

**RESOLUTION NO. 2025-026**

**A RESOLUTION OF THE CITY COUNCIL OF THE  
CITY OF CORONA, CALIFORNIA, APPROVING THE  
SEWER SYSTEM MANAGEMENT PLAN AND  
REPEALING RESOLUTION NO. 2023-022**

**WHEREAS**, the State Water Resources Control Board has adopted Order No. 2006-0003-DWQ, requiring all public wastewater collection system agencies in California that own or operate a collection system comprised of more than one mile of pipe or sewer line, which convey untreated wastewater to a publicly owned treatment facility, to prepare a sewer system management plan; and

**WHEREAS**, the City of Corona, as the owner and operator of a collection system comprised of more than one mile of pipe or sewer line, is subject to the requirements of Order No. 2006-0003-DWQ; and

**WHEREAS**, on February 18, 2009, the City Council adopted Resolution No. 2009-018 approving a Sewer System Management Plan for the City of Corona in accordance with the requirements of Order No. 2006-0003-DWQ; and

**WHEREAS**, Order No. 2006-0003-DWQ requires the Sewer System Management Plan be updated every 5 years and it be recertified by the City Council if significant updates are made; and

**WHEREAS**, on May 3, 2023, the City Council adopted Resolution No. 2023-022, approving a Sewer System Management Plan for the City of Corona in accordance with the requirements of Order No. 2006-0003-DWQ; and

**WHEREAS**, the State Water Board adopted the reissued Sanitary Sewer System Waste Discharge Requirements Order No. 2022-003-DWQ on December 6, 2022, making it effective as of June 5, 2023; and

**WHEREAS**, the Utilities Department staff has reviewed and updated the Sewer System Management Plan. Significant changes to the SSMP include updated spill notification, monitoring, and reporting requirements, Legally Responsible Official designation requirements, and updated deadlines for SSMP Audits (now due every 3 years vs. every 2 years) and SSMP Updates (now due every 6 years vs. every 5 years); and

**WHEREAS** the Utilities Department now presents the Sewer System Management Plan to the City Council for recertification as required by Order No. 2022-0103-DWQ.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF  
THE CITY OF CORONA, CALIFORNIA, AS FOLLOWS:**

**SECTION 1. Approval of SSMP.** The Sewer System Management Plan attached hereto as Exhibit "A" is hereby adopted and certified, and the Utilities Director of the City of Corona Utilities Department is authorized and directed to amend the Sewer System Management Plan as necessary to reflect current regulatory requirements and best practices.

**SECTION 2. Repeal of Conflicting Resolution.** Resolution No. 2023-022 is hereby repealed.

**SECTION 3. Effective Date.** This Resolution shall become effective immediately upon its adoption.

**PASSED, APPROVED AND ADOPTED** this 16<sup>th</sup> of April, 2025.

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Mayor of the City of Corona, California

**ATTEST:**

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City Clerk of the City of Corona, California

**CERTIFICATION**

I, Sylvia Edwards, City Clerk of the City of Corona, California, do hereby certify that the foregoing Resolution was regularly passed and adopted by the City Council of the City of Corona, California, at a regular meeting thereof held on the 16th day of April, 2025 by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

**ABSTAINED:**

**IN WITNESS WHEREOF**, I have hereunto set my hand and affixed the official seal of the City of Corona, California, this 16th day of April, 2025.

\_\_\_\_\_  
City Clerk of the City of Corona, California

[SEAL]

## **EXHIBIT "A"**

### **SEWER SYSTEM MANAGEMENT PLAN**

# CITY OF CORONA UTILITIES DEPARTMENT



## SEWER SYSTEM MANAGEMENT PLAN (SSMP)

WDID 8SSO10565  
Updated 04-16-2025

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# **SECTION 1.0**

## **GOALS & INTRODUCTION**

## 1.0 GOALS & INTRODUCTION

### REGULATORY REQUIREMENTS

The Plan Introduction section must provide a:

- 1.1 General description of the sewer system management program and
- 1.2 Discuss Plan implementation and updates

**Goals:** The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to:

- Properly manage, operate, and maintain all parts of the Enrollee's sanitary sewer system(s),
- Reduce and prevent spills, and
- contain and mitigate spills that do occur.

### COMPLIANCE

#### 1.1 Regulatory Context

This Sewer System Management Plan (Plan) identifies goals the City of Corona Utilities Department has established for the management, operation, and maintenance of the sewer system, and discusses the role of the Plan in supporting these goals. These goals provide a focus for City staff to continue high-quality work and to implement improvements in the management of the City's sewer system. To ensure a robust Plan, the City regularly conducts an audit of the Plan, assesses its effectiveness, and updates the Plan accordingly.

### GOALS DISCUSSION

- Be available and responsive to the needs of the public, and work cooperatively with local, state and federal agencies to reduce, mitigate the impacts of, and properly report sewer system overflows (SSOs).
- Protect public health and safety, and the environment.
- Provide adequate capacity to convey peak wastewater flows.
- Conduct a regularly scheduled maintenance program that will minimize the risk and occurrence of SSOs.
- Identify areas in the sewer system prone to blockages or SSOs and implement scheduled maintenance to remove roots, debris, fats, oils, and grease.
- Identify, prioritize, and continuously renew and replace sewer system facilities to maintain reliability.
- Periodically review and update the Sewer System Management Plan (Plan).
- Educate the public on the impacts of fats, oils, and grease to gravity sewer mains to prevent their actions from causing SSOs.
- Uphold the City's standards and specifications on newly constructed public sewers.



For successful implementation of the Sewer System Management Plan, the Legally Responsible Official (LRO), Assistant Utilities Director, Maintenance Manager, Construction Superintendent, Utility Service Workers, Pre-Treatment Program Contractor, and the Regulatory Compliance Division are responsible for reviewing the Sewer System Management Plan for compliance and determining its effectiveness in preventing sewer spills and are responsible for implementing the Plan as well as updating the Plan regularly.

The City periodically reviews the Plan for compliance, implementation, and effectiveness of all of the following elements as well as Appendices:

1. Goals and Introduction
2. Organization
3. Legal Authority
4. Operation and Maintenance Program
5. Design and Performance Provisions
6. Sanitary Sewer Overflow Emergency Response Plan
7. Fats, Oils, Grease, and Pipe Blocking Substances Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, Measurement, and Program Modifications
10. SSMP Program Audits
11. Communication Program

#### **COMPLIANCE SUMMARY**

The City of Corona's Sewer System Management Plan is internally reviewed annually, including the Emergency Response Plan and the Training Program. All updates are logged in the Plan Change Log found in Appendix S. All Plan audits are completed within six months following the three-year audit period and all Plan Updates are completed every six years after the last Plan Update. The City's governing body certifies significant changes by the due date.

## 1.2 SSMP UPDATE SCHEDULE

### REGULATORY REQUIREMENTS

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

### COMPLIANCE

To comply with this requirement, the City has conducted Audits and Updates according to the schedule below:

Sewer System Management Plan & Subsequent Update Due Dates					
System Name	WDID Number	Original Plan Required Due Date	Required Plan Update Due Date	Required Plan Update Due Date	Required Plan Update Due Date*
Corona City CS	8SSO10565	5/2/2009	5/2/2014	5/2/2019	5/2/2025

Audit Due Dates								
System Name	WDID Number	Original Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	End of Required 3-Year Audit Period**
Corona City CS	8SSO10565	5/2/2011	5/2/2013	5/2/2015	5/2/2017	5/2/2019	5/2/2021	5/2/2024

\* Per Section 5.5 and Attachment E1, Section 3.11 of the General Order, Plan updates are due within six years after the required due date of the Enrollee's last Plan Update.

\*\* Per Section 5.4 and Attachment E1, Section 3.10 of the General Order, the Audit Report is due within six months after the end of the required 3-year audit period.

The Utilities Department reviews and updates the Sewer Management Plan regularly. Internal audits of the Sewer System Management Plan are conducted utilizing the established Audit Form (Appendix R) at a minimum frequency of once every three years, after the end of the last required audit period. The Audit is completed within three months following the end of the three-year audit period. The Audit Report is submitted into the California Integrated Water Quality System (CIWQS) Online Database by the Legally Responsible Official (LRO) within six months following the end of the three-year audit period.

Any deficiencies discovered following the internal audit is addressed within six months in order to address the prevention of sewer spills immediately and effectively.

Following internal audits, the Sewer System Management Plan is updated at a minimum frequency of every six years after the last Plan Update due date.

Significant milestones of spill prevention activities are reviewed, monitored, and updated as needed:

- Date CCTV inspection cycle will be completed every 4 years

- High maintenance locations cleaned monthly or quarterly
- Sewer Master Plan Update

A summary of revisions based on internal audit findings and other sewer system management-related changes are included in the Plan Update. Changes to the Plan are also documented in the Plan Change Log (Appendix S).

Corona's governing entity, City Council, approves and certifies the updated Plan, which is then uploaded into CIWQS by the Legally Responsible Official.

Corona's internal timeline for meeting compliance is summarized below:

Action Item	Deadline
Review Plan	Annually
Conduct Audit	May 3 - October 31, 2024, then every 3 years
Upload Audit Report into CIWQS	November 2, 2024, then every 3 years
Address Deficiencies	As outlined in the Audit Report
Update Plan	As deficiencies are corrected
Certify Plan	April 2025 and every 6 years; following significant changes
Upload Updated Plan into CIWQS	May 2, 2025, then every 6 years; following significant changes

#### COMPLIANCE SUMMARY

The City adheres to the milestones described in this section by conducting audits, monitoring spill prevention activities, addressing deficiencies, and updating the Plan as scheduled.

## 1.3 SEWER SYSTEM ASSET OVERVIEW

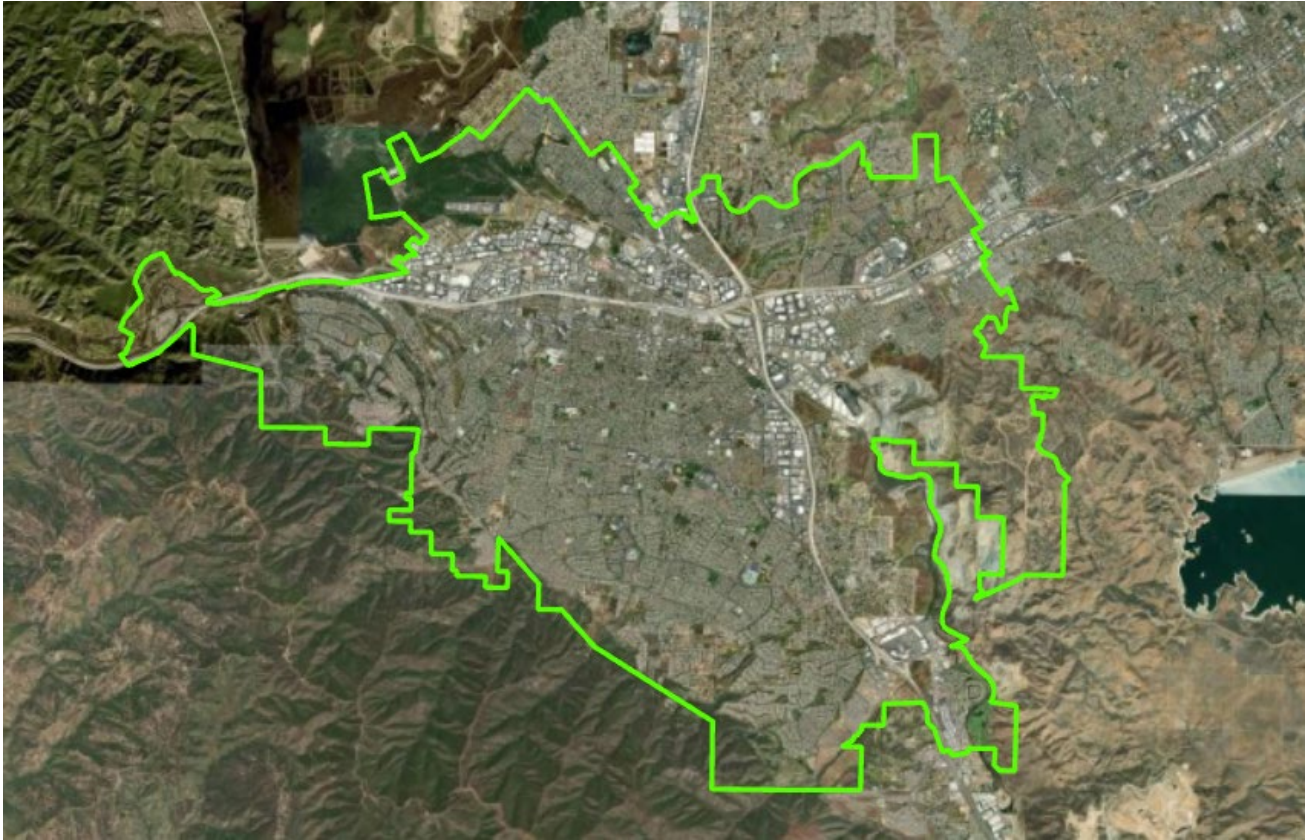
### REGULATORY REQUIREMENTS

The Plan Introduction section must provide a description of the Enrollee-owned assets and service area, including but not limited to:

- Location, including county(ies);
  - Service area boundary;
  - Population and community served;
  - System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;
  - Structures diverting stormwater to the sewer system;
  - Data management systems;
  - Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;
  - Estimated number or percent of residential, commercial, and industrial service connections; and
  - Unique service boundary conditions and challenge(s).
- Additionally, the Plan Introduction section must provide reference to the Enrollee's up-to-date map of its sanitary sewer system, as required in section 4.1 (Updated Map of Sanitary Sewer System)

### COMPLIANCE

The City of Corona is located in the northwestern portion of Riverside County, California. The City has a population of approximately 169,868 residents and encompasses 39.2 square miles of residential, commercial, and industrial land. Neighboring cities include Riverside to the northeast and Norco to the north. The western and eastern portions of the City are generally bounded by unincorporated Riverside County (County) territory, and the southern portion of the City is bounded by the Cleveland National Forest and County territory. Prado Flood Control Basin is located adjacent the City's northwest corner.



*City of Corona Sewer System Boundary Map*

Corona's sewer collection system is comprised of 457 total sewer lines and 15 active lift stations. There are 435 miles of gravity sewer lines, 22 miles of force mains, and 120 miles of private sewer lines within City limits.

The latest Supervisory Control and Data Acquisition (SCADA) technology is employed throughout the City of Corona's various facilities. There are 15 active sewage pump stations throughout the City. SCADA enables continuous monitoring of the flows, levels, pressure, and overall condition of the sewage pumping stations from the City's operations center and all three Water Reclamation Facilities. Additionally, there are set points within the SCADA system that will create an alarm that can be received by water reclamation operators and utility service workers for the purpose of immediate response to the site.

The City of Corona's sanitary sewer flow consists of 39,238 residential, 1,471 commercial, 643 industrial and 38 permitted sewer connections that are regulated through the pretreatment program as required by City Municipal Code chapter 13.08. The City has an active fats, oil, and grease (FOG) control program described in section 7.0 of this SSMP.

There are approximately 40,646 upper and lower laterals that are connected to the City's system, however, City does not own nor operate these laterals within its service area. All private connections must be maintained by the property owner as described in [Chapter 13.12](#) Sewer Connections of the Municipal Code.

All sewer lines, assets, and maps are tracked via GIS. Section 4.1, Operation and Maintenance, of the Sanitary Sewer Management Plan further describes staff responsibilities in updating and maintaining all City mapping; and how all sewer system electronic mapping files are available to State and Regional Board staff.

#### **COMPLIANCE SUMMARY**

The City maintains records on sewer system assets and its service area through established data management systems and standard operating procedures. GIS is utilized for tracking sewer lines, assets, and maps. This data is reviewed annually by the Maintenance Manager, Maintenance Superintendent, as well as the Regulatory Compliance division.

# **SECTION 2.0**

# **ORGANIZATION**

## 2.0 ORGANIZATION

The intent of this section of the SSMP is to identify staff responsible for the implementation of this SSMP, responding to SSO events, and meeting the SSO reporting requirements. This section also includes the designation of the authorized representative responsible for certifying reports in the California Integrated Water Quality System (CIWQS) Online Database.

### REGULATORY REQUIREMENTS

**D.2 Organization:** The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative documentation that includes:

- The name of the Legally Responsible Official;
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements;
- Organizational lines of authority; and
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable.

### COMPLIANCE

#### ORGANIZATION DISCUSSION

The following sections outline the City's organization, general and SSMP responsibilities of personnel, authorized representatives, organizational lines of authority, and chain of communication for responding to and reporting SSOs. Names and contact information for current staff are included in Appendix A.

#### LEGALLY RESPONSIBLE OFFICIAL

The Legally Responsible Official (LRO) has the authority to ensure the enrolled sanitary sewer system(s) complies with the General Order and is authorized to serve as a duly authorized representative. The Legally Responsible Official has responsibility over management of the Enrollee's entire sanitary sewer system and is authorized to make managerial decisions that govern the operation of the sanitary sewer system, including making major capital improvement recommendations to ensure long-term environmental compliance. The Legally Responsible Official also has direct authority over individuals that:

- Possess a recognized degree or certificate related to operations and maintenance of sanitary sewer systems, and/or



- Have professional training and experience related to the management of sanitary sewer systems, demonstrated through extensive knowledge, training and experience.

## **DESCRIPTION OF GENERAL AND SSMP RESPONSIBILITIES**

### **Utilities Director**

The Utilities Director provides direction, plans, directs, and integrates the operations of the electric water and wastewater utilities of the City; directs and controls departmental budgets, staffing, and policies; directs intergovernmental relations and participates as member of the City's executive team; and performs related duties as assigned. Is also designated as the Legally Responsible Official (LRO) and can certify reports in CIWQS if needed.

### **Assistant Utilities Director**

The Assistant Utilities Director provides administrative direction, plans, manages, and coordinates all related Water, Wastewater and Electric activities. The Assistant Utilities Director takes on a larger responsibility for all division operations, budgets and staffing, and has a greater level of interaction and communication with staff, other departments, committees, agencies, the development community, and public officials. Is also designated as the Legally Responsible Official (LRO) and can certify reports in CIWQS if needed.

The Legally Responsible Official has direct authority over individuals that:

- Possess a recognized degree or certificate related to operations and maintenance of sanitary sewer systems, and/or
- Have professional training and experience related to the management of sanitary sewer systems, demonstrated through extensive knowledge, training and experience.

### **Maintenance Manager**

The Maintenance Manager position is currently vacant, however, the Maintenance Manager manages and oversees the City's infrastructure and maintenance activities; manages all maintenance and construction capital improvement projects for sewer collection and facility maintenance systems. Controls, implements and manages budgetary and administrative duties of this operation. Oversees the construction superintendent, maintenance supervisor, utility service workers, and CCTV contractors.

### **Senior Engineer**

The Senior Engineer approves, and coordinates changes needed to the GIS database. Provides QA/QC for changes needed to utility pipeline maps and records changes. Supplies annual quantification updates for the sewer system inventory.

### **GIS Analyst**

The GIS Analyst updates, manages, and maintains the GIS database. Coordinates with other City departments.

### **Utility Maintenance Superintendent**

The Underground Maintenance Division is managed by the Utility Maintenance Superintendent. The Utility Maintenance Superintendent provides , plans, schedules, lays out, supervises and participates in the work of skilled, journey-level personnel engaged in the construction, maintenance, repair and servicing of the water distribution/sewer system and recycled water mains, service lines, valves, water meters and related appurtenances; plans, schedules, lays out the work of construction pipeline and special projects; oversees and manages work of outside contractors involved in the fire hydrant, air vac, blow-offs, and sewer inspection, cleaning and videoing services; leads emergency response, investigates and reports SSOs, trains field crews, notifies Regulatory Compliance Division or regulatory agencies of SSO events when applicable and after normal business hours, and performs other related duties as assigned.

### **Utility Maintenance Superintendent**

The Aboveground Maintenance division is managed by the Utility Maintenance Superintendent. The Utility Maintenance Superintendent provides, schedules and oversees maintenance of the City's lift stations, water reclamation collection system, water distribution, reclaimed water infrastructure, generators, and related equipment; oversees field staff and performs related duties as assigned.

### **Regulatory Compliance Specialists**

The Regulatory Compliance Specialist reviews data and creates reports to display the information; updates plans and procedures to meet new regulations including the SSMP and related documents; compiles and submits SSO reports in CIWQS and verifies that information populated is correct; reviews the SSMP and conducts internal audits; notifies regulatory agencies when applicable during normal business hours, reviews applicable permits, laws, and regulations; provides regulatory support to all parts of the Department; prepares letters for notification to agencies regarding changes occurring at facilities; performs related duties as assigned.

### **Utility Service Workers**

The City's Utility Service Workers performs a wide variety of skilled journey level duties involved in the installation, servicing, repair, and maintenance of the City's domestic, commercial, and industrial water distribution and sewer system facilities, systems, and equipment; responds to reports of SSOs and blockages, assists in clean up, spill containment and mitigation during SSO events, mobilizes sewer cleaning equipment, by-pass pumping equipment, and portable generators, provides information on SSOs to the Regulatory Compliance Division when appropriate, and performs related duties as assigned.

### **Closed-Circuit Television (CCTV) Contractor**

The CCTV contractor inspects, cleans, and videos the sewer system at the enrollee's direction.

