 3, 2025
Ordinance Number: 25-3277
Posted To Webpage: _____

This Business Impact Estimate is given as it relates to the proposed ordinance titled:

AN ORDINANCE OF THE CITY OF KEY WEST, FLORIDA, AMENDING CHAPTER 74 OF THE CODE OF ORDINANCES, ENTITLED "UTILITIES", ARTICLE II ENTITLED "SANITARY SEWER SYSTEM," BY REPEALING SECTION 74-171 - GREASE, OIL AND SAND INTERCEPTORS; ADDING ARTICLE VI ENTITLED "FATS OILS AND GREASE MANAGEMENT" SECTION 74-245 THROUGH 74-261 TO PROVIDE REGULATIONS FOR UNIFORM MAINTENANCE AND MONITORING REQUIREMENTS FOR CONTROLLING THE DISCHARGE OF GREASE FROM FOOD SERVICE FACILITIES, AND GREASE HAULING; ADDING SECTIONS 74-250 - TITLE; SECTION 74-251 - PURPOSE; SECTION 74-252 - APPLICABILITY; SECTION 74-253 - DEFINITIONS; SECTION 74-254 - AUTHORITY; SECTION 74-255 - FACILITY INSPECTIONS; 74-256 - GREASE TRAPS & INTERCEPTORS; SECTION 74-257 - GREASE INTERCEPTOR AND TRAP ENFORCEMENT; SECTION 74-258 - GREASE HAULERS; SECTION 74-259 - FEES; SECTION 74-260 - ENFORCEMENT, APPEALS; AND SECTION 74-261 ADDITIONAL CRIMINAL OFFENSES; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF INCONSISTENT PROVISIONS; PROVIDING FOR AN EFFECTIVE DATE

The sections below are not required to be completed if the ordinance involves any one of the following types of regulations. Please check if applicable:

- ☒ 1. Ordinances required for compliance with federal or state law or regulation;
- ☐ 2. Ordinances relating to the issuance or refinancing of debt;
- ☐ 3. Ordinances relating to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget;
- ☐ 4. Ordinances required to implement a contract or an agreement, including, but not limited to, any federal, state, local, or private grant, or other financial assistance accepted by a municipal government;
- ☐ 5. Emergency ordinances;

- ___ 6. Ordinances relating to procurement; or
- ___ 7. Ordinances enacted to implement the following:
 - ___ a. Part II of chapter 163, relating to growth policy, county and municipal planning, and land development regulation, including zoning, development orders, development agreements, and development permits;
 - ___ b. Sections 190.005 and 190.046;
 - ___ c. Section 553.73, relating to the Florida Building Code; or
 - ___ d. Section 633.202, relating to the Florida Fire Prevention Code.

Part I.

Summary of the proposed ordinance and statement of public purpose:

(Address the public purpose to be served by the proposed ordinance, such as serving the public health, safety, morals, and welfare of the City of Key West.)

Through a variety of "SSO's" (Sanitary Sewer Overflows) prior to 2021, the City was issued a consent order (OGC File No 21-0851) with certain corrective measures required. Item 5.G of the order was to "fully implement a documented Capacity, Management, Operation, and Maintenance (CMOM) program", which began in 2024. A portion of said CMOM is the implementation of this proposed F.O.G. Ordinance.

Part II.

Estimate of the direct economic impact of the proposed ordinance on private, for-profit businesses in the City of Key West: *(fill out subsections a-c as applicable, if not applicable write "not applicable")*

(a) Estimate of direct compliance costs that businesses may reasonably incur if the proposed ordinance is enacted:

There should not be any Business Impacts as this is already a process followed by compliant Licensees. Only violation fees may be enforced more frequently than current enforcement procedures.

(b) Identification of any new charges or fee on businesses subject to the proposed ordinance, or for which businesses will be financially responsible; and

N/A

(c) An estimate of the City of Key West's regulatory costs, including an estimate of revenues from any new charges or fees that will be imposed on businesses to cover such costs.

N/A

Part III.

Good faith estimate of the number of businesses likely to be impacted by the ordinance:

250

Part IV. Additional Information (if any):