**Pre-Treatment (Source Control) Program Contractor**

Regulates industrial users for the City, reviews industrial permit applications; conducts wastewater sampling, industry inspections, and issues industrial permits; compiles monthly, quarterly, and annual status reports; regulates and inspects interceptors at restaurants, auto repair shops and car washes; issues verbal warnings and written violations to bring industries into compliance; conducts public education on proper disposal of FOG and BMPs for restaurants, monitoring the addition/removal of interceptors, clarifiers, and traps; Uses the Aquatic Informatics database to store data and manage industrial users and the FOG program; provides assistance with building plan checks, the storm water program, odor complaints, and SSO response/follow up as needed.

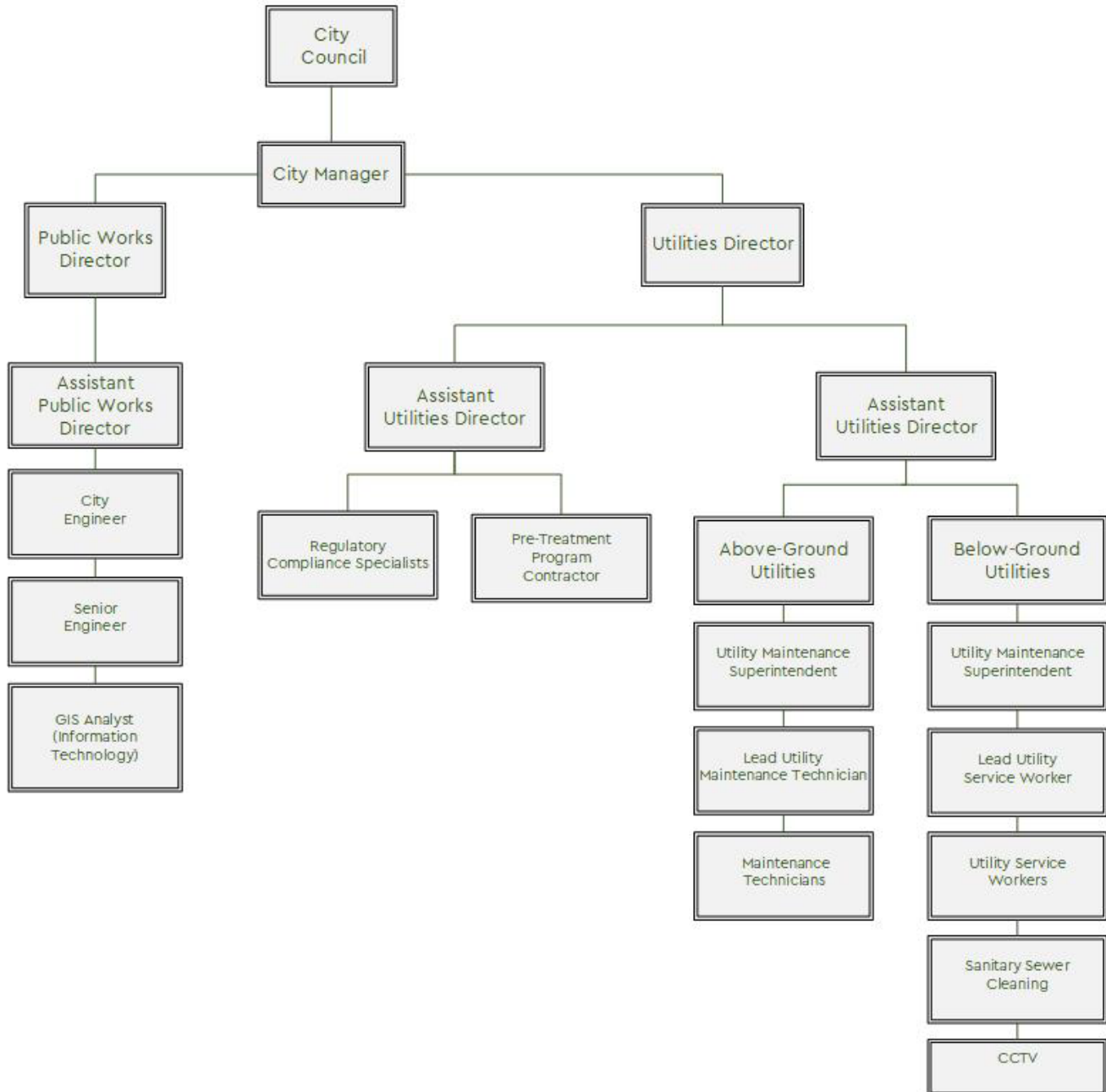
**Maintenance Technicians**

Maintenance Technicians performs a wide variety of duties involved in the installation, modification, design, maintenance, and repair of mechanical equipment and machinery used in the operation of large surface water treatment facilities, water reclamation facilities, reverse osmosis desalination facilities, sewer lift stations, and reclaimed water pump stations, and potable booster stations; operation/maintenance, including: production, storage and distribution facilities, and chemical system; and performs related duties as assigned.

## ORGANIZATION CHART

The City of Corona Utilities Department is governed by the City Council. Daily management is carried out by the Director of Utilities, who oversees the Department.

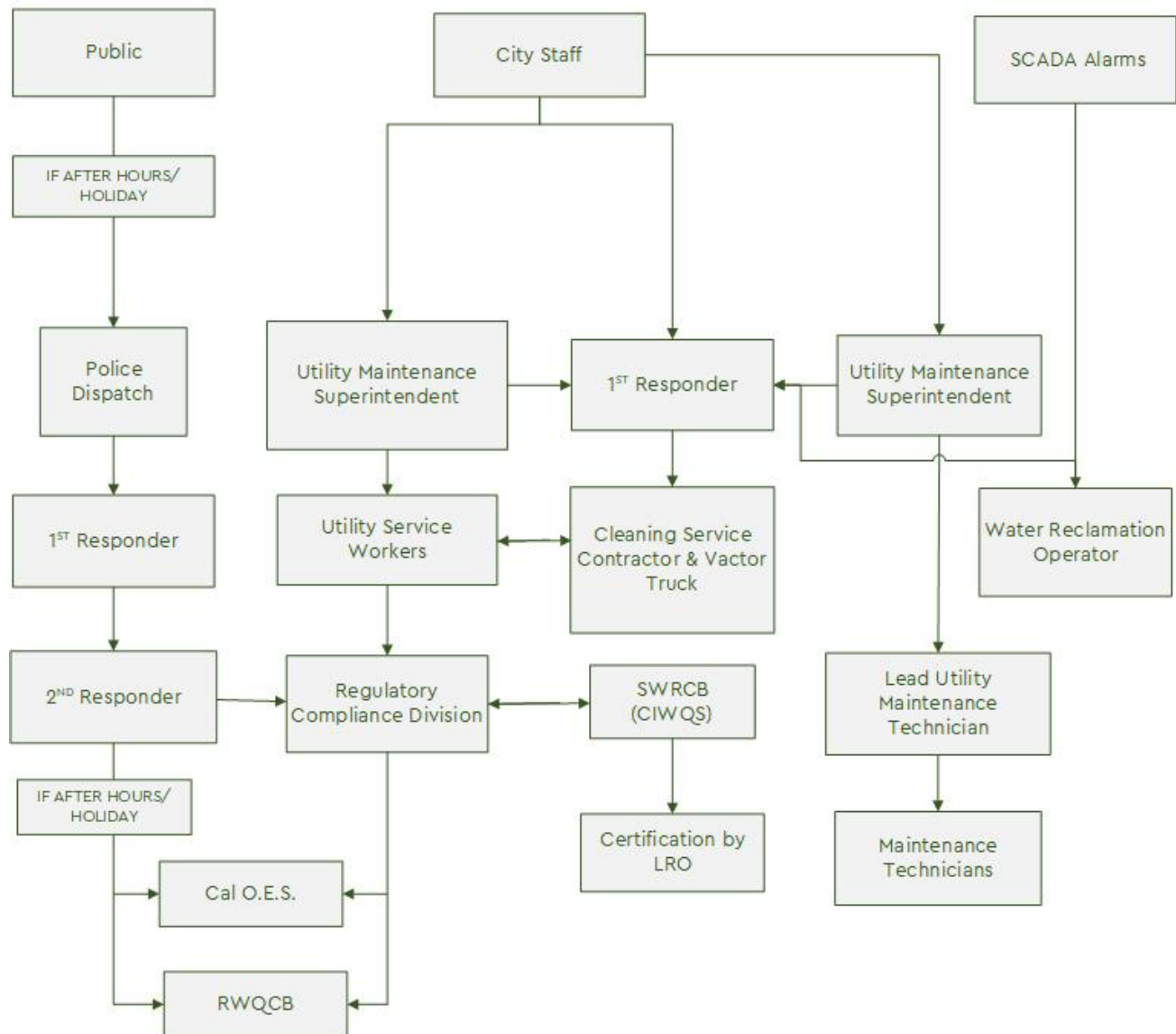
### Sewer System Management Plan Organizational Structure



## CHAIN OF COMMUNICATION

The City of Corona Utilities Department chain of communication for reporting spills are as follows:

### City of Corona Utilities Department SSO Chain of Communication



## **COMPLIANCE SUMMARY**

The City has a robust sanitary sewer program comprised of well-qualified staff. Any changes in staffing, responsibilities, and contact information are reflected in the Sanitary Sewer Management Plan's organizational lines of authority and chain of communication to ensure rapid spill response. All spill notifications are routed appropriately to responsible personnel in accordance with the adopted SOP, dated 2018, and the Sewer Emergency Response Plan that is updated on an as-needed basis. All spill response activities are documented and reported to the Legally Responsible Official, Regulatory Compliance Division, and to regulatory agencies as required by the Order.

The City ensures a resilient program by training multiple personnel in specific duties including but not limited to: maintenance, spill response, and reporting.

# **SECTION 3.0**

## **LEGAL AUTHORITY**

### 3.0 LEGAL AUTHORITY

The intent of this section of the Sewer System Management Plan is to establish that the City of Corona Utilities Department has the legal authority to protect public health and the environment while maintaining compliance with waste discharge requirements for sanitary sewer systems.

#### **REGULATORY REQUIREMENTS**

**D.3. Legal Authority:** The Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages;
- Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure;
- Require that sewer system components and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee;
- Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and
- Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

#### **COMPLIANCE**

##### **LEGAL AUTHORITY DISCUSSION**

The City of Corona Utilities Department has the necessary authority to protect its sewer system through Chapter 13.08 and 13.12 of the Corona Municipal Code and Resolution No. 2012-019. The City also runs an EPA approved pretreatment program that administers discharge permits to industrial users who discharge wastewater into the City's water reclamation collection system.

##### **PREVENTION OF ILLICIT DISCHARGES**

The public sewerage ordinance gives the City the authority to prevent illicit discharges per City Municipal Code Section 13.08.210. § 13.08.210 describes all prohibited waste discharges into the City's sewer system, or any opening, sump, tank, clarifier, piping, or waste treatment system that will drain or flow to the City's sewer system.



§ 13.08.220 gives the City the necessary authority to also prevent discharges and unauthorized debris from entering the City's sewer system and storm drain system.

The public sewerage ordinance gives the City the authority to prevent the discharge of FOG and other debris. The Ordinance (in § 13.08.110 and § 13.08.150) gives the City the authority to require applicable businesses to have oil and grease interceptors. Additionally, the Ordinance (in § 13.08.330) requires industries to submit industrial waste discharge permit applications for review to identify if a permit is needed to protect the sewer system.

#### **COLLABORATE WITH STORM SEWER AGENCIES**

Riverside County Flood Control and co-permittees of the Municipal Separate Storm Sewer System (MS4) permit, R8-2010-0033, have developed and submitted to the Regional Water Quality Control Board a Unified Sanitary Sewer Spill Response Procedure to ensure effective coordination between sewer agencies and permittees in an event a sanitary sewer overflow impacts, or threatens to impact, the MS4.

#### **SEWER DESIGN AND CONSTRUCTION**

The City's public sewerage ordinance, as well as Chapter 13.12 Sewer Connections of the Municipal Code, gives the City authority to regulate the proper design and construction of sewers and connections.

§ 13.08.170 describes the City's authority to establish design requirements for standard interceptor designs and installation.

§ 13.12.070 requires anyone who wishes to connect to the City's collection system to obtain a permit and receive approval from the City before construction.

§ 13.12.180 describes the requirement to comply with sewer construction standards developed by the City.

The City of Corona Utilities Department also has an updated standard plans and specifications and Design Policy. The purpose of the specifications is to achieve uniformity and consistency in materials, equipment and methods of construction for projects in the City. Additional information can be found in Section 5.0, Design and Performance Provisions, in this Sanitary Sewer Management Plan.

#### **MAINTENANCE AND INSPECTION**

The City's public sewerage ordinance as well as Chapter 13.12 Sewer Connections of the Municipal Code, ensures the City will have access for maintenance, inspection and repair of publicly owned portions of the City's lateral.

§ 13.12.190 states that any part of the sewer system constructed in a public street, alley, way or right-of-way, will be owned by the City.

## **ENFORCEMENT**

The City has the authority to enforce all violations of its ordinance with specific wording in the ordinance as well as by Resolution No. 2012-019, Pretreatment Program Enforcement Response Plan (ERP), included in Appendix C. The ERP describes the City's approved pretreatment program of investigation and response to incidents where industrial users violate regulation relating to the discharge of waste into the City's sewer system.

Additionally, the ordinance (in § 13.08.410 and § 13.12.210) gives the City enforcement mechanisms and authority.

## **EASEMENT ACCESSIBILITY AGREEMENTS**

The City reserves and maintains access to the sewer collection system if it is on private property through easement recorded on parcel maps and tract maps before a development is accepted by the City Council. For any new sewer collection installation, City obtains approval from other government agencies.

For spills that impact or threaten to impact the Municipal Separate Storm Sewer System (MS4), the responsible sewer agency is to lead response to sewer overflows and will assume Person-In-Charge responsibilities, and may cut locks, open manholes, or otherwise enter MS4 as necessary to contain and clean up SSOs according to the Unified Sanitary Sewer Spill Response Procedures.

## **COMPLIANCE SUMMARY**

The City legal authority is derived from the City's municipal code Chapter 13.08, Public Sewerage System Waste Regulations. The City's Ordinances are codified as needed to comply with changing regulations on as needed basis. The City also complies with its commitment as stated in the SSMP requirements; and actively addresses deficiencies.

The City also has a robust inspection program that inspects and evaluates the system routinely.

# **SECTION 4.0**

## **OPERATION &**

### **MAINTENANCE PROGRAM**

#### 4.0 OPERATION AND MAINTENANCE PROGRAM

The Maintenance Manager leads the Sewer Operations and Maintenance Program and is directly responsible for all day-to-day operations of the sewer system section and oversight control of sewage lift stations, as related to Sanitary Sewer Overflows (SSOs). Responsibilities include construction, installation, pipeline repair projects, inspection, maintenance and support programs, sewer stoppages, and preventive and predictive maintenance. The Construction Superintendent is responsible for supervising and coordinating all work assigned to the utility service workers.

#### REGULATORY REQUIREMENTS

**D.4. Operation and Maintenance Program.** The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

**4.1. Updated Map of Sanitary Sewer System** - An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

**4.2. Preventive Operation and Maintenance Activities** - A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors that must include:

- Inspection and maintenance activities;
- Higher-frequency inspections and maintenance of known problem areas, including areas with tree root problems;
- Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.

The data collection system must document data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure.

**4.3 Training** - In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- The requirements of this General Order;
- The Enrollee's Spill Emergency Response Plan procedures and practice drills;
- Skilled estimation of spill volume for field operators; and
- Electronic CIWQS reporting procedures for staff submitting data.

#### **4.4 Equipment Inventory**

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

## **4.1 SEWER SYSTEM MAPPING**

### **COMPLIANCE**

The City of Corona Utilities Department has maps of the existing sewer system. These maps are continually updated and available in the City's Sewer Atlases, which are hard copies of the sewer system map. These maps show all gravity line segments, manholes and their associated identification number, pumping facilities, and pressure pipes and valves, as well as applicable stormwater conveyance facilities within the sewer system service area boundaries. The hard copies of the atlas are derived from a digital atlas that can be accessed through the City's employee website, [atwork.coronaca.gov](http://atwork.coronaca.gov) - Geographic Information Services (GIS). All utility service worker crews have their own Sewer Atlas and access to GIS sewer maps on the City's intranet to locate and find specific information about the sewer system. The digital GIS system can generate a *Sewer Features Report* that includes information such as status of facility, installation date, length, diameter, upstream and downstream invert, slope of line, material type, manhole depth and lid size among other things.

The City has a Senior Engineer who coordinates mapping and GIS changes in the City's water and sewer system. Any sewer system addition, replacement, or errors found by City staff in the Sewer Atlas is given to this designated person for correction and proper dissemination with the creation or revision date marked on each page. Additionally, all storm water facilities are mapped in the same fashion as the sewer facilities. In the event of an SSO, the Utility Maintenance Superintendent and crews can locate storm drains quickly for sand bagging purposes or can locate where a storm drain is flowing/discharging to (i.e. channel, wetlands, creek, etc.).

All maps pertaining to the sewer system are always available to the State and Regional Water Board. Any major changes to the sewer system maps must be logged in the Plan Change Log (Appendix S).

### **COMPLIANCE SUMMARY**

The GIS department updates and maintains all City mapping. When sewer mapping discrepancies are identified by field staff, staff submit a request, and updates are made by the responsible department. All sewer system electronic mapping files are available to the State and the Regional Water Quality Control Board staff upon request.

## **4.2 PREVENTATIVE OPERATION AND MAINTENANCE**

### **COMPLIANCE**

SSOs may occur for a number of reasons. Utility service workers are responsible for responding to SSOs during regular work hours (Monday through Thursday). After-hour requests for service are received by 911 dispatch and are then routed to the on-call first responder. This person responds to and assesses the situation, and if further action is required, the second responder (staff classified as a Supervisor) is called. For further details please see Section 2.0 and Section 6.0 of the SSMP.

Once the cause of an SSO has been determined, the Maintenance Manager and/or Utility Maintenance Superintendent will determine if the pipeline and/or facility need to be placed on a schedule for increased cleaning and inspection and/or if repairs are needed. All SSOs are tracked on a centralized spreadsheet and are reported in CIWQS by the Regulatory Compliance Division. Additionally, SSOs are mapped for internal reference and reporting.

Currently all sewer system cleaning and closed-circuit television (CCTV) inspections are contracted out. The contractor(s) utilize state of the art equipment, including CCTV and GIS systems to analyze the entire City sewer and sewage pump station service area. The contractor(s) are hired annually, with the option to renew for up to five years, to video and clean the City's sewer system. The City plans to have the entire sewer and transmission system videoed and cleaned at a minimum of every four years. The City also contracts a company to perform smoke testing of the sewer mainline to find leaks and illegal hook ups in the sewer system on an as needed basis.

Twenty-two high maintenance areas around the City have been identified and been placed on a monthly or quarterly cleaning schedule. Each manhole cover have a green S painted on top to denote that they have been cleaned. High maintenance areas are also mapped for internal reference and reporting purposes. The City currently works with an engineering firm to evaluate these high maintenance areas for possible capital improvement projects to eliminate these high maintenance areas.

## Monthly High Maintenance Area Cleaning

1. 1111 W. Sixth Street (Wells Fargo Bank)  
Manhole 3337, 3338, 3277
2. 600 Block Vicentia (East/West Alley)  
Manhole 4005 to 3970 – 450 ft. W. 4000-3970 - 239 ft. E.
3. 220 Kendall (in alley)  
Manhole 4118 to 4098 – 461 ft. W.
4. Rincon East of Main Street (Old Marie Callender's)  
Manhole 4434 to 4433, Reverse clean 4434-4435
5. Main Street at River Road (southbound left turn lane)  
Manhole 4442-8282 – Double Barrell Siphon – 104 ft. x 2
6. 230 W. River Road (at wash)  
Manhole 4398 to 4441 – 344 ft. E.
7. 230 W. River Road (alongside wash)  
Manhole 4397 to 4398 – 107 ft. E.
8. River Road at Kalus (intersection)  
Manhole 3789 to 3796 – 387 ft. N.
9. Third Street between Main and Washburn  
Manhole 4539 - 4535 – 50 ft. S.
10. Taylor at Crestview (intersection)  
Manhole 4174 to 4160 – 288 ft. W.
11. Mount Humphries East of McKinley  
Manhole 7288, 7287, 7286, 7271 South.
12. Corporate Yard Lines  
Manhole 11019-11021, 10475-10478, 3864-3862
13. Grand Blvd. Manhole 4578-4579 185ft.
14. Joy & Parkridge (Intersection) Manhole 4456-4454-4453/ 4452-4451-4453-4424  
Require T.C.

15. E 3<sup>rd</sup> St. to Quarry (alley behind)  
Manhole 5069 – 5046/ 9296 – 5071

16. Alley between Joy St. and E. Grand Blvd  
Manhole 4621-4620

#### **Quarterly High Maintenance Area Cleaning**

17. 1012 Serene Drive  
Manhole 3782 to 3770 – 209 ft.

18. Green River Rd.  
Manhole 1080-1079-1070-1077-1060-1061-1062

19. 1217 E. Grand Blvd. (in alley) Manhole  
4605 and 4607

20. Dos Lagos Shopping Center  
Manhole 10514-10725, 11044-10719, 11042-10520

21. Corona Ave at the 15 Freeway Overpass  
Manhole 10737

22. Lincoln at Willow Creek  
Manhole 5710-11118-11119-3788

If an SSO occurs, the City has the contractor(s) video and clean approximately 1,000 feet around the affected area and depending on the cause or severity of the SSO, may place the area on a monthly or quarterly cleaning schedule. The City also contracts with a root control company to treat areas identified by CCTV. The contractor foams about 15,000 to 17,000 linear feet of sewer main per year. Additionally, the City contracts with a company to perform insect control by spraying the manholes. The insect control is completed for the entire system at a minimum of every three years.

The latest in Supervisory Control and Data Acquisition (SCADA) technology is employed throughout the City of Corona's various facilities. There are 15 active sewage pump stations throughout the City. SCADA enables continuous monitoring of the flows, levels, pressure, and overall condition of the sewage pumping stations from the City's operations center and all three Water Reclamation Facilities. Additionally, there are set points within the SCADA system that will create an alarm that can be received by water reclamation operators and utility service workers for the purpose of immediate response to the site.

Per the City's Sewer Master Plan dated September 2005, there are several guidelines, as a



minimum, for routine and preventative maintenance activities for the sewage pump stations and sewer system that are outlined in Table 1 and 2 below and that have been implemented as described in the paragraphs above.

**Table 1**

<b>ROUTINE MAINTENANCE</b>
<i>Sewage Pump Station – Weekly:</i>
<ul style="list-style-type: none"> <li>• Visit pump stations.</li> <li>• Inspect control panel and verify pump operation.</li> <li>• Check for signs of vandalism.</li> <li>• Amp reads on the motors.</li> <li>• Log all meter readings.</li> <li>• Inspect wet well and dry well for abnormal conditions.</li> <li>• Note findings.</li> </ul>
<i>Sewer System:</i>
<ul style="list-style-type: none"> <li>• Continue to video and inspect all sewers within 5 years.</li> </ul>

**Table 1. From *City of Corona Sewer Master Plan*, AKM Consulting Engineers, September 2005, p. 5-20.**

**Table 2**

<b>PREVENTATIVE MAINTENANCE</b>
<i>Sewage Pump Station - Weekly:</i>
<ul style="list-style-type: none"> <li>• Test alarms, transducer (LVL), sump pump, and flood alarm.</li> <li>• Replace and clean filters and filter bowl assembly that supplies water to mechanical seal.</li> <li>• Check meter for heat and pump for vibration.</li> </ul>
<i>Sewage Pump Station:</i>
<ul style="list-style-type: none"> <li>• De-rag the check valves and pump volute-impeller as needed.</li> <li>• Pull pumps bi-annually. Inspect impellers and bowls for wear. Change seals or packing as required.</li> <li>• Exercise valves monthly.</li> <li>• Check and exercise back-up generator monthly</li> <li>• Exercise mechanical equipment which normally does not operate weekly.</li> <li>• Clean wet wells every six months, more frequently in areas with grease, sand or where solids accumulate quickly.</li> <li>• Check electrical connections annually.</li> <li>• IR scanning annually.</li> </ul>
<i>Sewer System:</i>
<ul style="list-style-type: none"> <li>• Clean sewers with root intrusion as necessary.</li> <li>• Clean sewers with grease deposit every 60 - 90 days (this may include siphons and identified "Frequent Maintenance Requiring Facilities")<sup>1</sup>.</li> <li>• Clean sewers with debris deposits (for low velocity reaches of pipe) every six months.</li> </ul>

**Table 2. From *City of Corona Sewer Master Plan*, AKM Consulting Engineers, September 2005, p. 5-20 – 5-21.**

<sup>1</sup> "Frequent Maintenance Requiring Facilities" are areas of the system that require frequent maintenance and cleaning as reported by City staff and identified in Table 5-7 of the *City of Corona Sewer Master Plan*, September 2005.

## **Data Management**

Recordkeeping of regular/routine maintenance and preventative maintenance is crucial for maintaining the reliability of the City's sewer system and facilities. The City utilizes an electronic tracking system, NexGen, for all work orders. Additionally, the City utilizes an electronic Maintenance Management System (MMS) that allows the City to view historical information and has reminders of preventative maintenance work. The City is continuously upgrading to allow these systems to track the work more efficiently.

## **COMPLIANCE SUMMARY**

The City utilizes electronic tracking systems for scheduling and completing routine and preventative maintenance on its sewer system as outlined in Table 1 and Table 2 above, at a minimum. Locations that are identified as high maintenance areas also adhere to a strict monthly or quarterly cleaning schedule.

### **4.3 TRAINING**

#### **COMPLIANCE**

The City is committed to ensuring its field staff has the proper technical skills and safety training programs available to them. Besides specialty conferences offered through various organizations like the California Water Environment Association (CWEA), the City has several in-house training courses and programs available for its Utility Service Workers. Depending on job description and duties, the City holds several mandatory training programs for City field staff like confined space entry, electrical safety, fall protection equipment, forklift, gas detector, ladder safety, respiratory protection and roadway flagger training, that are tracked through the City's Human Resources Department, Safety Division. Additionally, all crews participate in bi-weekly safety meetings with their supervisors as well as whenever new equipment is issued. These safety meetings require staff to sign in and the sign-in sheets are kept to document the safety topic and meetings that individual staff have participated in. The City has also created and provided an online training module entitled, *SSO Response and Reporting*, for all Utility Service Workers and stand-by staff who may respond to an SSO. This training covers the Spill Emergency Response Plan, General Order requirements, estimating spill volume, and reporting. The *SSO Reporting Form* training module further details information needed to complete reporting required by the General Order. This ensures the most accurate reporting of sewer overflows. The training also covers CIWQS reporting for data submitters and LROs. All trainings are required annually; however, the City will continually evaluate the need for additional training. The City supports its staff in receiving the necessary training and testing to receive specialized certifications for collection systems.

While the City does not have specified formal training for contractors, City staff does make them aware of the hazards within the system before the start of a job or contract so that contracted staff can be properly trained. The City specifies in its contracts that contractors must be properly trained and that they will be held liable for the consequences of their actions.

## **COMPLIANCE SUMMARY**

The City regularly reviews training materials and provides annual trainings for staff in collection system operations and maintenance, and requires that contractors are aware of the hazards within the sewer system in advance. The Maintenance Division is responsible for ensuring staff are trained in the operation and maintenance of the sewer system. The Regulatory Compliance Division is responsible for ensuring SSMP staff are trained in the requirements of the Order and SSO reporting. The Safety Division is responsible for maintaining the City's training records.

### **4.4 CONTINGENCY EQUIPMENT AND REPLACEMENT INVENTORIES**

#### **COMPLIANCE**

The City has invested in onsite generators for all lift stations to provide emergency back-up power generation. The City also has the capability to utilize by-pass pumping in case of lift station failure or blockage/failure of mains. The City's Operations Division has two portable bypass pumps with hoses and the Maintenance Division has two Godwin portable bypass pumps and two hose trailers outfitted with hoses, valves, and fittings.

The City is capable of completing multiple pipeline repairs and has spare items available at the warehouse such as: spare motors, seals, and valves. This inventory is tracked and maintained through an asset works management program. Additionally, the City has several local suppliers that can supply materials around the clock.

#### **COMPLIANCE SUMMARY**

The City tracks and maintains its inventory through an asset works management program. Local suppliers also provide the City with immediate access to materials.

# **SECTION 5.0**

## **DESIGN & PERFORMANCE PROVISIONS**

## 5.0 DESIGN AND PERFORMANCE PROVISIONS

### REGULATORY REQUIREMENTS

#### **D.5. Design and Performance Provisions:**

The Plan must include the following items as appropriate and applicable to the Enrollee's system:

#### **5.1 Updated Design Criteria and Construction Standards and Specifications**

Updated design criteria, and construction standards and specifications, for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations, and other system appurtenances. If existing design criteria and construction standards are deficient to address the necessary component-specific hydraulic capacity as specified in section D.8 (System Evaluation, Capacity Assurance and Capital Improvements) the procedures must include component-specific evaluation of the design criteria.

#### **5.2. Procedures and Standards**

Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances.

### 5.1 UPDATED DESIGN CRITERIA AND CONSTRUCTION STANDARDS AND SPECIFICATIONS

#### **COMPLIANCE**

The City of Corona Utilities Department has an updated standard plans and specifications and Design Policy. The purpose of the specifications is to achieve uniformity and consistency in materials, equipment and methods of construction for projects in the City. The information is updated on an as needed basis, but not less than every 5 years.

The Design Policy outlines general information and requirements by contractors for plan submittal and construction cost estimates.

The specifications and design criteria include materials, pipe alignment, easements, manholes, minimum sizes, minimum cover, strength, minimum slope, trenching and backfill, lift station design criteria, and structure standards.

The City has developed a rehabilitation and replacement plan via the *City of Corona Sewer Master Plan, September 2005* which is being updating currently. The objective of the Master Plan is essentially, "to evaluate the City's existing sewer collection system and provide a framework for the construction of new and replacement facilities using new modeling tools and the City's

most recent 2003 General Plan update." (p. 2-3). The Master Plan identifies several considerations used in determining the useful life of the City's gravity sewers, force mains, and sewage pump stations. These considerations are: type of materials used and recorded performance of similar installations, velocities and flow rates expected in the system, chemical and biological conditions of the wastewater, construction methods and installation quality, frequency, thoroughness, and types of maintenance (p. 4-11).

In order to assess the condition and to be able to recommend rehabilitation and replacement of City facilities, a hydraulic model of the City's sewer system was created with H2OMap Sewer software. The model was based on the City's GIS data that included information on land use, sewer pipe diameters, lengths and invert elevations. The hydraulic model results were able to identify existing sewers in the City that exceeded the capacity criterion and are discussed in Section 5 and listed in Table 5-4 of the Sewer Master Plan. Additionally, results of the CCTV inspections were used to identify problem areas around the City and generate a CCTV pipeline assessment summary of 120 locations listed in Table 5-5 of Section 5 of the Master Plan. All sewage pump stations were assessed, graded, and given a priority ranking in regard to rehabilitation and replacement. This summary can be found in Table 7-5 of Section 7 of the Master Plan as well. All assessments were made based on the useful life consideration and performance design criteria, visual inspections, and modeling results that are discussed in further detail in Sections 4, 5 and 7 of the Master Plan.

Based upon the assessments in the Master Plan, a list of Capital Improvement Projects (CIP) was identified and generated. Currently, Managers are working from this 2005 list, however, every year it is reviewed and revised based on the changing needs of the City and regulations. The latest CIP list can be found in the City of Corona Capital Improvement Program for the current Fiscal Year.

## **COMPLIANCE SUMMARY**

The City of Corona Utilities Department utilizes standard plans and specifications and a Design Policy to ensure consistency in materials, equipment and methods of construction for projects within the City. The City also assesses the collection system via the *City of Corona Sewer Master Plan*. Based on the Master Plan, Capital Improvement Projects are identified to rehabilitate and improve the sewer system.

## **5.2 PROCEDURES AND STANDARDS**

### **COMPLIANCE**

The City of Corona has a full-time staff of qualified inspectors and uses qualified third party inspectors for inspecting new sewers, lift stations, other appurtenances and for rehabilitation and repair projects. The City utilizes the Standard Specifications for Public Works Construction (Greenbook) latest edition, City's adopted engineering standards, and its design manual or Construction Specifications Institute standard specifications for inspection and testing of new and rehabilitated facilities. The information is updated on an as needed basis, but not less than every 5 years.

### **COMPLIANCE SUMMARY**

The City of Corona adheres to standard specifications for inspecting and testing new and rehabilitated facilities.

The City's Sewer Master Plan, design policy, and specifications for inspection, ensures vulnerable areas within the collection system are identified, rehabilitated or replaced, and are inspected and tested according to standard specifications. The specifications are updated on an as needed basis, but not less than every 5 years.

# **SECTION 6.0**

## **SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN**



## 6.0 SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

### REGULATORY REQUIREMENTS

**D.6. Spill Emergency Response Plan:** The Plan must include an up-to-date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

## COMPLIANCE

The Sanitary Sewer Overflow Emergency Response Plan is designed to ensure that every report of a confirmed sewage overflow is immediately dispatched to the appropriate crews. This way the effects of the overflow can be minimized with respect to impacts to public health and adverse effects on beneficial uses and water quality of surface waters. The Emergency Response Plan further includes provisions to ensure safety pursuant to the directions provided by the Utilities Department. Notification and reporting are made to the appropriate local and state authorities. For purposes of this Emergency Response Plan, "confirmed sewage spill" is also sometimes referred to as "sewer overflow," "overflow," or "SSO."

To comply with this requirement, the City addresses each element below:

## ORGANIZATION OF PLAN

The key elements of the Emergency Response Plan are addressed individually as follows:

- Notification and Reporting Procedures
- Response Activities
- Emergency Response, Containment, Clean-Up, and Monitoring
- Training
- Assessments

## NOTIFICATION AND REPORTING PROCEDURES

The City of Corona has developed SSO Notification Procedures to ensure notifications are made in a timely manner to first responders, local officials, regulatory agencies, and other affected agencies. These procedures provide the appropriate agency name, contact person, and phone number for each type of spill category including private spills. Immediate notification to the Office of Emergency Services (OES) and Regional Water Quality Control Board (RWQCB) is required **within two hours for all Category 1 spills**. A copy of the SSO Notification Procedure is included in Appendix D.

Using data supplied, starting from the initial notification to complete clean-up, the first or second responder prepares initial and final internal SSO Reports. The designated responder will utilize the SSO Incident Response Form (Appendix E) and the SSO Reporting Form (Appendix F) to record all pertinent information on the spill. Within two working days, these forms are submitted to the Regulatory Compliance Division for reporting in CIWQS.

During regular work hours, the Regulatory Compliance Division is responsible for making notifications to the regulatory agency according to the reporting requirements in the permit. The Regulatory Compliance Division will contact other agencies, if necessary, as well as other interested and possibly impacted parties. After hours, the second responder is responsible for completing the notifications. The Regulatory Compliance Division is responsible for reporting the spill in CIWQS within the specified timeframes. All information supplied to the Regulatory Compliance Division is reviewed for completeness; any missing data is confirmed, and all forms and photos are saved in an electronic file

for future reference. The documentation provided is then used to complete an SSO report in CIWQS.

### **Media Notifications**

When an overflow has been confirmed and is a threat to public health, the following actions will be taken, if necessary, to notify the media:

1. First responder or response crew verifies overflow and reports back to the Director of Utilities.
2. The City of Corona Utilities Director shall be the "first-line" of response to the media for any overflow.
3. Calls received by the dispatcher from the media at any time are referred to the Utilities Director.

### **Other Public Notifications**

Should surface water bodies or ground surfaces subjected to a sewer overflow be deemed hazardous and there is a need for further public notification, it can be made through the use of pre-scripted notices. These notices are made available through printed or electronic news media for immediate publication or airing, or by other measures (e.g., front door hangers).

### **Temporary Signage**

The City of Corona has primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities or service area. If posting is deemed necessary, the County Department of Environmental Health shall be notified. During work hours, the Regulatory Compliance Division should make the notification. The City of Corona shall work with the RWQCB and any other local, state, or federal agencies necessary to ensure effects on the public and environment are minimized.

### **RESPONSE ACTIVITIES**

The SSO Response SOPs present a strategy for the City of Corona to mobilize labor, materials, tools, and equipment to correct or repair any condition, which may cause or contribute to an un-permitted discharge. The plan considers a wide range of potential system failures that could create an overflow to surface waters, land, or buildings. SSO Response Standard Operating Procedures (SOPs) are included in the appendices.

### **Receipt of Information Regarding a Sewer Overflow**

An overflow may be detected by system employees or by others. The Utilities Department is primarily responsible for receiving phone calls from the public of possible sewer overflows, and for issuing work orders. Generally, telephone calls from the public reporting possible sewer overflows are received during the day by telephone at the Utilities Department. The after-hours emergency phone line is staffed 24 hours per day by the first responder at (951) 830-2319.

The telephone operator or first responder obtains all relevant information available regarding the overflow including:

- Time and date call was received;
- Specific location;
- Description of problem;
- Time possible overflow was noticed by the caller;
- Caller's name and phone number;
- Observations of the caller (e.g., odor, duration, back or front of property); and
- Other relevant information that will enable the responding investigator and crews, to quickly locate, assess, and stop the overflow.

The receiver then records the overflow information in the SSO Incident Response Form.

Lift station failure alarms are monitored and received by Water Reclamation Operators. The operator on-duty immediately conveys all information regarding alarms to the Chief Reclamation Operator to initiate the investigation.

Sewer overflows detected by any personnel in the course of their normal duties are reported immediately to the Utilities Department. Dispatching personnel record all relevant overflow information and dispatch responders to investigate and can send additional first responders as needed.

### **Dispatch of Appropriate Crews to Site of Sewer Overflow**

Failure of any element within the sewer system that threatens to cause or causes an SSO triggers an immediate response to isolate and correct the problem. Crews and equipment are available to respond to any SSO location. Crews will be dispatched immediately to any site of a reported SSO. Also, additional maintenance personnel can be placed "on call" in the event extra crews are needed.

#### **1. Dispatching Crews**

- Dispatchers receive notification of sewer overflows as outlined in "Receipt of Information Regarding a Sewer Overflow" and dispatch first responders to investigate and/or the appropriate crews and resources as required.
- Dispatchers notify the appropriate manager or supervisor, with the quickest communication tool available, regarding sewer overflows and field crew locations.

#### **2. Crew Instructions and Work Orders**

- Utilities Department employees receive instructions from their supervisors regarding appropriate crews, materials, supplies, and equipment needed.

- Dispatchers verify that the entire message has been received and acknowledged by the crews that were dispatched. All employees being dispatched to the site of a SSO should proceed immediately to the overflow. Report any delays or conflicts in assignments immediately to the supervisor for resolution.
  - In all cases, response crews report their findings, including possible damage to private and public property, to the Maintenance Manager immediately upon making their investigation. If necessary, the site supervisor refers all pertinent information to the next shift, including any details of the problems described by customers.
3. Additional Resources
    - Spill volume is estimated and reported to second responder and Regulatory Compliance Division.
  4. Second responder receives and conveys to appropriate parties requests for additional personnel, material, supplies, and equipment from crews working at the site of a sewer overflow.
  5. Preliminary Assessment of Damage to Private and Public Property
    - The focus is to resolve the problem. The response crews use discretion in assisting the property owner/occupant as reasonably as they can. Be aware that the Utilities Department could face increased liability for any further damages inflicted to private property during such assistance. The response crew shall not enter private property for purposes of assessing damage. Take appropriate still photographs and video footage, if possible. This should include the outdoor area of the sewer overflow and impacted area in order to thoroughly document the nature and extent of impacts. Forward available photographs to the Utilities Department Regulatory Compliance Division for filing with the SSO Report.
  6. Field Supervision and Inspection
    - The supervisor of the first responder, who confirmed the sewer overflow, visits the site of the overflow, to ensure that provisions of this overflow response plan and other directives are met.
    - The supervisor is responsible for confirming that the SSO Report is provided to the Regulatory Compliance Division within two (2) days.
  7. Coordination with Hazardous Material Response
    - Upon arrival at the scene of a sewer overflow, if a suspicious substance (e.g., oil sheen, foamy residue) is found on the ground surface, or a suspicious odor (e.g., gasoline) not common to the sewer system is detected, the first responder or response crew should immediately contact the supervisor for guidance before taking further action.

- Should the supervisor determine the need to alert the hazardous material response team, contact the City of Corona Fire Department at dispatch (951) 736-2221. The first responder or crew awaits the arrival of the appropriate response team to take over the scene. **Remember that any vehicle engine, portable pump, or open flame (e.g., cigarette lighter) can provide the ignition for an explosion or fire if flammable fluids or vapors are present. Keep a safe distance and observe caution until assistance arrives.**
- Upon arrival of the response team, the first responder or crew takes direction from the lead authority of that team. Only when that authority determines it is safe and appropriate for the first responder and crew to proceed, they can proceed under the SSOERP with the containment, clean-up activities, and correction.

### **EMERGENCY RESPONSE, CONTAINMENT, CLEAN-UP, MONITORING, AND ASSESSMENTS**

Sanitary Sewer Overflows (SSOs) of various volumes occur from time to time in spite of concerted prevention efforts. Spills may result from blocked sewers, pipe failures, or mechanical malfunctions among other natural or man-made causes. The City of Corona is on alert and prepared to respond upon notification of an overflow. The objectives of these actions are:

- To protect public health, environment, and property from sewage overflows and restore surrounding area back to normal as soon as possible;
- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles, or use of natural topography (e.g., hills, berms).
- To promptly notify the Regulatory Compliance Division during work hours, or if after hours, the regulatory agencies of the preliminary overflow information and potential impacts;
- To contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface waters and drainage conveyance systems; and
- To minimize the City of Corona's exposure to any regulatory agency penalties and fines. Under most circumstances, the City of Corona handles a majority of response actions with its own maintenance division. They have the skills and experience to respond rapidly and in the most appropriate manner. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce additional problems elsewhere in the system. For example, repair of a force main could require the temporary shutdown of a pump station and diversion of the flow at an upstream location. If the closure is not handled properly, sewage system backups may create other overflows.

The City contracts a company to clean and CCTV the sewer system throughout the year and to aid the City during SSO events. The City owns its own combination, jetting and vacuum, truck to mitigate SSOs immediately, however, if additional vacuum trucks are needed, this contractor can be called to assist with an SSO and is usually already within City limits, which provides quick response, containment, and clean-up. The City also maintains contracts with restoration companies for emergency services. The Four C's - containment, control, call, and clean-up - are used during any SSO event and included in Appendix K.

Circumstances may arise when the City of Corona could benefit from the support of private-sector construction assistance. This may be true in the case of large diameter pipes buried to depths requiring sheet piling and dewatering should excavation be required. The City of Corona may also choose to use private contractors for open excavation operations that might exceed one day to complete.

### **First Responder Responsibilities**

It is the responsibility of the first personnel who arrive at the site of a sewer overflow to protect the health and safety of the public by mitigating the impact of the overflow to the best extent possible. Should the overflow not be the responsibility of the City of Corona but there is imminent danger to public health, public or private property, or to the quality of waters of the U. S., the City of Corona takes prudent emergency action until the responsible party assumes responsibility and provides actions. Upon arrival at an SSO, the response crew:

- Determines the cause of the overflow, e.g. sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.;
- Take immediate steps to contain the overflow - e.g., block or bag storm drains, recover through vacuum truck, divert into downstream manhole, etc.
- Determines the immediate destination of the overflow - e.g. storm drain, street curb gutter, body of water, creek bed, etc.
- Recover where possible sewage which has already been discharged. This can aid in minimizing impacts on public health or the environment.
- Estimates the volume and the flow and reports to second responder and Regulatory Compliance Division.
- Determines if private property is impacted. If yes, inform the Construction Superintendent.
- Takes immediate steps to stop the overflow, e.g. relieves pipeline blockage, manually operates pump station controls, repairs pipe, etc. Extraordinary steps may be considered where overflows from private property threaten public health and safety

(e.g., an overflow running off of private property into the public right-of-way);

- Takes appropriate measures to protect the health and safety of affected public and/or property.

The second responder has the responsibility of identifying and requesting, if necessary, assistance or additional resources to correct, contain, or isolate the overflow or to assist in the determination of its cause. Sewer overflow rates to aid in volume estimation are included in Appendix K along with the Four C's.

### **Additional Measures under Potentially Prolonged Overflow Conditions**

In the event of a prolonged sewer line blockage or a sewer line collapse, set up a portable by-pass pumping operation around the obstruction.

- Take appropriate measures to determine the proper size and number of pumps required to effectively handle the sewage flow.
- Implement continuous or periodic monitoring of the by-pass pumping operation as required.
- Address regulatory agency issues in conjunction with emergency repairs.

### **Clean-up**

Clean sewer overflow sites thoroughly after an overflow, including drainage conveyance systems. No readily identified residue (e.g., sewage solids, papers, rags, plastics, and rubber products) is to remain.

- Where practical, thoroughly flush the area and clean off any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal.
- Secure the overflow to prevent contact by members of the public until the site has been thoroughly cleaned.
- Where appropriate, disinfect and deodorize the overflow site.
- Where sewage has resulted in ponding, pump the area dry and dispose of the residue in accordance with applicable regulations and policies.
- If a ponded area contains sewage which cannot be pumped dry, it may be treated with bleach. If sewage has discharged into a drainage conveyance system or body of water that may contain fish or other aquatic life, do not use bleach or other disinfectants.

### **Monitoring**

If 50,000 gallons or more of untreated or partially treated sewage reaches surface water, then **water quality monitoring is required within 18 hours after initial notification of the spill**. The SSO Water



Quality Monitoring SOP is included in Appendix L. Results of the water quality monitoring along with an SSO Technical Report will be uploaded to CIWQS by the Regulatory Compliance Division staff.

### **Assessments**

Following an SSO event, post-spill assessments are required to evaluate spill response activities and determine procedures and actions to improve spill response. During post-spill assessment, actions to further prevent and minimize SSOs should be considered.

Annually, the effectiveness of the Spill Response Plan shall be reviewed and assessed and shall be updated as needed.

### **Training**

All first and second responders are to be appropriately trained to respond to SSOs and are required to review training materials annually. Each responder is provided a field guide which includes all SOPs, notification procedures, reporting forms, and reference material. Internal staff are trained on appropriate response actions should they receive notification by phone or email of a possible SSO. All contractors are instructed to immediately notify Corona Utilities Department in the event of an SSO.

### **COMPLIANCE SUMMARY**

The Sanitary Sewer Overflow Emergency Response Plan, training material, and SOPs are designed to minimize the effects of a sewer spill on the environment and public health and outlines notification and reporting procedures in the event of an overflow. These materials are reviewed annually and are updated as needed.

# **SECTION 7.0**

## **SEWER PIPE BLOCKAGE CONTROL PROGRAM**

## 7.0 SEWER PIPE BLOCKAGE CONTROL PROGRAM

### REGULATORY REQUIREMENTS

#### **D.7. Sewer Pipe Blockage Control Program:**

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed. The procedures must include, at minimum:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

### COMPLIANCE

The City of Corona Utilities Department (UD) established an ongoing FOG control program with the proper authority to regulate and run the program effectively. The City retains the services of G&G Environmental Compliance, Inc. to maintain and implement the City's EPA approved Source Control/Pretreatment Program.

## **PUBLIC EDUCATION OUTREACH**

The City has a comprehensive public outreach program for residential and commercial customers that consist of: utility bill inserts, door hangers, Facebook and Twitter, newsletters, LED signs, and community events. All information is available in English and Spanish.

The City's public outreach program includes information on proper disposal of FOG for residential, commercial, and industrial dischargers. An educational FOG bill insert is mailed out to all customers and is available on our website (see Appendix M). This bill insert informs customers why it is not appropriate to dispose of fats, oils, and grease down the drain and the consequences for dumping these products down the drain. Additionally, staff in the Source Control Division created two flyers; one on Best Management Practices (BMPs) for restaurants (Appendix N) and the other for automotive repair (Appendix O). These BMPs educate commercial and industrial dischargers on limiting pollutants discharged into the sewer system which includes oil and grease. The BMP flyers are provided to customers during interceptor inspections and are included with the restaurant questionnaire (Appendix P).

The City also has an ongoing public awareness campaign to encourage proper disposal of unused medications. The "No Drugs Down the Drain" program includes bill inserts, banners, LED signs within the community, letters, magnets, and brochures to pharmacies and doctor's offices in Corona.

Educational outreach material is posted on the City of Corona Utilities Department's website under the learn more tab. In addition, the fliers and brochures are handed out at numerous events throughout the year reaching thousands of households.

[Utilities Department | City of Corona \(coronaca.gov\)](http://coronaca.gov)

A variety of other public outreach materials and programs are made available to residential customers through Western Riverside Council of Governments ([WRCOG](#)).

The City also has its own decanting station for pipe blocking substances at Water Reclamation Facility No. 1. Collected solids are taken to Waste Management and liquids are circulated back to the Water Reclamation Facility No. 1 headworks.

## **LEGAL AUTHORITY**

The City has the legal authority to prohibit the discharge of pipe blocking substances into the sanitary sewer system. FOG, sediment, and floating materials is explicitly prohibited in Municipal Code [Chapter 13.08](#) - Public Sewerage System Waste Regulations. The City has the authority per § [13.08.160](#) to inspect and sample all users' interceptors and requires customers

to make their interceptors immediately accessible at all times for inspection by the City. The City has the legal right to enforce this ordinance by way of its Enforcement Response Plan (ERP) (*Appendix C*).

### **GRAVITY SEPARATION INTERCEPTORS (GREASE REMOVAL DEVICES)**

The City requires applicable businesses to have an appropriate grease removal device. Section 13.08.110(C) of the Municipal Code states that, "All restaurant wastewater and wastes from floor drains, floor sinks, sinks, waste container wash racks, dishwashers and garbage grinders to be directed through a minimum 750-gallon gravity separation interceptor." Additionally, § 13.08.150 states that, "Any person that operates or maintains a facility for the servicing or repair of roadway machinery, industrial transportation equipment, motor vehicles or any other facility as required by the Director of Utilities shall install and maintain a gravity separation interceptor."

The City references the 2019 California Plumbing Code Section 1014.0 for grease interceptor design standards and the Municipal Code interceptor design requirements in § 13.08.170. Interceptor maintenance requirements are included in § 13.08.180. All businesses with interceptors are scheduled to be inspected on a quarterly basis, but at a minimum frequency of at least once a year. All businesses must fill out business use questionnaires or if new, an industrial wastewater questionnaire, which is then passed on to the Source Control Division who evaluates the need for a grease removal device.

The City's Source Control/Pretreatment Program is self-supporting; § 13.08.390 of the Municipal Code states that, "The City is authorized to recover costs from users for the implementation of the City's pretreatment program. These fees relate exclusively to matters covered by this chapter and are separate from all other fees chargeable by the City."

While developing the original SSMP, the City became aware of the importance in holding all FOG dischargers accountable for all aspects of their interceptor maintenance. Thus, the City determined that FOG dischargers needed to be charged to cover staff inspection time, ability to keep the source control program self-sufficient, and to maintain consistency with the rules and regulations as outlined in 40 CFR 403, Protection of the Environment. The inspection fees, as approved by the City Council, are based on the time the source control inspector spends on a typical FOG discharger's interceptor over a one-year period.

### **DISPOSAL**

The City requires all businesses with a gravity separation interceptor to properly maintain the interceptor at all times. The interceptor shall be cleaned as often as necessary to ensure that sediment and floating materials do not accumulate to impair the efficiency of the interceptor. An interceptor is not considered to be properly maintained if for any reason the interceptor is not in good working condition or if the operational fluid capacity has been reduced by

more than 25% by the accumulation of sediment and floating oils and greases.

The City does not accept FOG at any of its facilities but can provide a list of local waste haulers upon request. When an interceptor is cleaned, the removed sediment and floating material shall be legally disposed of and shall not be placed or discharged into the sewer system. Records of the interceptor cleaning are required to be available on-site for review for three years.

The City utilizes an outside contractor to clean and video the City's sewer system. The waste collected during the cleaning is disposed of at Water Reclamation Facility No. 1 in a designated refuse area. No grease is allowed to be disposed of in the City's sewer system or at the City's Publicly Owned Treatment Works (POTW).

### **MAINTENANCE AND CLEANING SCHEDULES**

Areas that have a sanitary sewer overflow as a result of FOG and other pipe blocking substances or that are known to have frequent build up in the sewer system are placed on a maintenance and cleaning schedule. The frequency varies depending on the severity of buildups in the area. See *Section 4.0, Operation and Maintenance Program*, for further details regarding maintenance and cleaning determination and schedules.

If a particular area is experiencing frequent sanitary sewer overflows or a problem is observed in the sewer line, the City has developed a door hanger which would be distributed in the immediate area. The door hanger (Appendix Q) indicates the problem observed and what can be done to solve the problem, along with ways residents can prevent sanitary sewer overflows.

### **PROGRAM IMPLEMENTATION**

The City maintains sufficient staff to enforce and implement the source control program. There is always at least one inspector that is actively monitoring the source control program on a daily basis. All FOG generating facilities that have an interceptor device are inspected on a quarterly basis, or annually at a minimum, to ensure the interceptors are being maintained. All inspections are recorded into the Linko database which tracks nearly 521 active devices throughout the City. In 2015, all monitored facilities were divided into 6 zones to improve the efficiency of the FOG inspections. The City has an active inspection program in place.

### **COMPLIANCE SUMMARY**

The City utilizes various methods to reduce the number of spills caused by pipe-blocking substances. This includes public outreach, legal authority, grease removal devices, and regular inspection and maintenance. The program is reviewed and updated on a regular basis and is implemented by the City's source control program.

# **SECTION 8.0 SYSTEM EVALUATION, CAPACITY ASSURANCE PLAN, & CAPITAL IMPROVEMENTS**

## 8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

*This information is contained with the Utilities Department's Sewer Master Plan.*

### REGULATORY REQUIREMENTS

#### **D.8 The Plan must include procedures and activities for:**

- Routine evaluation and assessment of system conditions;
- Capacity assessment and design criteria;
- Prioritization of corrective actions; and
- A capital improvement plan.

#### **8.1 System Evaluation and Condition Assessment** - The Plan must include procedures to:

- Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;
- Identify and justify the amount (percentage) of its system for its condition to be assessed each year;
- Prioritize the condition assessment of system areas that: Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;
- Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;
- Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;
- Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;
- Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;
- Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and
- Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.



**8.2 Capacity Assessment and Design Criteria** - The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- Dry-weather peak flow conditions that cause or contributes to spill events;
- The appropriate design storm(s) or wet weather events that causes or contributes to spill events;
- The capacity of key system components; and
- Identify the major sources that contribute to the peak flows associated with sewer spills.
- The capacity assessment must consider:
  - Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;
  - Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;
  - Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;
  - Increases of erosive forces in canyons and streams near underground and above-ground system components due to larger and/or higher-intensity storm events;
  - Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and necessary redundancy in pumping and storage capacities.

**8.3 Prioritization of Corrective Action** - The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

**8.4 Capital Improvement Plan** - The capital improvement plan must include the following items:

- Project schedules including completion dates for all portions of the capital improvement program;
- Internal and external project funding sources for each project; and

- Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.

### **8.1-8.3 SYSTEM EVALUATION AND CONDITION ASSESSMENT, DESIGN CRITERIA, CORRECTIVE ACTIONS**

#### **COMPLIANCE**

The City Sewer Master Plan was completed in September 2005 which is currently being updated. It is a long-term, forward-looking planning tool. It evaluates the existing and future system conditions and provides a footprint and planning guidance for the wastewater collection and conveyance system. The analysis of the City's ultimate gravity sewer system was based upon general plan land uses (year 2020).

Flow monitoring programs, hydraulic condition assessments, master plans, and capital improvement programs are essential elements of the City's System Evaluation and Capacity Assurance Plan. The City's efforts to evaluate the hydraulic capacity of the system to prevent capacity related SSOs are summarized in the City's Sewer Master Plan adopted by Council Action in 2005.

The City's sewer system has sufficient capacity to handle peak dry weather flows and has not experienced any wet weather overflows. In addition, through proactive efforts, dry weather overflows have decreased. However, some dry weather overflows continue to occur due to tree roots, grease blockages, and vandalism. The City has eliminated dry weather overflows resulting from power outages or equipment failures.

The City has an on-going dry and wet weather flow monitoring program. The City owns and operates fifteen (15) sewage lift stations located throughout the City. All of the lift stations are maintained and operate reliably.

The City will further assess sewer system conditions including vulnerable and environmentally sensitive areas, as well as areas that are sensitive to impacts of climate change in the updated Sewer Master Plan, which is expected to be completed in 2026.

#### **COMPLIANCE SUMMARY**

The City assesses its sewer system for deficiencies via the Sewer Master Plan which is expected to be completed in 2026.

## **8.4 CAPITAL IMPROVEMENT PROGRAM**

### **COMPLIANCE**

The ultimate goal of the capital improvement program is to provide the City with a long- range planning tool, to orchestrate construction of infrastructure improvements in an orderly manner, and to keep pace with the City's growth. Capital improvement projects have been developed based upon the results of the hydraulic analyses, physical inspection of the lift station facilities, CCTV inspections, and review and City's capital improvement projects.

Projects recommended in the City's Sewer Master Plan are prioritized according to system vulnerability. Project schedules outlined in the Sewer Master Plan are recommendations and are routinely reviewed and prioritized based on variety of reasons. Some of those reasons are as follows:

- Technical analysis
- Financial considerations
- New or changing needs

Operations, maintenance, and engineering staff also meet monthly to discuss updates to capital improvement projects including but not limited to budgets and progress reports.

### **COMPLIANCE SUMMARY**

As collection system deficiencies are identified in the Sewer Master Plan, vulnerable areas are added as capital improvement projects for rehabilitation or replacement. City staff in various divisions meet regularly to address these matters.

# **SECTION 9.0**

## **MONITORING, MEASUREMENT, & PROGRAM MODIFICATIONS**

## 9.0 MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

### REGULATORY REQUIREMENTS

**D.9 Monitoring, Measurement, and Program Modifications:** The Plan must include an Adaptive Management section that addresses Plan-implementation effectiveness and the steps for necessary Plan improvement, including:

- Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- Monitoring the implementation and measuring the effectiveness of each Plan element;
- Assessing the success of the preventative operation and maintenance activities;
- Updating Plan procedures and activities, as appropriate, based on results of monitoring or performance evaluations; and
- Identifying and illustrating spill trends, including: spill frequency, location, and volume.

### COMPLIANCE

The City of Corona Utilities Department has multiple ongoing programs that support the collection and management of data and information essential to successful implementation of its Sewer System Management Plan.

The City's information management systems are an integral and essential element of the operation and maintenance program. Information regarding sewer conditions and overflows are reported to the City's GIS system. The City's contractor continuously flushes and televises the City's sewer system. All closed-circuit television (CCTV) records are submitted to our GIS staff. The information is updated into the system regularly.

Every area where a sanitary sewer overflow occurs is televised and evaluated for possible causes. The video is also evaluated for future problems that may occur due to some type of activity that may be occurring, such as roots, grease, fractures in pipes, etc. The appropriate repairs are made when any deficiencies are discovered. The City's GIS system includes the ability to watch CCTV activity in areas of concern. The majority of the film is taken at least 1000 ft. upstream of the overflow. The contractor submits a video of the sewer line to the City which includes voice records of identified items and distances within the pipe segment. All SSOs are reported to the SWRCB through CIWQS.

## **COMPLIANCE SUMMARY**

The City collects and maintains all records on every sanitary sewer overflow incident including spill reports, photographs, and maps. Performance indicators are reviewed and measured annually. The SSMP is reviewed, and audits are conducted as scheduled; every 6 years for SSMP updates and every 3 years for internal audits.

# **SECTION 10.0**

## **SSMP PROGRAM**

### **INTERNAL AUDITS**

## 10.0 SSMP PROGRAM AUDITS

### REGULATORY REQUIREMENTS

**D.10 SSMP Program Audits** - The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order.

### COMPLIANCE

This section requires the Utilities Department to develop an audit program on the effectiveness of the Sanitary Sewer Management Plan.

The responsible individuals who conduct the internal audit are the Regulatory Compliance Division staff in conjunction with the Maintenance Manager and/or the Utility Maintenance Superintendent. Input from sewer system operators on audit findings are considered and a statement is included in the Audit Report. Internal audits are conducted at a minimum frequency of every three years using the audit form included in Appendix S. Within six months after the end of the required three-year audit period, the Legally Responsible Official (LRO) certifies the audit report into CIWQS which is available only to Waterboard staff.

### COMPLIANCE SUMMARY

The City's Sanitary Sewer Management Plan is updated according to the findings of internal audit reports, which are conducted as scheduled with a minimum frequency of once every three years. This ensures sewer spills are minimized, and all requirements of the General Order are met.



# **SECTION 11.0**

## **COMMUNICATION PROGRAM**

## 11.0 COMMUNICATION PROGRAM

### REGULATORY REQUIREMENTS

**D.11 Communication Program** - The Plan must include **procedures** for the Enrollee to communicate with:

- The public for:
  - Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and
  - The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for:
  - System operation, maintenance, and capital improvement-related activities

### COMPLIANCE

The City of Corona Utilities Department maintains a website with information about the Department, the various programs and services, contact information, newsletters, public outreach materials, latest news, events, and the current SSMP. The City of Corona's primary "customers" are the residential, industrial, and commercial users. Customers can contact the Department by phone or email with questions or feedback on various Department programs. Additionally, the SSMP is brought to a public City Council meeting for adoption when significant updates are made and at a minimum frequency of every six years. The City also has a plan for communication with systems that are tributary and/or satellite to the sanitary sewer system.

[Utilities Department | City of Corona \(coronaca.gov\)](#)

### COMPLIANCE SUMMARY

The City of Corona conducts public outreach and education to residents and businesses related to sanitary sewer overflows, preventing grease blockages, and Best Management Practices for handling grease waste. Customer outreach includes bill inserts, newsletters, public events, social media posts and an annual consumer confidence report. In addition, the City's Source Control Program inspects food service facilities quarterly for compliance with Best Management Practices and grease removal device maintenance and distributes educational materials during these inspections. The City also conducts plan checks for all new and remodeling restaurants and other food service facilities.

Internally, the City will communicate within various Departments, such as Regulatory, Public Works, Building and Code Enforcement regarding the overall Sewer System Management Plan, program audits, emergency response plan, FOG program, and design standards.

Plumbers and sewer contractors have access to all available City of Corona plans, specifications, and standard details.

# SSMP APPENDICES

## **List of Appendices**

Appendix A – City of Corona Contact List

Appendix B – Standby Schedule

Appendix C – City of Corona Pretreatment Program Enforcement Response Plan

Appendix D – SSO Notification Procedure

Appendix E – SSO Incident Response Form

Appendix F – SSO Reporting Form

Appendix G – Initial Spill Notification Procedure

Appendix H – SSO Response SOP

Appendix I – SOP for Responding to Private Sewer Spills

Appendix J – Lift Station Information Table

Appendix K – The Four C's of a Sewage Overflow

Appendix L – SSO Water Quality Monitoring SOP

Appendix M – FOG Bill Insert

Appendix N – Restaurant BMP Flyer

Appendix O – Automotive Repair BMP Flyer

Appendix P – Restaurant Questionnaire

Appendix Q – FOG Door Hanger

Appendix R – SSMP Change Log

Appendix S - Audit Form

# **APPENDIX A**

## **CITY OF CORONA CONTACT LIST**

**CITY OF CORONA  
UTILITIES DEPARTMENT  
SSMP CONTACT LIST**

Position	First	Last	Office	Mobile	Email
<b>Utilities Director</b>	Tom	Moody	951.279.3660	951.830.2319	<a href="mailto:tom.moody@coronaca.gov">tom.moody@coronaca.gov</a>
<b>Assistant Utilities Director</b>	Katie	Hockett	951.279.3660	951.545.0015	<a href="mailto:katie.hockett@coronaca.gov">katie.hockett@coronaca.gov</a>
<b>Assistant Utilities Director</b>	Aftab	Hussain	951-736-2443	951-741-7626	<a href="mailto:aftab.hussain@coronaca.gov">aftab.hussain@coronaca.gov</a>
<b>Regulatory Compliance Specialist</b>	Korina	Rangel	951.279.3688		<a href="mailto:korina.rangel@coronaca.gov">korina.rangel@coronaca.gov</a>
	Stacy	Joyce	951.736.2265		<a href="mailto:stacy.joyce@coronaca.gov">stacy.joyce@coronaca.gov</a>
	Nicole	Quinlan	951.279.3624		<a href="mailto:nicole.quinlan@coronaca.gov">nicole.quinlan@coronaca.gov</a>
<b>Maintenance Manager/LRO</b>	Aftab	Hussain	951.736.2443	951.741.7626	<a href="mailto:aftab.hussain@coronaca.gov">aftab.hussain@coronaca.gov</a>
<b>Utility Maintenance Superintendent</b>	David	Ortiz	951-739-4915	951-992-8633	<a href="mailto:david.ortiz@coronaca.gov">david.ortiz@coronaca.gov</a>
<b>Utility Service Worker</b>	Richard	Betancourt		951.903.9072	<a href="mailto:richard.betancourt@coronaca.gov">richard.betancourt@coronaca.gov</a>
	Jerry	Ferguson		951.377.0768	<a href="mailto:jeremiah.ferguson@coronaca.gov">jeremiah.ferguson@coronaca.gov</a>
	Chris	Jardine		951.830.2362	<a href="mailto:chris.jardine@coronaca.gov">chris.jardine@coronaca.gov</a>
	Fernando	Razo		951.377.0227	<a href="mailto:fernando.razo@coronaca.gov">fernando.razo@coronaca.gov</a>
	Kurtis	Stabile		951.830.1216	<a href="mailto:kurtis.stabile@coronaca.gov">kurtis.stabile@coronaca.gov</a>
	Hector	Urias		951.712.0458	<a href="mailto:hector.urias@coronaca.gov">hector.urias@coronaca.gov</a>
	Chris	Vila		951.817.4977	<a href="mailto:christopher.vila@coronaca.gov">christopher.vila@coronaca.gov</a>
	Juan	Guzman		951.532.0021	<a href="mailto:juan.guzman@coronaca.gov">juan.guzman@coronaca.gov</a>
	Mike	Soto		951.545.8660	<a href="mailto:michael.soto@coronaca.gov">michael.soto@coronaca.gov</a>
	Jose	Magana		951.496.9381	<a href="mailto:jose.magana@coronaca.gov">jose.magana@coronaca.gov</a>
	Marcus	DeVoe		951.496.6696	<a href="mailto:marcus.devoe@coronaca.gov">marcus.devoe@coronaca.gov</a>
	Francisco	Yopez		951.415.2290	<a href="mailto:francisco.yopez@coronaca.gov">francisco.yopez@coronaca.gov</a>
<b>Utility Maintenance Superintendent</b>	Rodney	Williams		951.377.0541	<a href="mailto:rodney.williams@coronaca.gov">rodney.williams@coronaca.gov</a>
<b>Utility Maintenance Technician</b>	Leslie	Garrison		951.830.0212	<a href="mailto:leslie.garrison@coronaca.gov">leslie.garrison@coronaca.gov</a>
	Kristopher	Bash		951.496.6061	<a href="mailto:kristopher.bash@coronaca.gov">kristopher.bash@coronaca.gov</a>
	Shawn	Kelly		951.830.2347	<a href="mailto:shawn.kelly@coronaca.gov">shawn.kelly@coronaca.gov</a>
	Timothy	Oates		951.830.4649	<a href="mailto:timothy.oates@coronaca.gov">timothy.oates@coronaca.gov</a>
	Rusty	Stabile		951.830.2154	<a href="mailto:rusty.stabile@coronaca.gov">rusty.stabile@coronaca.gov</a>
	Jose	Zaragoza		951.903.9269	<a href="mailto:jose.zaragoza@coronaca.gov">jose.zaragoza@coronaca.gov</a>
	Scott	Macias		951.207.2671	<a href="mailto:scott.macias@coronaca.gov">scott.macias@coronaca.gov</a>
	Andrew	Kreger		951.736.2234	
	Mario	Sedano		951.403.0033	<a href="mailto:mario.cedano@coronaca.gov">mario.cedano@coronaca.gov</a>
	Kenneth	Lane		951.415.1592	<a href="mailto:kenneth.lane@coronaca.gov">kenneth.lane@coronaca.gov</a>

**Regulatory Agency Notification List**

**CalOES 1.800.852.7550**

**RWQCB 951.320.6362**

**SWRCB 951.782.4130 [info8@waterboards.ca.gov](mailto:info8@waterboards.ca.gov)**

**For Category 1 spills 1,000 gallons or greater to surface waters.  
Notify Regulatory Agency if outside work hours within 2 hours of spill**

# **APPENDIX B**

## **STANBY SCHEDULE**



## January 2023 through June 2023

<b>01/02-01/09</b>	<b>01/02-01/11</b>
DeVoe for Ferguson	Jardine
<b>01/09-01/16</b>	<b>01/09-01/16</b>
Yepez	Stabile
<b>01/16-01/23</b>	<b>01/16-01/23</b>
Cataldo	Guzman
<b>01/23-01/30</b>	<b>01/23-01/30</b>
Razo	Betancourt
<b>01/30-02/06</b>	<b>01/30-02/06</b>
Magana	Urias
<b>02/06-02/13</b>	<b>02/06-02/13</b>
Ferguson	Soto
<b>02/13-02/20</b>	<b>02/13-02/20</b>
DeVoe	Jardine
<b>02/20-02/27</b>	<b>02/20-02/27</b>
Yepez	Stabile
02/27-03/06	02/27-03/08
Cataldo	Betancourt
<b>03/06-03/13</b>	<b>03/06-03/13</b>
Razo	Guzman
<b>03/13-03/20</b>	<b>03/13-03/20</b>
Magana	Urias
<b>03/20-03/27</b>	<b>03/20-03/27</b>
Ferguson	Soto
<b>03/27-04/03</b>	<b>03/27-04/03</b>
Stolz	Jardine
<b>04/03-04/10</b>	<b>04/03-04/10</b>
DeVoe	Stabile
<b>04/10-04/17</b>	<b>04/10-04/17</b>
Yepez	Betancourt
<b>04/17-04/24</b>	<b>04/17-04/24</b>
Cataldo	Guzman
<b>04/24-05/01</b>	<b>04/24-05/03</b>
Razo	Urias
<b>05/01-05/08</b>	<b>05/01-05/08</b>
Magana	Soto
<b>05/08-05/15</b>	<b>05/08-05/15</b>
Ferguson	Jardine
<b>05/15-05/22</b>	<b>05/15-05/22</b>
Stolz	Stabile
<b>05/22-05/29</b>	<b>05/22-05/29</b>
DeVoe	Betancourt
<b>05/29-06/05</b>	<b>05/29-06/05</b>
Yepez	Guzman
06/05-06/12	06/05-06/14
Cataldo	Urias
<b>06/12-06/19</b>	<b>06/12-06/19</b>
Razo	Soto
<b>06/19-06/26</b>	<b>06/19-06/26</b>
Magana	Jardine
<b>06/26-07/03</b>	<b>06/26-07/03</b>
Ferguson	Stabile
<b>07/03-07/10</b>	<b>07/03-07/10</b>
Stolz	Betancourt

Infrastructure Standby phone: 951-830-2391

Maintenance standby phone: 951-403-5596

# January 2025 through June 2025

Infrastructure 1st responder Monday to Monday	Infrastructure 2nd responder Monday to Monday
01/06/2025-----01/13/2025	
Wences	DeVoe
01/13/2025-----01/20/2025	
Morales	Vila
01/20/2025-----01/27/2025	
Diaz	Ferguson
01/27/2025-----02/03/2025	
Magana	Urias
02/03/2025-----02/10/2025	
Wences	Betancourt
02/10/2025-----02/17/2025	
Morales	Stabile
02/17/2025-----02/24/2025	
Diaz	Yepez
02/24/2025-----03/03/2025	
Magana	Devoe
03/03/2025-----03/10/2025	
Wences	Vila
03/10/2025-----03/17/2025	
Morales	Ferguson
03/17/2025----03/24/2025	
Diaz	Urias
03/24/2025-----03/31/2025	
Magana	Stabile
03/31/2025-----04/07/2025	
Wences	Betancourt
04/07/2025-----04/14/2025	
Morales	Yepez
04/14/2025-----04/21/2025	
Diaz	DeVoe
04/21/2025-----04/28/2025	
Magana	Vila
04/28/2025-----05/05/2025	
Wences	Ferguson
05/05/2025-----05/12/2025	
Morales	Urias
05/12/2025-----05/19/2025	
Diaz	Stabile
05/19/2025-----05/26/2025	
Magana	Betancourt
05/26/2025-----06/02/2025	
Wences	Yepez
06/02/2025-----06/09/2025	
Morales	DeVoe
06/09/2025-----06/16/2025	
Diaz	Vila
06/16/2025-----06/23/2025	
Magana	Ferguson
06/23/2025-----06/30/2025	
Wences	Urias

Standby phone: 951-830-2391

**APPENDIX C**

**CITY OF CORONA PRETREATMENT**

**PROGRAM ENFORCEMENT**

**RESPONSE PLAN**

**RESOLUTION NO. 2012-019**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
CORONA, CALIFORNIA, ADOPTING AN  
ENFORCEMENT RESPONSE PLAN FOR RESPONSE TO  
VIOLATIONS OF THE CITY'S WASTEWATER  
PRETREATMENT REGULATIONS**

**WHEREAS**, federal and state law and associated regulations, and the City's permits for its wastewater treatment system, require the City to maintain a pretreatment program to protect the City's wastewater treatment system against harmful wastewater discharges and spills; and

**WHEREAS**, federal regulations (40 CFR 403.8(f)(5)) and Section 13.08.410 of the Corona Municipal Code require the City to adopt an "Enforcement Response Plan" to establish procedures for the City to investigate violations of and non-compliance with the City's wastewater pretreatment regulations, and carry out enforcement actions for pretreatment violations; and

**WHEREAS**, it is necessary to update the existing Enforcement Response Plan to reflect current standards.

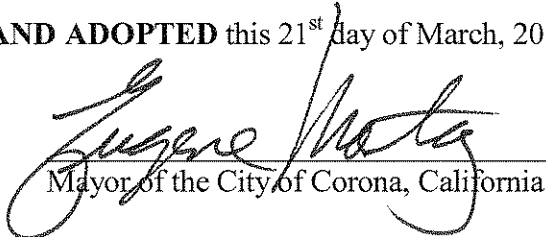
**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Corona, California, as follows:

**SECTION 1.** The Enforcement Response Plan shown in Exhibit "A", attached hereto and incorporated herein by reference is hereby adopted.


**SECTION 2.** The City Council may amend the Enforcement Response Plan established by this Resolution from time to time.

**SECTION 3.** This Resolution shall take effect immediately upon its adoption.

**PASSED, APPROVED AND ADOPTED** this 21<sup>st</sup> day of March, 2012.

  
Mayor of the City of Corona, California

**ATTEST:**

  
\_\_\_\_\_  
Chief Deputy City Clerk of the  
City of Corona, California

**CERTIFICATION**

I, Lisa Mobley, Chief Deputy City Clerk of the City of Corona, California, do hereby certify that the foregoing Resolution was regularly introduced and adopted by the City Council of the City of Corona, California, at an adjourned meeting thereof held on the 21<sup>st</sup> day of March, 2012, by the following vote:

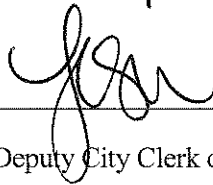
**AYES: MONTANEZ, NOLAN, SCOTT, SKIPWORTH, SPIEGEL**

**NOES: NONE**

**ABSENT: NONE**

**ABSTAINED: NONE**

**IN WITNESS THEREOF**, I have hereunto set my hand and affixed the official seal of the City of Corona, California, this 21<sup>st</sup> day of March, 2012.

A handwritten signature in black ink, appearing to read 'Lisa Mobley', is written over a horizontal line.

Chief Deputy City Clerk of the City of Corona, California

(SEAL)

**EXHIBIT “A”**

**Enforcement Response Plan**

**(The Enforcement Response Plan is attached on the following pages.)**

CITY OF CORONA  
PRETREATMENT PROGRAM  
ENFORCEMENT RESPONSE PLAN

Prepared By:

City of Corona  
Department of Water and Power

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CITY OF CORONA  
PRETREATMENT PROGRAM  
ENFORCEMENT RESPONSE PLAN

**I. GENERAL:**

In accordance with the Code of Federal Regulations, Title 40 CFR 403.8(f)(5), the City of Corona (City) has developed an Enforcement Response Plan (ERP). The ERP contains detailed procedures identifying how the Source Control Section of the City will investigate violations of and non-compliance with the City's wastewater pretreatment regulations. The ERP will be used by City personnel to carry out enforcement actions for pretreatment violations. The ERP does not create any rights or obligations, nor should it be used or relied upon by non-City personnel for any purpose. The City of Corona Source Control Section reserves the right to change and/or amend the ERP at any time and may vary from the ERP if circumstances require the City to do so.

The City's Source Control Section implements a Federally-mandated and approved Pretreatment Program as required by the State and NPDES permits obtained by the City and has primary responsibility for enforcing the pretreatment standards and standards in 40 CFR 403.8(f). The primary purpose of the City's Pretreatment Program is to protect the City's Publicly Owned Treatment Works (POTW), beneficial sludge reuse/collection system/storm drain system, and personnel from harmful or detrimental wastewater discharges and accidental and negligent spills. The City accomplishes these goals by operating a permitting system and inspecting and monitoring users.

The City uses the Federal definitions of non-compliance as found in Title 40 CFR 403.8 (f) (2) (viii) (A - H), and Chapter 13.08.020 of the Corona Municipal Code.

The City issues Industrial User Permits and requires sampling and inspection of industrial use facilities. The City also establishes specific discharge limits for controlled constituents as well as Best Management Practices (BMPs). The City conducts wastewater monitoring and inspection

activities to detect noncompliance at the Industrial Users' sites. Inspections are conducted in both a scheduled and unscheduled manner. The majority of the sampling and inspections are unannounced.

Discharge limits are derived from applicable Federal standards and POTW's Local Discharge Limits. The most stringent limits are adopted by the City. The discharge permit requires all permitted Industrial Users to maintain compliance with the City's discharge requirements, applicable Federal, State, and County of Riverside regulations and Corona Municipal Code ("CMC") Chapter 13.08.

## **II. INTRODUCTION:**

The City's ERP identifies violations of pretreatment program elements, indicates initial and follow-up responses, designates personnel responsible for investigating and enforcing violations and sets forth time frames for enforcement. Presented below are the objectives of the City's ERP:

- To define the range of enforcement actions based on the nature and severity of the violation and other relevant factors.
- To illustrate the various documents (tools of enforcement) that the City will use in implementing the ERP.
- To establish a means of tracking violator progress (from initiation to completion) once enforcement action has been taken.
- To promote consistent and timely use of enforcement actions by the City.
- To eliminate any confusion or uncertainty concerning enforcement.
- To identify specific Source Control Section personnel who may initiate various enforcement actions.
- To provide a fair and equitable means of enforcing the City's wastewater pretreatment regulations as set forth in Chapter 13.08 of the CMC.

### **III. DEFINITIONS AND ABBREVIATIONS:**

Unless otherwise defined in Chapter 13.08 of the CMC, the definition of terms related to Industrial User Permits shall be as follows:

Administrative Order (AO) shall mean an order issued to an Industrial User who has violated Chapter 13.08 of the CMC. The order directs the Industrial User to perform a specific act or refrain from an act. Types of AOs include but are not limited to the following:

- Consent Order
- Compliance Order
- Show Cause Hearing
- Cease and Desist Order
- Termination of Permit

Best Management Practices (BMPs) shall mean the schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b). BMP also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

City shall mean the City of Corona.

CMC shall mean the Corona Municipal Code.

Code of Federal Regulations (CFR) shall mean the codification of the general and permanent rules published in the United States Federal Register by the executive departments and agencies of the Federal Government to include, but not limited to the Environmental Protection Agency.

Enforcement Response Plan (ERP) shall mean the City's formally adopted policy and program which describes methods and steps adopted by the City to investigate and take appropriate enforcement actions against violations of wastewater pretreatment regulations, established by the City in accordance with State and Federal law.

General Manager shall mean the General Manager of the Department of Water and Power of the City of Corona or other designated City employee responsible for administration of the Department.

Harm shall mean to cause injury, damage, or in any manner jeopardize the interests of the City, its citizens, employees, or the environment whether the harm is temporary or permanent.

Industrial User shall mean all entities, public or private, industrial, commercial, governmental or institutional which discharge or cause to be discharged, wastewater and waterborne waste into the Collection System of the City or Collection Agency.

Inspection shall mean inspection of the Industrial User's facility by the City's Source Control Section personnel.

Inspection Report shall mean a written investigative report created by the City's Source Control Section staff, describing the conditions and facts surrounding a violation and recommending that formal enforcement action be taken.

Inspector shall mean a person authorized by the General Manager to inspect the facility of any Industrial User that directly or indirectly discharges or anticipates discharging wastewater or waterborne waste into the Collection System of the City or Collection Agency.

Major Violation shall mean any violation or series of violations that cause or contributes to harm to the City, the public, the environment, or any violation that occurs as the result of a criminal act.

May means permissive.

Minor Violation shall mean any violation or series of violations that does not cause harm to the City, the public, or the environment.

Ordinance shall mean the current adopted Wastewater Ordinance set forth in Chapter 13.08 of the CMC, and may be amended from time to time.

Person shall mean any individual, partnership, firm, association, company, society, corporation or public agency and includes the plural as well as the singular.

POTW shall mean the City's Publicly Owned Treatment Works. A treatment works is defined by Section 22 of the Clean Water Act, (33 U.S.C. 1292). This definition includes Corona's three (3) Water Reclamation Facilities and related devices or systems used in the storage, transportation, treatment, recycling, and reclamation of municipal sewerage. It also includes all sewers, pipes, lift stations, and other conveyances which carry sewerage to the treatment plants.

Pretreatment shall mean the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater, to a less harmful state prior to discharge of the wastewater into the City's Collection System. The reduction or alteration may be accomplished by physical, chemical or biological processes, process changes, waste minimization, or by other legal means designed to remove or reduce pollutants in a waste stream.

Shall is mandatory.

Significant Industrial User shall mean any industrial user of the City's collection system who:

- (a) Is a user as defined in 40 CFR Subchapter N, parts 401 through 471; or
- (b) Has a discharge flow rate of 25,000 gallons or more per average work day of processed wastewater, excluding sanitary, non-contact cooling and boiler blown down water or contribute a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the city's POTW; or
- (c) Has in its wastewater toxic pollutants, as defined pursuant to Section 307 of the Act, or state statutes and rules; or

- (d) Is found by the city, the CRWQCB or the EPA to have significant impact, either singularly or in combination with other wastewater discharges from contributing industries on the operation of the POTW, the quality of sludge, the system's effluent quality or air emissions generated by the system.

Significant Noncompliance (SNC) shall mean any Significant Industrial User Violation(s), which meet any of the criteria below, or any Industrial User violation that violates c, d, or h below.

- (a) Chronic violations of wastewater discharge limits are defined as those in which 66% or more of all of the measurements taken during a consecutive six month period exceed (by any magnitude) the numeric Pretreatment Standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3 (1);
- (b) Technical review criteria (TRC) violations are defined as those in which 33% or more of all of the measurements taken for the same pollutant parameter during a consecutive six month period equal or exceed the product of the numeric Pretreatment Standard or requirement including instantaneous limits, multiplied by the applicable TRC (TRC =1.4 for BOD, TSS, fats, oil and grease and 1.2 for all other pollutants except pH);
- (c) Any other violation of a pretreatment effluent limit (daily maximum, long term average, instantaneous limit, or narrative standard ) that the City determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health and safety of POTW personnel or the general public);
- (d) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the City exercise of its emergency authority to halt or prevent such a discharge;

- (e) Failure to meet within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction or attaining final compliance;
- (f) Failure to provide within 45 days after the due date required reports such as baseline monitoring reports, 90 day compliance reports, periodic self-monitoring reports and reports on compliance with compliance schedules;
- (g) Failure to report accurately non-compliance;
- (h) Any other violations or group of violations, which may include violations of Best Management Practices, which the City believes will adversely affect the operation and implementation of the city's pretreatment program or the City's sewer system; or
- (i) In the case of pH, violations are considered significant if the pH value is more than 1.0 pH units above the upper pH limit or below the lower pH limit based on any sampling performed.

Termination of Service shall mean a physical blockage of the sewer connection to an Industrial User or issuance of a formal notice of termination of services to the Industrial User.

User shall mean any person or entity, public or private, residential, industrial, commercial, governmental, or institutional, including an Industrial User, which discharges or causes to be discharged, wastewater or water borne wastes into the Collection System of the City or Collection Agency.

Wastewater shall mean any combination of waste and water, whether treated or untreated, discharged into or permitted to enter the Collection System or storm drain of the City or Collection Agency.



#### **IV. STAFF RESPONSIBILITIES:**

The City staffs a Source Control Section for the implementation of the Pretreatment Program and its related activities. The Section is part of the Department of Water and Power and headed by a General Manager.

The Source Control Section is staffed by an Operations Manager (hereafter referred to as “Manager”), a Regulatory Compliance Supervisor (hereafter referred to as “Supervisor”), and Source Control Inspectors. The Manager reports to the General Manager, and is responsible for managing all activities assigned to the Section including interactions with the USEPA, California EPA, California Regional Water Quality Control Board, and the Riverside County Health Department.

The Manager is responsible for the development of Enforcement Compliance Schedule Agreements (ECSA), Enforcement Compliance Schedules (ECS), and Administrative Orders (AO); conflict resolution arising from enforcement actions; participating in Show Cause Hearings; and advising the General Manager regarding resolved and unresolved instances of noncompliance.

The Supervisor monitors Source Control Inspector’s actions and ensures consistency in the application of enforcement actions and advises the Manager regarding appropriate steps to resolve a wide range of violations. The Supervisor ensures Source Control Inspectors are following established procedures assists the Manager with the preparation of Administrative Orders and preparing referrals to the City Attorney.

The Source Control Inspectors are responsible for inspecting and monitoring all classes of Users and initiating enforcement actions for all violations of the City’s wastewater pretreatment regulations. They have rotational job duties covering field inspections, plan checking, User permits, waste minimization/pollution prevention, surcharge billing, and training. They are also responsible for tracking all enforcement activities and scheduling all periodic inspections and/or sampling/monitoring of Users that could cause interference, and/or pass-through of the City’s Collection System or POTW.

The City follows strict inspection, sampling and data management procedures. The City has adopted those inspection, sampling and data management procedures set forth in the State of California's Pretreatment Program Implementation Guidance Manual. The State manual guides the City in its inspection frequency and pre-inspection preparation, as well as the City's sampling procedures.

Following each inspection, the City prepares an Inspection Report. This Report is then used to follow-up on violations and to develop enforcement plans in accordance with the enforcement procedures adopted by the City. The City's Source Control Section Staff inputs all inspection, sampling and monitoring data into a computer data base, using a Pretreatment Compliance Monitoring Evaluation program software package.

## **V. IDENTIFYING AND INVESTIGATING NONCOMPLIANCE**

Industrial User Inventory – An essential step in identifying non-compliance is identifying all sources discharging non-domestic wastewater to the POTW; where they are located; and the nature of the non-domestic waste being discharged. The Source Control Section maintains a current inventory of all non-domestic sources of waste to the POTW.

Monitoring and Inspection Plan – The Source Control Section monitors the wastewater from each Industrial User at least once per year. All sampling and analysis is performed in accordance with 40 CFR Part 136. Sampling procedure include Quality Assurance/Quality Control procedures discussed elsewhere in the approved pretreatment program, are followed to maximize sample integrity.

Compliance Screening – All reports from Industrial Users are carefully reviewed on an as received basis for timeliness, completeness and accuracy. The screening process includes an evaluation of compliance with report due dates, numerical standards, sampling handling and analysis requirements, signatory/certification requirements and monitoring frequency. All violations are clearly documented and addressed in accordance with the Enforcement Response Plan.

Publication of Industrial Users in Significant Noncompliance - A list of all users who are found to be in Significant Noncompliance (SNC) as defined in Title 40 CFR 403.8(f)(2)(viii)(A-H), and Chapter 13.08.020(81)(a – i) of the Corona Municipal Code in the previous 12 months shall be published at least annually in the largest daily newspaper in the city in accordance with 40 CFR 403.8(f)(2)(viii).

## VI. ENFORCEMENT ACTIONS:

A. Range of Enforcement Actions: In order to achieve compliance by Industrial Users, the City uses a wide range of enforcement actions. The enforcement actions available to the City range from a simple reminder telephone call to termination of service and assessment of penalties. Some intentional violations may constitute criminal violations of Federal, State and City Law and the General Manager may seek the assistance of the EPA, the State or the City Attorney to implement enforcement. The purpose of this section is to describe the range of available enforcement actions. The enforcement philosophy is progressive in that problems are addressed at the lowest level and with the least formality possible, consistent with the specific problem. **However, the enforcement action is not contingent upon the completion of any less formal procedure and depending upon the factual scenario presented, a formal procedure may be needed for the initial action.** Written notices of violation are issued within 30 days of the Source Control staff becoming aware of the violation.

The following is a summary of the enforcement mechanisms which the City may use to correct Industrial User discharge violations and violations of the City's pretreatment regulations set forth in CMC Chapter 13.08. The details of each mechanism have been adopted by Ordinance and are codified in Chapter 13.08 of the CMC. For a more complete discussion of each mechanism, see CMC Chapter 13.08.

1. **Verbal Warnings**: This level of enforcement may be issued by the Manager, Supervisor or a Source Control Inspector who may observe or learn of a violation which may be easily resolved by changing housekeeping practices or altering a discharge practice. This warning shall be issued immediately upon observation. This verbal warning is documented in the Inspection Report and by a written follow-up letter, which shall be issued within 7 days after the verbal warning. The letter describes the violation encountered and a request that the Industrial User correct the problem.

2. **Written Warnings:** This level of enforcement may be issued by the Manager, Supervisor or a Source Control Inspector if an Industrial User fails to achieve compliance after a verbal warning and a written warning is issued with a date for achieving compliance. This notification reiterates the violations and the need for corrective actions and is issued within 7 days after an Industrial User fails to comply with a verbal warning. The compliance date issued notifies the Industrial User that compliance must be met by a set date. The time frame for compliance may range from 14 to 30 days. Follow-up inspections are used to verify compliance.
3. **Notice of Non-Compliance:** A Notice of Non-Compliance may be issued by the Manager, Supervisor or a Source Control Inspector whenever an Industrial User violates Chapter 13.08 of the CMC and the violation does not imminently endanger human health or welfare. The Notice of Non-Compliance shall be served in person by an employee of the City, preferably by a Source Control Inspector, or by certified or registered mail, return receipt requested, within 7 days after discovery of the violation. This level is used to escalate enforcement actions against Industrial Users who have failed to comply with a written warning to correct deficiencies and/or CMC Chapter 13.08 violations. This is the first level of formal enforcement used for discharge violations that may be accompanied by a penalty fee.

Within ten (10) working days from the date of receipt of the Notice of Non-Compliance, an Industrial User must provide, in writing, an explanation of the violation noted in the notice and a plan for the satisfactory correction and prevention thereof, to include specific required actions. Submission of such a plan in no way relieves the Industrial User of liability for any violations occurring before or after receipt of the Notice of Non-Compliance. This action shall not limit the General Manager's authority to take or initiate any action, including emergency actions or any other enforcement action.

- a. The first Notice of Non-Compliance may include a monetary penalty. Said penalty, if deemed appropriate, shall not be less than a \$100.
  - b. A second Notice of Non-Compliance for the same violation(s) may include a monetary penalty. Said penalty, if deemed appropriate, shall not be less than \$200.
  - c. A third Notice of Non-Compliance for the same violation may include a monetary penalty. Said penalty, if deemed appropriate, shall not be less than \$500.
4. Stop Work Order: A Stop Work Order may be used to prevent new construction, tenant improvements, alterations or additions when no City permits have been obtained, or work has begun without written approval by the General Manager, or violations of Chapter 13.08 of the CMC have been found at a construction/improvement site. The Manager, Supervisor, or a Source Control Inspector is responsible for issuing a Stop Work Order within 7 days of discovery of the violation. The corrective action required by a Stop Work Order is for the person receiving such an order to cease all activities which may lead to illegal discharges until the necessary permits or approvals have been obtained. The minimum penalty fee for a Stop Work Order is \$500.
5. Consent Order: A Consent Order may be issued after an Industrial User receives a Notice of Non-Compliance and fails to achieve compliance. The Consent Order will be issued within 7 days after an Industrial User fails to achieve compliance. The Consent Order involves an Enforcement Compliance Schedule Agreement (ECSA) developed between the Industrial User and the City. The Manager, the Supervisor, the Source Control Inspector assigned to the Industrial User, together with a representative from the City Attorney's office may develop the ECSA. The General Manager will be consulted regarding the final version of all Consent Orders. The purpose of the Consent Order is to allow the Industrial User who has

demonstrated a willingness to correct violations, a voice in the development of their ECSA. No element of ECSA shall exceed six (6) calendar months in duration. All ECSAs will be reviewed by the City Attorney's office.

An ECSA may include, but is not limited to any or all of the following:

- a. A consultant or person with the necessary expertise is to be hired to identify the problems causing the User to violate the wastewater pretreatment regulations and require such person to submit the reports to the City. The user will be required to submit the report, and all subsequent reports, to the City for review and approval;
- b. All pretreatment systems, equipment specifications, facilities be corrected as required to prevent violations;
- c. A provision for review by Source Control Section staff and other relevant City departments prior to finalizing;
- d. Requirements to hire contractors to assist the User in coming into compliance;
- e. Requirements to obtain all necessary permits to operate;
- f. Requirements to submit purchase orders and other relevant documents to verify progress with new construction, repairs or replacement of existing equipment;
- g. Document relevant training for key personnel responsible for compliance assurance by the Industrial User;
- h. Compliance sampling as necessary to demonstrate a return to compliance;

- i. Milestone and final compliance deadlines; and
- j. Progress reports at a frequency determined by the total duration of the ECSA but in no case less often than every thirty (30) days.

The minimum penalty for a Consent Order is \$500.

6. Compliance Order: A Compliance Order may be issued by the Manager within 7 days after an Industrial User has failed to achieve compliance and has shown a lack of cooperation and good faith effort to comply. The Compliance Order is an Enforcement Compliance Schedule (ECS) developed by the City with no input from the Industrial User. The City Attorney will participate in developing the ECS. The General Manager is consulted for the preparation of all Compliance Orders. The purpose of the Compliance Order ECS is to compel an uncooperative Industrial User to achieve compliance. No element of the ECS shall exceed six (6) months in duration. A Compliance Order ECS shall contain the same elements as a Consent Order Enforcement Compliance Schedule. Issuance of a Compliance Order shall not be a bar against, or a prerequisite for, taking any other action against the Industrial User. The minimum penalty fee for a Compliance Order is \$1,000.
7. Show Cause Hearing: The General Manager may order an Industrial User which has violated or continues to violate Chapter 13.08 of the CMC to appear before the General Manager and show cause why the City should not take certain proposed enforcement action against the Industrial User. Within 7 days after identification of a continued violation, notice shall be served on the Industrial User. The notice shall specify the time and place for the hearing, the proposed enforcement action, the reasons for such action, and a request that the Industrial User show cause why the proposed enforcement action should not be taken. The notice of the hearing shall be served personally or by registered or certified mail, return receipt



requested, at least ten (10) days prior to the hearing. A Show Cause Hearing may be used after the Cease and Desist Order, ECSA, or ECS have failed to achieve compliance, but is not limited to use under these circumstances. The Manager is responsible for issuing all notices for Show Cause Hearings. Before the issuance of a notice for a Show Cause Hearing, the Manager and the General Manager shall meet with a representative from the City Attorney's office to discuss the case. Testimony obtained at a Show Cause Hearing shall be under oath and transcribed. The findings of the Show Cause Hearing and the final decision shall be issued by the City Attorney. A Show Cause Hearing shall not be a bar against, or prerequisite, for taking any other action against an Industrial User. The minimum penalty fee for a Show Cause Hearing is \$1,500.

8. Cease and Desist Order: A Cease and Desist Order may be issued to gain immediate compliance from an Industrial User in cases of severe violations or in cases where a violation poses a threat to the City's POTW, City personnel, or the public. The Manager or the General Manager may issue a Cease and Desist Order within 7 days of finding that an Industrial User has violated, or continues to violate, any provision of Chapter 13.08 of the CMC. The Cease and Desist Order may direct the Industrial User to:

- a. Immediately comply with all requirements; and
- b. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge.

Issuance of a Cease and Desist Order shall not be a bar against, or a prerequisite for, taking any other action against the Industrial User. The penalty for the issuance of a Cease and Desist Order is \$1,000.

9. Probation: The General Manager may place an Industrial User on probation as a condition of any Administrative Order. The probationary provisions will be removed when the General Manager determines that future violations are unlikely to occur.
10. Permit Revocation: The General Manager may revoke any Industrial User permit if the user is in violation of Chapter 13.08 of the CMC. Validity of the Industrial User permit shall be conditioned upon compliance with the provisions of Chapter 13.08 CMC. The General Manager may revoke the Industrial User permit upon a minimum notice of 15 days when the General Manager finds that the permitted wastewater discharge is in violation of the provisions of Chapter 13.08 CMC or of any applicable Federal, State or Municipal law or regulation. Within 7 calendar days prior to the intended permit revocation date, a user may request a hearing before a hearing officer. A person dissatisfied with the decision of the hearing officer may appeal to the City Council within 30 days of notice of the hearing officer's decision. If after the hearing or appeal, if any, it is found that the user has violated reporting or discharge requirements, pursuant to this Chapter 13.08 CMC or an Industrial User permit, the hearing officer or board may assess a civil penalty against the user.
11. Termination of Service: The General Manager may suspend wastewater treatment service to any user within 7 days of discovering a user is in violation of any provision of Chapter 13.08 of the CMC or of applicable State or Federal regulations. In the event the user fails to comply voluntarily with an administrative order, the City may take such steps as deemed necessary, including, but not limited to, the immediate severance of the user's sewer service, revocation of the Industrial User discharge permit and/or termination of water service to prevent or minimize damage to the City's collection system, POTW and/or endangerment to any individuals or the environment. The City shall reinstate the Industrial User discharge permit and service upon proof that the violation(s) have been corrected and payment of reconnection fees. All costs for the termination and/or reconnection of services shall be borne by the Industrial User.

Violations subjecting an Industrial User to revocation of its permit include, but are not limited to, the following:

- (1) Failure of the user to accurately report the constituents and concentrations of its wastewater discharges;
- (2) Failure of the user to report significant changes in operation and/or significant changes in wastewater constituents and concentrations;
- (3) Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring;
- (4) Violation of conditions of an industrial user's permit;
- (5) Failure to comply with any administrative order issued by the General Manager pursuant to this chapter;
- (6) Failure of the user to comply with any provision of this chapter.

All Industrial Users may request a hearing to appeal any administrative order. Written requests for an appeal hearing must be submitted within ten (10) working days from the receipt of any administrative order issued in accordance with Chapter 13.08 of the CMC. The hearing shall be held within a reasonable time of the request. The hearing shall be recorded or transcribed. Testimony shall be given under oath. A written decision shall be provided to the User by the Manager and shall contain the findings of facts regarding the reversal or affirmation of the administrative order.

12. Civil or Criminal Actions: In addition to administrative remedies, the City may pursue legal action against Industrial Users which violate Chapter 13.08 of the CMC. The City may request that the City Attorney pursue legal action if any of the following apply:
  - a. All administrative remedies to achieve compliance have failed;
  - b. The violation(s) is/are causing or contributing to pass through or violation(s) of any of the City's regulatory permits or requirements;
  - c. The violation(s) cause or contribute to an imminent threat to life, health, the environment or property; or
  - d. A judicial remedy is deemed to be the most appropriate and effective response to resolve the matter.

The referral to the City Attorney is made by the General Manager after conferring with the City Manager and the Manager. The specific civil and criminal measures available to the City are set forth in Chapter 13 of the CMC.

In the case of criminal prosecution the City may refer the case to the State, EPA or the local District Attorney.

#### B. Determining Factors

The following factors are considered when determining the most appropriate initial and subsequent progressive action steps necessary in addressing the types of violations as described in the Enforcement Response Guide.

1. Magnitude of the Violation: The level of enforcement action depends on the magnitude of the violation and/or any significant threat to the public health, safety, welfare, the environment, the POTW, or any City personnel.
2. Duration of the Violation: The length of time a violation exists without being corrected also impacts the level of enforcement response. Violations that are not corrected within a specified time frame will result in escalated enforcement responses.
3. Compliance History of the User: The initial level of enforcement may also be determined by the compliance history of the User. Repeat violations within specified time frames, indicating chronic noncompliance, generally will be addressed at higher levels of response and may be accompanied by a change in permit classification which increases the City's oversight and places additional requirements on the User to demonstrate assurance of continued compliance.

4. Good Faith of the User: Additional considerations are given in the enforcement response to Users that demonstrate reasonable and consistent approaches to resolving noncompliance such as quick responses to noted violations; installation of equipment and/or implementation of best management practices, etc. in good faith attempts to resolve noncompliance.
5. Effect of the Violation: The initial response to a violation also considers the effect or impact of any noncompliance on the City. For example, any violation that meets the definition of Significant Noncompliance (SNC) or jeopardizes the designated beneficial reuse of treated wastewater or municipal sludge (biosolids), or that compromises the City's ability to meet any Federal, State, or Local regulatory requirements requires an elevated response to assure quick resolution.

The following section, Enforcement Response Guide, includes tables which describe typical types of violations that occur and the most likely response(s) and an overview flowchart that shows the progressive responses for minor and major violations. Specific circumstances, as viewed using the determining factors listed above will determine the most reasonable and appropriate response(s) to resolve a violation and therefore the following tables are to be used as a guideline for City staff and actual enforcement steps may not necessarily be the same as outlined in the Enforcement Response Guide tables.

## VI. ENFORCEMENT RESPONSE GUIDE

<b>1. Discharge Violations</b>			
<b>Type of Violation</b>	<b>Typical Response</b>	<b>Comments</b>	<b>Personnel Involved</b>
First discharge violation in a 12-month Period - No harm to POTW	Verbal Warning; Resample and evaluate.	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Any discharge violation(s) that result in Quarterly SNC status. No harm to POTW.	Notice Non-Compliance Resample and evaluate.	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor, OM
Dilution of Wastestream – First offense	Verbal Warning – Resample and evaluate	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Continuous pH Monitoring indicates noncompliance but not a prohibited discharge	Verbal Warning – Resample and evaluate	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Discharge of any prohibited Waste – No harm to POTW. First Offense	Verbal Warning – Resample and evaluate	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Any discharge violation(s) that result in pass-through, sludge contamination, or interference	Administrative Complaint, Civil or Criminal Penalties	Major Violation. See administrative and/or civil/criminal actions available in the flow chart.	Inspector, Supervisor, OM, GM, City Manager, City Attorney
Any discharge that poses an imminent threat to the POTW, the public, or the environment.	Cease and Desist	Major Violation. See administrative and/or civil/criminal actions available in the flow chart.	Inspector, Supervisor, OM, GM, City Manager, City Attorney

<b>2. Monitoring Violations</b>			
<b>Type of Violation</b>	<b>Typical Response</b>	<b>Comments</b>	<b>Personnel Involved</b>
Failure to sample or resample within required timeframes – Doesn't result in SNC	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to sample or resample within required timeframes – Results in SNC	NNC – Sample or resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Improper sampling collection procedures, location, or analytical methods – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to monitor for all required pollutants – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to properly maintain or operate flow monitoring or pretreatment equipment – First offense.	Verbal Warning	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to install required monitoring or flow equipment – First offense.	Verbal Warning – Complete required installation	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Intentional tampering with or disabling of monitoring equipment to achieve compliance.	Administrative Order Show Cause Hearing	Major Violation. See administrative and/or civil/criminal actions available in the flow chart.	Inspector, Supervisor, OM, GM, City Manager, City Attorney

### 3. Reporting Violations

Type of Violation	Typical Response	Comments	Personnel Involved
Failure to maintain records or reports as required by permit – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to submit records, reports, or correspondence results in SNC	NNC	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to report SMR Discharge violation – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to report Slug Load or spill discharge violation – First offense & no harm	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to report Slug Load or spill discharge violation – Causes or contributes to Harm.	Administrative Order Show Cause Hearing	Major Violation. See administrative and/or civil/criminal actions available in the flow chart.	Inspector, Supervisor, OM, GM, City Manager, City Attorney



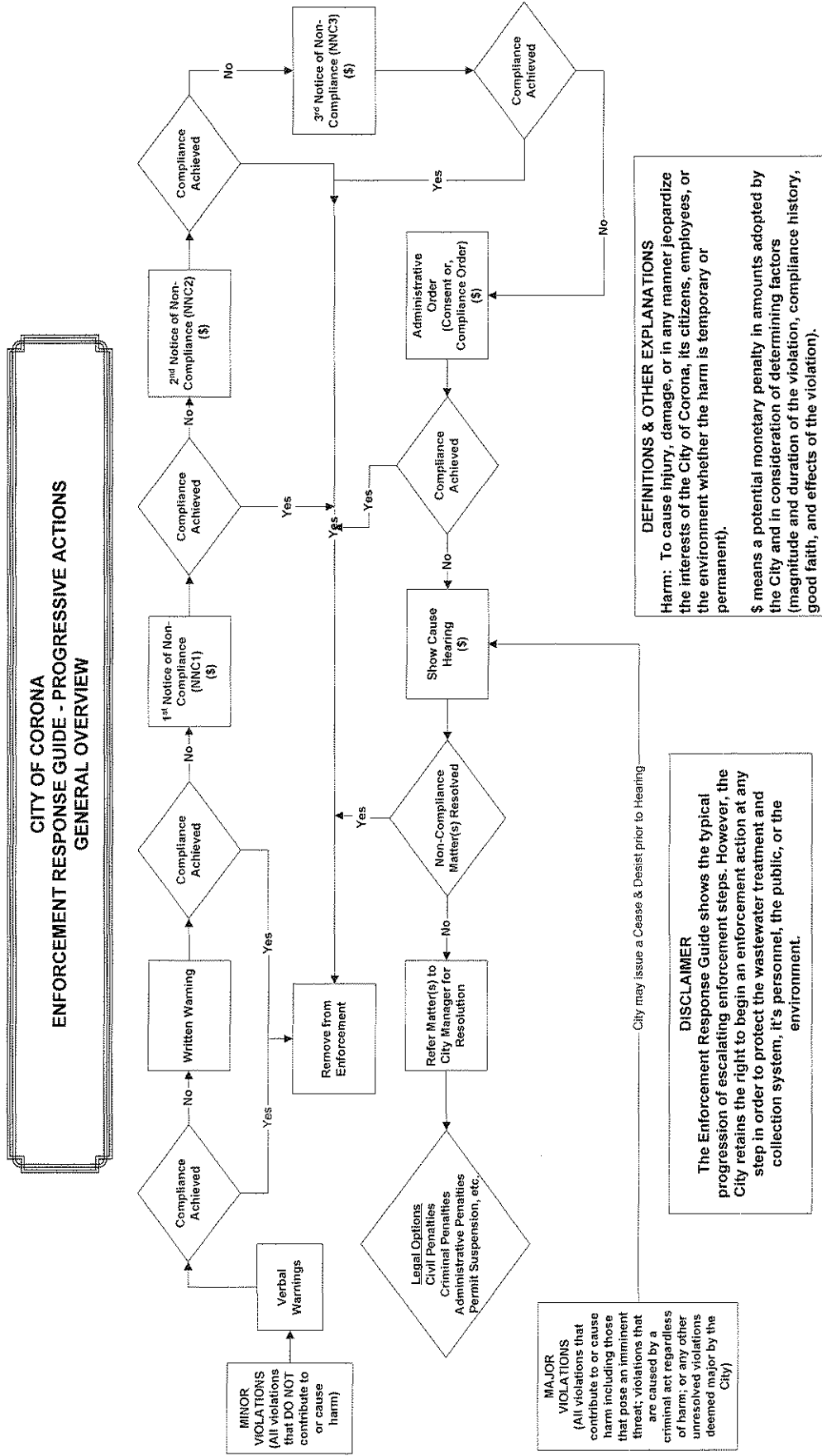
#### 4. Permit Violations

Type of Violation	Typical Response	Comments	Personnel Involved
Failure to submit permit application or renewal by due date	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to comply with any permit condition of requirement – First offense. No Harm	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Unauthorized or Unpermitted Discharge – first offense – No harm to POTW	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Unauthorized or Unpermitted Discharge – Harm to the POTW	Cease & Desist; Administrative Order; Show Cause Hearing	Major Violation. See administrative and/or civil/criminal actions available in the flow chart.	Inspector, Supervisor, OM, GM, City Manager, City Attorney
Failure to submit required permit information or any process modification – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to implement any plan required by the permit (i.e. slug load, spill prevention, TOMP, etc.) – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor

## 5. Miscellaneous Ordinance Violations

Type of Violation	Typical Response	Comments	Personnel Involved
Denial of entry to perform monitoring or inspections – first offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Denial of entry to perform monitoring or inspections – Unresolved with minor violation steps	Administrative Complaint - Obtain Inspection Warrant	Major Violation. See administrative and/or civil/criminal actions available in the flow chart	Inspector, Supervisor, OM, GM, City Manager, City's Legal Counsel
Spill containment not present or inadequate – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Spill containment area not properly maintained – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Illegal water softening equipment installed – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor
Failure to implement Best Management Practices(BMPs) – First offense	Verbal Warning – Sample/resample as required	Minor Violation. See progression of actions in flow chart for subsequent violations.	Inspector, Supervisor

## 6. Enforcement Response Guide Flow Chart



## **APPENDIX D**

# **SSO NOTIFICATION PROCEDURE**



## SSO NOTIFICATION PROCEDURE

Page 1 of 2

### SSO OF ANY VOLUME

#### DURING WORK HOURS

Immediately call the  
Utility Maint. Superintendent **(951) 992-8633**  
and Maintenance Manager **(951) 736-2443**

Immediately call the Regulatory Compliance  
Division to report the spill **(951) 279-3688**

Regulatory Compliance Division will make  
the following notifications according to the  
spill Category

#### AFTER WORK HOURS

First Responder is to immediately call the  
Second Responder to report the spill

Second Responder immediately call the  
Utility Maint. Superintendent **(951) 992-8633**  
and Maintenance Manager **(951) 736-2443**

Second Responder will make the following  
notifications according to the spill Category  
AND notify the Regulatory Compliance  
Division by the next business day

Utility Maint. Superintendent or Maintenance Manager will  
notify the Director of Utilities, Assistant Director of Utilities,  
and Operations Manager of any SSOs of any volume

START – Must answer 1-3 below

1. Did spill reach a drainage channel that is  
a tributary to surface water?

YES

NO

2. Did spill reach surface water?

YES

NO

3. Did spill reach a storm drain and was not  
fully captured?

YES

If YES, report as Category 1

**Within 2 hours for Category 1 Spills  
>1,000 gallons notify by phone  
(Use total spill volume)**

1. California Warning Center/Office of  
Emergency Services and obtain a  
notification control number  
**1-800-852-7550**

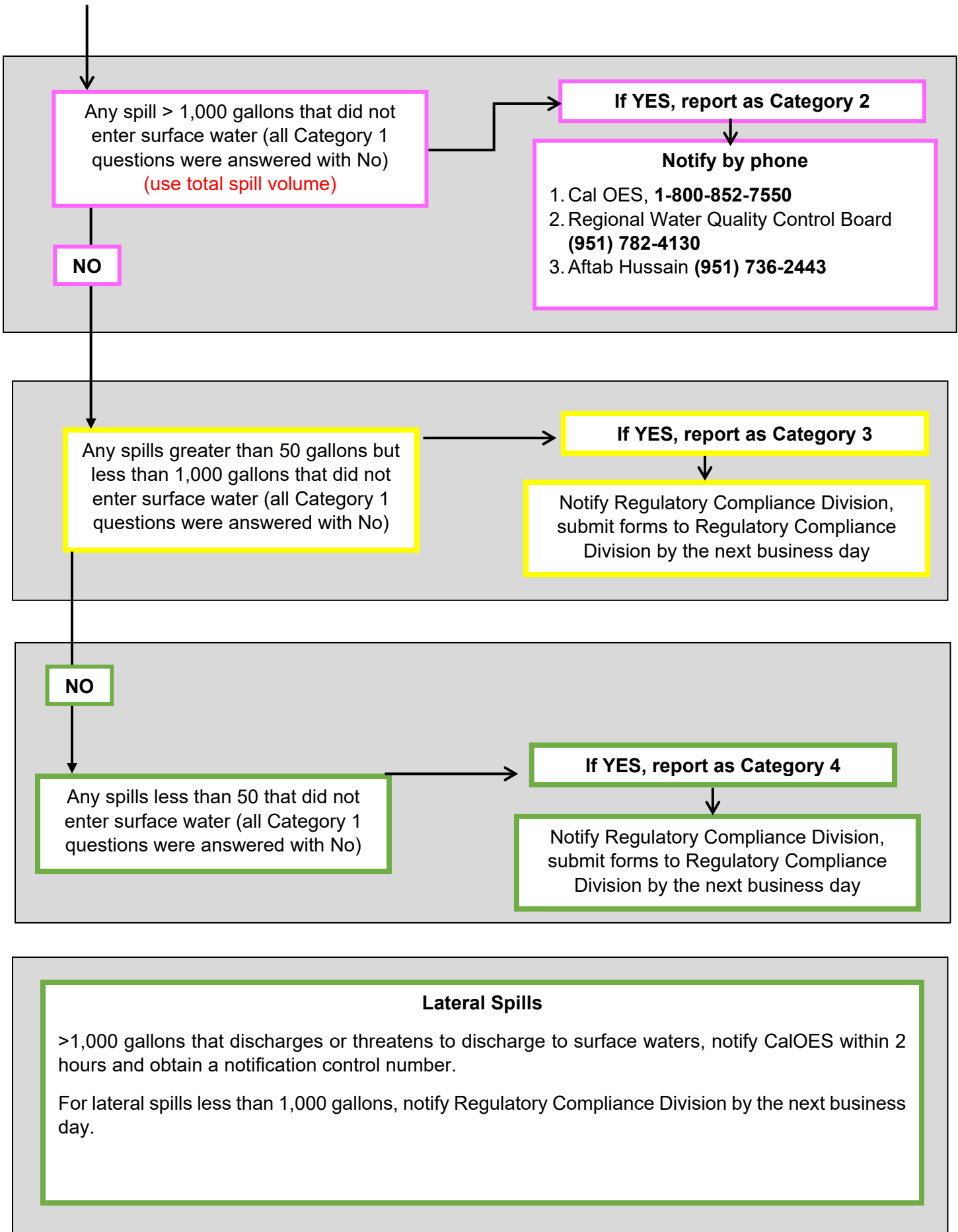
2. Regional Water Quality Control  
Board Najah Amin **(951) 320-6362**

3. Aftab Hussain **(951) 736-2443**

NO

**\*Note: If more than 50,000 gallons is spilled to surface water then we are required to conduct water quality monitoring within 18 hours after initial notification. Refer to the SSO Water Quality Monitoring SOP for details.**

Continue to Page 2



# **APPENDIX E**

## **SSO INCIDENT RESPONSE FORM**



## SSO INCIDENT RESPONSE FORM

Page 1 of 6

### CALLER INFORMATION

Location of SSO (Address): \_\_\_\_\_

Caller Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Receipt of Call: Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_\_ ☐ AM ☐ PM

Call Received By: \_\_\_\_\_ Call Dispatch: Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Time: \_\_\_\_\_ ☐ AM ☐ PM Assigned To: \_\_\_\_\_

Follow up email sent to: \_\_\_\_\_

### CALLER INTERVIEW

Where did you see sewage spill from? \_\_\_\_\_

Time Caller noticed spill: \_\_\_\_\_ ☐ AM ☐ PM Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

### RESPONDER OBSERVATIONS

Responder Arrival Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_\_ ☐ AM ☐ PM

Spill Location Address: \_\_\_\_\_

Spill observed from: \_\_\_\_\_ Structure ID: \_\_\_\_\_

Spill Destination: ☐ Building ☐ Paved Surface ☐ Storm Drain  
☐ Curb/Gutter ☐ Unpaved ☐ Other \_\_\_\_\_

### SPILL DURATION

SSO Start Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_\_ ☐ AM ☐ PM

SSO End Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_\_ ☐ AM ☐ PM

SSO Duration \_\_\_\_\_ Minutes

Describe how the start time or duration was determined \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_





## SSO INCIDENT RESPONSE FORM

Page 2 of 6

### SSO VOLUME ESTIMATION

Accurate start time determination is an essential part of the SSO volume estimation. Depending on the flow rate, being even one minute off can have a huge impact on the volume estimation. Be as precise as possible. Do not round to quarter hour increments. Start time must be based on all available information (interviews with neighbors, first responders, etc.). Please reference the Orange County Sewer Spill Estimation Guide.

There are various ways to estimate spill volume, choose one and document your findings.

- ☐ Pictorial Reference \_\_\_ CWEA Ruler \_\_\_ Vent or Pick Hole Chart \_\_\_ Eyeball Estimate Method
- ☐ Measured Volume Method \_\_\_ Counting Connections \_\_\_ Manhole Ring \_\_\_ Partially Covered Manhole \_\_\_ Open Manhole
- ☐ Estimated Flow \_\_\_ Bucket Method \_\_\_ Gutter Flow Method \_\_\_ Metered Flow \_\_\_ Pipe Size Method \_\_\_ Rain Event Method
- ☐ Saturated Soil Method ☐ Vactor Truck Recovery
- ☐ Other (explain) i.e.; estimated daily use per capita upstream or meter @ Pump Station.

**If spill is observed from manhole picks, measure the height. Take photos.**

Water Height \_\_\_\_\_ inches. Use the vent hole estimation chart to determine flow rate.

Flow Rate \_\_\_\_\_ gpm. Multiply the flow duration in minutes by the flow rate to determine volume of spill.

\_\_\_\_\_ gpm x \_\_\_\_\_ minutes = \_\_\_\_\_ gallons

**If spill is observed from sides of manhole cover, measure the height of spout above manhole rim and take photos.**

Water Height \_\_\_\_\_ inches. Use the estimated SSO flow out of MH with cover in place chart to determine flow rate.

Flow Rate \_\_\_\_\_ gpm. Multiply the flow duration in minutes by the flow rate to determine volume of spill.

\_\_\_\_\_ gpm x \_\_\_\_\_ minutes = \_\_\_\_\_ gallons

**If spill has stopped, one option is to use Measured Volume Method** (this may take several calculations as you may have to break down the odd shaped spill to rectangles, circles, and polygons). It is important when guessing depth to measure, if possible, in several locations and use an average depth. Use the **SSO Volume Estimation by Area Work Sheet**, if necessary, to sketch the shapes and show your work.



## SSO INCIDENT RESPONSE FORM

Page 3 of 6

Revised 2/20/20

## SSO VOLUME ESTIMATION BY AREA WORKSHEET

1. Draw a sketch of the spill.
2. Draw shapes and dimensions used on your sketch.
3. Use correct formula for various shapes.

☐ Surface

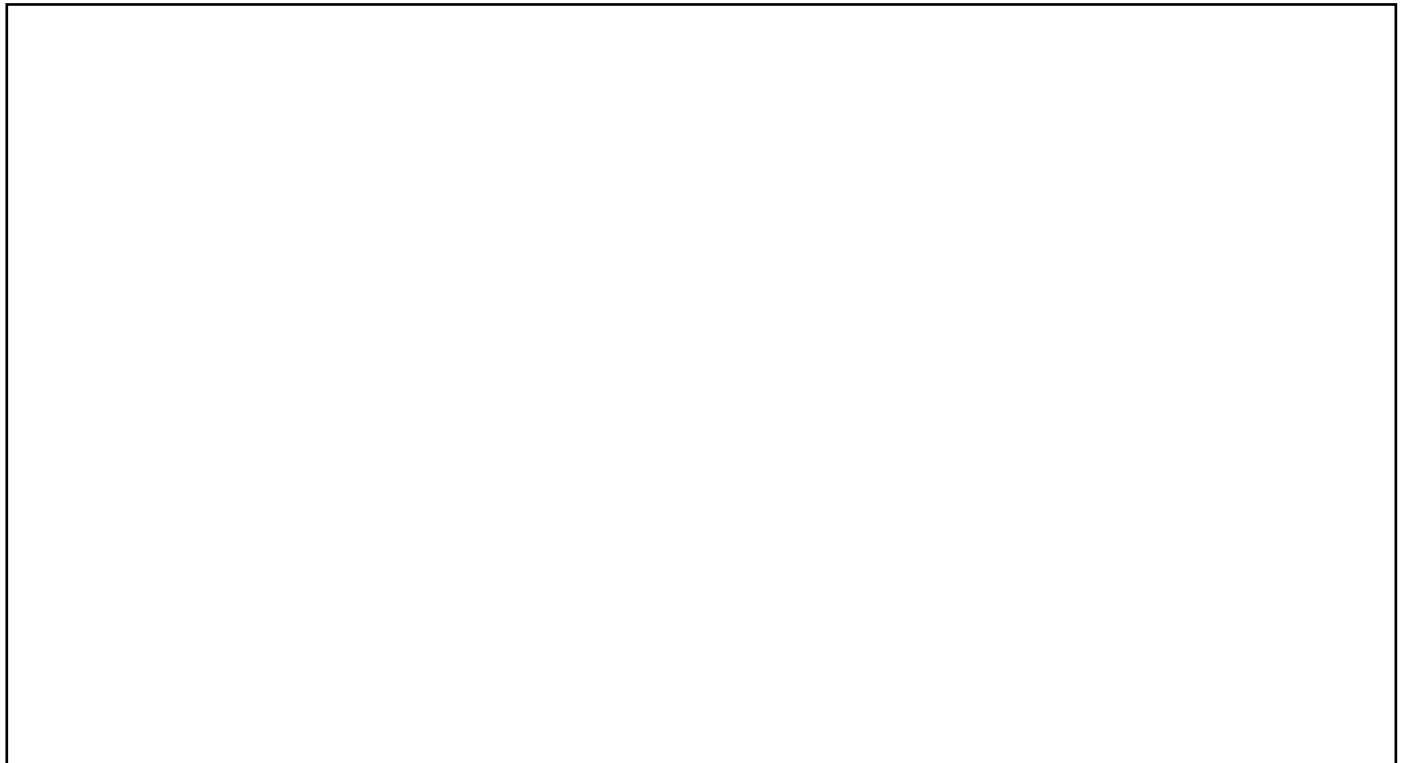
☐ Asphalt

☐ Concrete Dirt Landscape

☐ Inside Building

☐ Other \_\_\_\_\_

(Draw / Sketch outline of Spill 'Footprint' and attach photos)



~~ Breakdown the 'Footprint' into Recognizable Shapes and Determine Dimensions of Each Shape ~~

Divide the inches by 12 to convert to feet.

One cubic foot = 7.48 gallons

Show calculations:



## SSO INCIDENT RESPONSE FORM

Page 4 of 6

### CATEGORY 1 DETERMINATION

- A. Did the spill reach surface water? ☐ YES ☐ NO
- B. Did the spill reach a drainage channel that is a tributary to surface water? ☐ YES ☐ NO
- C. Did the spill reach a storm drain and was not fully captured? ☐ YES ☐ NO

If you answered YES to question A, B, or C the spill is a Category 1

**\*\*Any Category 1 spill >1,000 gallons must be reported to EOS & RWQCB within 2 hours**

**\*\*\*Water quality sampling required for spills 50,000 gallons or greater**

(USE TOTAL SPILL VOLUME, DO NOT INCLUDE VACTOR TRUCK VOLUME FROM SEWER)

### NOTIFICATIONS

Notifications were made to:

☐ **OES** 1-800-852-7550 Time: \_\_\_\_\_ ☐ AM ☐ PM Control Number: \_\_\_\_\_

Notification made by: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

☐ **RWQCB** - Najah Amin (951) 320-6362 Time: \_\_\_\_\_ ☐ AM ☐ PM

Notification made by: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

☐ **Aftab Hussain** (951) 736-2443 Time: \_\_\_\_\_ ☐ AM ☐ PM

Notification made by: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

☐ **Regulatory Division** (951) 279-3688 Time: \_\_\_\_\_ ☐ AM ☐ PM

Notification made by: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Comments: \_\_\_\_\_

### SPILL CONTAINMENT

Containment Measures:

\_\_\_\_\_ Plugged Storm Drain

\_\_\_\_\_ Washed Down

\_\_\_\_\_ Vacuum up Water/Sewage

\_\_\_\_\_ Other Measures

\_\_\_\_\_ Sandbags



## SSO INCIDENT RESPONSE FORM

Page 5 of 6

### STORM DRAIN INFORMATION

Did the spill reach a storm drain or drainage channel? ☐ YES ☐ NO

Name, location, or description of drain or drainage channel \_\_\_\_\_

Where does the storm drain go to? \_\_\_\_\_

Was the spill recovered from the storm drain or drainage channel? \_\_\_\_\_

Describe how, where, and or why not \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### CLEAN UP

Spill response completion: Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_\_ ☐ AM ☐ PM

Number of City staff on site: \_\_\_\_\_ Number of contractor staff on site: \_\_\_\_\_

Describe clean-up operations, including equipment used, and who performed the clean-up:

\_\_\_\_\_

\_\_\_\_\_

### CAUSE OF SPILL

Spill Cause: \_\_\_\_\_ Roots \_\_\_\_\_ Vandalism

\_\_\_\_\_ Grease \_\_\_\_\_ Lift Station Fail

\_\_\_\_\_ Debris \_\_\_\_\_ Other \_\_\_\_\_

☐ Spill cause to be determined by CCTV inspection

Notes: \_\_\_\_\_

\_\_\_\_\_

Final Cause Determination: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## SSO INCIDENT RESPONSE FORM

Page 6 of 6

### PHOTOS AND DOCUMENTATION

Note location of photos taken: \_\_\_\_\_

\_\_\_\_\_

Other Documentation (videos or other evidence): \_\_\_\_\_

\_\_\_\_\_

### WATER QUALITY SAMPLING

**\*For Spills 50,000 gallons or greater.**

Were water samples collected? ☐ YES ☐ NO

Describe what and where samples were collected:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### CERTIFICATION

**Submit this completed form to the Regulatory Compliance Division. Please update Regulatory Division staff of any of the above information has changed or additional information is obtained.**

**This form has been completed to the best of my ability using all available information.**

Name: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Title: \_\_\_\_\_

Cell phone: \_\_\_\_\_

Signature: \_\_\_\_\_

# **APPENDIX F**

## **SSO REPORTING FORM**



# SSO REPORTING FORM

**Please complete all questions and return to Regulatory Compliance Division staff within 24 hours of an SSO.**

1. Spill location name/address: \_\_\_\_\_
- a. GPS Coordinates of the spill, include multiple spill appearance points. Include Manhole Number (MH#), if applicable:
- GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_ MH# \_\_\_\_\_
- GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_ MH# \_\_\_\_\_
- GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_ MH# \_\_\_\_\_
- GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_ MH# \_\_\_\_\_
- b. Photographs of the spill origin point, final spill destination, cleanup location, and discharge points into surface waters:
- ☐ Extent of spill spread and spill boundaries, include GPS coordinates:
- ☐ EX. How far did spill extend? Approx. Length, Width, Area of spill:
  - ☐ GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_
  - ☐ GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_
  - ☐ GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_
  - ☐ GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_
  - ☐ Describe extent of spill spread and spill boundaries.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- ☐ Drainage conveyance system entry locations (if applicable; EX. Storm drain entry points)
- ☐ Locations of clean up
- ☐ Locations of discharge points into surface waters (if applicable; EX. Storm drain outlets into surface waters)
- c. Description of the impact of the spill:
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
2. Estimate spill volumes for each location (total spill volume will be a+c+e+g+i). Do not include wash water in volume estimation.
- Estimated spill flow \_\_\_\_\_gallons per minute. Total volume of spill \_\_\_\_\_gallons.**
- a. Explain how the spill volume estimations were calculated (*include at a minimum- methods, assumptions, and type of data relied upon such as SCADA records, flow monitoring, used to estimate volume of spill and the volume recovered*)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- b. Estimate volume to **reach storm drain** \_\_\_\_\_gallons.
- c. Estimate volume **recovered from storm drain** \_\_\_\_\_gallons.
- d. Estimate volume that **reached a drainage channel** that flows to a surface water body \_\_\_\_\_gallons. (Do not include volume that reached storm drain)



# SSO REPORTING FORM

e. Estimate volume **recovered from drainage channel** that flows to a surface water body \_\_\_\_\_gallons.

f. Estimate volume **that discharged directly to a surface water** body \_\_\_\_\_gallons.

g. Estimate volume **recovered from surface water body** \_\_\_\_\_gallon

h. Estimate volume **discharged to land** (EX. soil, grass, curb, street, etc.) \_\_\_\_\_gallons.

i. Estimate volume **recovered from land** \_\_\_\_\_gallons. (This includes discharges directly to land or a retention structure, field, or non-surface water location).

j. Estimate volume to **reach groundwater infiltration basin** \_\_\_\_\_gallons.

k. Estimate volume **recovered from groundwater infiltration basin** \_\_\_\_\_gallons.

l. Spill located within 1,000 feet of a municipal surface water intake? \_\_\_\_\_Yes \_\_\_\_\_No

3. Did the spill reach a storm drain? \_\_\_\_\_Yes \_\_\_\_\_No

a. Does the storm drain flow to a surface water body or drainage channel? \_\_\_\_\_Yes \_\_\_\_\_No

b. Was all of the wastewater fully captured from the storm drain and returned to the sewer? \_\_\_\_\_Yes \_\_\_\_\_No

c. Did the spill reach a drainage channel or surface water body? \_\_\_\_\_Yes \_\_\_\_\_No

If Yes to 3.c.:

d. Description of the drainage conveyance system transporting the spill (EX. Describe the storm drain, channel, and surface water affected by the spill)

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e. Estimated spill volume fully recovered from the drainage conveyance system: \_\_\_\_\_gallons.

f. Estimated spill volume remaining within the drainage conveyance system: \_\_\_\_\_gallons.

g. Photographs of the drainage conveyance system entry location(s) collected? \_\_\_\_\_Yes \_\_\_\_\_No

h. Description and photographs of all discharge point(s) into the surface water (EX. Describe and provide photos for all points spill exited storm drain/ outlets):

---

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---

4. Number of appearance points (EX. The number of points the spill exited the system): \_\_\_\_\_

5. Spill appearance point. Check all that apply.

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Backflow prevention device,   | <input type="checkbox"/> Lateral clean out private, | <input type="checkbox"/> Other sewer system structure, |
| <input type="checkbox"/> Combined sewer D.I.,          | <input type="checkbox"/> Lateral clean out public,  | <input type="checkbox"/> Pump station,                 |
| <input type="checkbox"/> Force main,                   | <input type="checkbox"/> Lower later private,       | <input type="checkbox"/> Upper later private,          |
| <input type="checkbox"/> Gravity mainline,             | <input type="checkbox"/> Lower lateral public,      | <input type="checkbox"/> Upper lateral public,         |
| <input type="checkbox"/> Inside building or structure, | <input type="checkbox"/> Manhole,                   | <input type="checkbox"/> Other                         |

6. Spill appearance point explanation (EX. Explain location of where spill exited the system include street address, manholes, etc. Required if spill appearance point is other or multiple appearance points are selected.)

---





# SSO REPORTING FORM

7. Final spill destination. Check all that apply.

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Building or structure, | <input type="checkbox"/> Storm drain,            | <input type="checkbox"/> Unpaved surface |
| <input type="checkbox"/> Drainage channel,      | <input type="checkbox"/> Street/curb and gutter, | <input type="checkbox"/> Other           |
| <input type="checkbox"/> Paved surface,         | <input type="checkbox"/> Surface water,          |  |

8. Explanation of final destination (*EX. Describe the final location of spill*).

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9. Estimated spill start date \_\_\_\_\_ start time \_\_\_\_\_

a. Description the methods, assumptions, and type of data relied upon for estimations of the Spill Start Time:

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10. Date \_\_\_\_\_ and time \_\_\_\_\_ sewer agency was notified or discovered the spill

11. Estimated operator arrival date \_\_\_\_\_ and arrival time \_\_\_\_\_

12. Estimated spill end date \_\_\_\_\_ and end time (*time line was unblocked*) \_\_\_\_\_

a. Description the methods, assumptions, and type of data relied upon for estimations of the Spill End Time:

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13. Spill cause. Check all that apply.

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Air relief valve/blow-off valve failure, | <input type="checkbox"/> Grease deposition,                            | <input type="checkbox"/> Pipe structural problem failure-mechanical, |
| <input type="checkbox"/> Construction diversion failure,          | <input type="checkbox"/> Inappropriate discharge to cs,                | <input type="checkbox"/> Pipe structural problem failure-power,      |
| <input type="checkbox"/> Maintenance caused spill/ damage,        | <input type="checkbox"/> Natural disaster,                             | <input type="checkbox"/> Rainfall exceeded design,                   |
| <input type="checkbox"/> Damage by other not related,             | <input type="checkbox"/> Non-dispersables,                             | <input type="checkbox"/> Root intrusion,                             |
| <input type="checkbox"/> Debris from construction,                | <input type="checkbox"/> Operator error,                               | <input type="checkbox"/> Siphon failure,                             |
| <input type="checkbox"/> Debris from lateral,                     | <input type="checkbox"/> Pipe structural problem failure,              | <input type="checkbox"/> Vandalism,                                  |
| <input type="checkbox"/> Debris general,                          | <input type="checkbox"/> Pipe structural problem failure-installation, | <input type="checkbox"/> Other                                       |
| <input type="checkbox"/> Debris-rags,                             | <input type="checkbox"/> Pipe structural problem failure-controls,     |  |
| <input type="checkbox"/> Flow exceeded capacity,                  |  |  |

14. Spill cause explanation \_\_\_\_\_ (required only if spill cause is other or not related)



# SSO REPORTING FORM

15. Where did the failure occur? Check all that apply.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Air relief valve/blow-off valve, | <input type="checkbox"/> Manhole,                         | <input type="checkbox"/> Siphon,                         |
| <input type="checkbox"/> Force main,                      | <input type="checkbox"/> Pump station failure - controls, | <input type="checkbox"/> Upper lateral (public/private), |
| <input type="checkbox"/> Gravity mainline,                | <input type="checkbox"/> Pump station-mechanical,         | <input type="checkbox"/> Other                           |
| <input type="checkbox"/> Lower lateral (public/private),  | <input type="checkbox"/> Pump station-power,              |  |

16. Explanation of where failure occurred \_\_\_\_\_ (required only if where failure occurred is other).

17. Was the spill associated with a storm event? \_\_\_\_\_ Yes \_\_\_\_\_ No

18. Diameter of the sewer pipe at the point of blockage or failure \_\_\_\_\_ inches.

19. Material of sewer pipe at the point of blockage or failure \_\_\_\_\_

20. Estimated age of sewer pipe at the point of blockage or failure \_\_\_\_\_

21. Spill response activities. Check all that apply.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Cleaned-up,                        | <input type="checkbox"/> Returned all spill to sanitary sewer system,        | <input type="checkbox"/> Property owner notified,     |
| <input type="checkbox"/> Mitigated effects of spill,        | <input type="checkbox"/> Returned portion of spill to sanitary sewer system, | <input type="checkbox"/> Enforcement agency notified, |
| <input type="checkbox"/> Contained all or portion of spill, |  | <input type="checkbox"/> Other                        |
| <input type="checkbox"/> Restored flow,                     |  |   |

22. Explanation of spill response activities, including description of immediate spill containment and cleanup efforts:

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23. Spill response completion date \_\_\_\_\_ and time \_\_\_\_\_

24. Spill corrective action taken. Check all that apply.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Added sewer to preventative maintenance program,    | <input type="checkbox"/> Enforcement action against FOG source,         | <input type="checkbox"/> Plan rehabilitation or replacement of sewer, |
| <input type="checkbox"/> Adjusted schedule/method of prevention maintenance, | <input type="checkbox"/> Inspected sewer using CCTV to determine cause, | <input type="checkbox"/> Repaired facilities or replaced defect,      |
|  |   | <input type="checkbox"/> Other  |

25. Explanation of spill corrective action taken:

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a. Description of implemented system modifications and Operation/Maintenance modifications needed to prevent repeated spills at this location:

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## SSO REPORTING FORM

- b. Adjusted schedule/method of preventative maintenance \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- c. Planned rehab or replacement of defective asset \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- d. Capital improvements \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- e. Documentation verifying immediately implemented system modifications and Operation/Maintenance modifications:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

26. Is there an ongoing investigation? \_\_\_\_\_ Yes \_\_\_\_\_ No

- a. Description of investigation \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- b. Investigation findings \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

27. Explain how the spill volume estimations were calculated (*include at a minimum- methods, assumptions, and type of data relied upon such as SCADA records, flow monitoring, used to estimate volume of spill and the volume recovered*)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Complete questions below for all Category 1 Spills, otherwise skip to question 39.**

**\*\*Category 1 – Spills that reach or threaten to reach a surface water.**

- ☐ **Notify:** CalOES, (800) 852-7550, within 2 hours of knowledge of spill 1,000 gallons or greater discharging/threatening to discharge to surface waters.
- ☐ **Sample:** Conduct water sampling within 18 hours of initial knowledge of spill 50,000 gallons or greater. Sample for ammonia and bacterial indicator.



## SSO REPORTING FORM

29. Visual inspection results from impacted receiving water:

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30. Health warning signs posted? \_\_\_\_\_ Yes \_\_\_\_\_ No

31. Name of impacted surface waters: \_\_\_\_\_

Type of impacted surface waters: \_\_\_\_\_

Description of:

a. Observed impacts on aquatic life: \_\_\_\_\_

---

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b. Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill?

---

c. Responsible entity for closing/restricting use of water body: \_\_\_\_\_

d. Number of days closed/restricted as a result of the spill \_\_\_\_\_

32. Water quality samples analyzed for – Check all that apply.

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Dissolved oxygen,            | <input type="checkbox"/> Biological indicator(s),        | <input type="checkbox"/> Not applicable to this spill, |
| <input type="checkbox"/> Other chemical indicator(s), | <input type="checkbox"/> No water quality samples taken, | <input type="checkbox"/> Other                         |

33. Explanation of water quality samples analyzed for \_\_\_\_\_  
(required only if water quality samples analyzed for is other).

34. Water quality sample results reported to – Check all that apply.

- |  |  |                                |
|--|--|--------------------------------|
| <input type="checkbox"/> County health agency, | <input type="checkbox"/> No water quality samples taken, | <input type="checkbox"/> Other |
| <input type="checkbox"/> Regional Board,       | <input type="checkbox"/> Not applicable to this spill,   |                                |

35. Explanation of water quality results reported to \_\_\_\_\_  
(required only if water quality samples reported to is other).

### Notification Details

36. Cal OES control number \_\_\_\_\_

37. Cal OES called by (name) \_\_\_\_\_ date \_\_\_\_\_ time \_\_\_\_\_

38. Others notified (name) \_\_\_\_\_ date \_\_\_\_\_ time \_\_\_\_\_

39. Contact number of person who can answer specific questions about this SSO:

Name \_\_\_\_\_

Title \_\_\_\_\_ Phone Number \_\_\_\_\_

40. Were photos taken documenting the spill and clean-up? \_\_\_\_\_ Yes \_\_\_\_\_ No

41. If yes, please indicate where these photos can be located \_\_\_\_\_



## SSO REPORTING FORM

42. Please note any additional comments here: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

43. This form was completed by:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_ Phone Number: \_\_\_\_\_



**APPENDIX G**

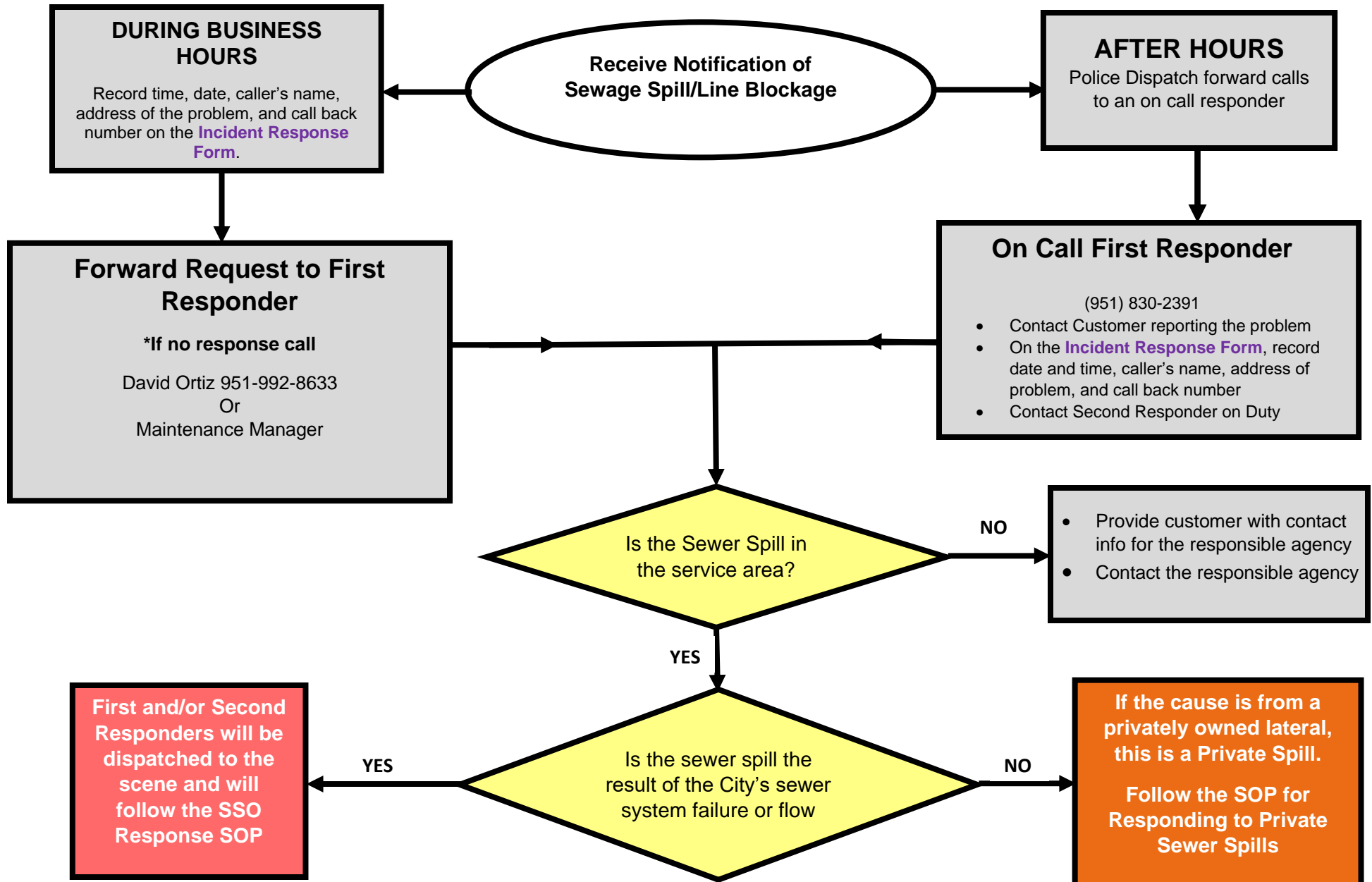
**INITIAL SPILL NOTIFICATION**

**PROCEDURE**



# INITIAL SPILL NOTIFICATION PROCEDURE

Page 1 of 1





# **APPENDIX H**

## **SSO RESPONSE SOP**



## **Assess The Situation At The Scene**

1. If a surcharging manhole is found **skip to Surcharging Manhole below**.
2. If there is no noticeable discharge from a manhole, the person should visually inspect upstream and downstream manholes of the reported incident area.
3. If these manholes are flowing freely with no noticeable obstruction in the movement of the water, the sewer lines are most likely open.
4. Report to the person making the complaint that the City lines are clear, and that the blockage may be in the customer's lateral which the City of Corona is not responsible for.
5. Report your findings to the City department making the service request and second responder.

## **Surcharging Manhole Or Line Blockage**

1. Make every effort to minimize and contain the spill.
2. If needed contact one of the on-call personnel for the Camel/Vactor truck to assist pumping.  
  
**Innerline Engineering      909-260-2322**  
**Houston Harris              909-721-1043**
3. If needed, use portable pumps to by-pass the overflowing manhole to the free flowing manhole (pumps are located at Corporation Yard).

## **If A Home Or Business Is Being Flooded By A Sewer Line Blockage**

- a) Remove clean-out cover lateral to help relieve flooding.
- b) Contact one of the following companies to commence clean-up of the affected property.  
  
**Servpro                              714-655-9130**
- c) Take pictures of the spill along with any mitigation efforts that are occurring and make notes in the **SSO Incident Response Form** regarding details (i.e. names, times, addresses, etc.) of the incident.
- d) Remain at the scene until the blockage is clear and the clean-up operations are complete.
- e) Estimate spill volume and the location of where the spill water drained to (i.e. gutter, empty field, storm drain, etc.)



4. Minimize the spill area by containing flow with soil dikes, sandbags or other materials.
5. Prevent spillage into storm drain, block off storm drain (if possible) and pump back into sewer system.
6. Secure affected area from foot traffic whenever possible.
7. Estimate the volume of the spill.
8. Report the spill according to the SSO Notification Procedure.
9. Take pictures of the spill along with any mitigation efforts that are occurring and make notes in the SSO Incident Response Form regarding details (i.e. names, times, addresses, etc.) of the incident.
10. In areas of public access only, apply disinfectant to areas wet from sewage using Hudson Sprayer. Disinfection is in stock and available at the City Warehouse (STORES).
11. Cleanup any solids or contaminated soil and transport it to the Water Reclamation Facility No. 1 containment area. Here it can dry-out and get hauled to the County landfill.
12. Use the SSO Incident Response Form to complete the SSO Reporting Form and return to the Regulatory Compliance Division.

# **APPENDIX I**

## **SOP FOR RESPONDING TO PRIVATE SEWER SPILLS**



**PRIVATE SPILL – A sewer spill or line blockage resulting from a failure or flow condition within a privately owned sewer later or other private sewer asset.**

## Assess the Situation at the Scene

1. Check manhole upstream and downstream
2. Determine if the cause is from Corona's sewer system
3. Immediately notify property owner
4. Contain spill at property and clean any spill that has left private property and entered the public right of way
5. If necessary, assist property owner in contacting plumber to resolve the problem
6. Estimate the volume of the spill
7. Report the spill according to the **Private SSO Notification Procedure** below
8. Use closed-circuit television (CCTV) if needed
9. Use the **SSO Incident Response Form** to complete the **SSO Reporting Form** and return to the Regulatory Compliance Division.

## PRIVATE SSO NOTIFICATION PROCEDURE

### PRIVATE SPILL SSO OF ANY VOLUME

#### DURING WORK HOURS

Immediately call the Regulatory Compliance Division to report the spill **(951) 279-3688**

Regulatory Compliance Division will make the following notifications according to the spill Category

#### AFTER WORK HOURS

Immediately call the Second Responder on duty

Second Responder will make the following notifications according to the spill Category AND notify the Regulatory Compliance Division by the next business day

If <1,000 gallons

No notification required, submit forms to Regulatory Compliance Division by the next business day.

Private SSO

If >1,000 gallons

#### Notify by phone

1. California Warning Center/Office of Emergency Services and obtain a notification control number **1-800-852-7550**
2. Regional Water Quality Control Board **(951) 782-4130**
3. Aftab Hussain **(951) 741-7626**



# PRIVATE SPILLS - SSO REPORTING FORM

**Please complete all questions and return to Regulatory Compliance Division staff within 24 hours of an SSO.**

1. If known, name of the Private System or Lateral Owner/Operator:

---

2. Date \_\_\_\_\_ and time \_\_\_\_\_ the Enrollee was notified of, or self-discovered, the Spill.

3. Spill location name:

---

**Estimated spill flow \_\_\_\_\_ gallons per minute X Estimated spill duration \_\_\_\_\_ minutes =**

**Total estimated volume of spill \_\_\_\_\_ gallons.**

4. Estimated spill volume: \_\_\_\_\_ gallons

5. Was the spill from:

- ☐ Private System
- ☐ Private Lateral

6. Description of the system location where the spill originated and GPS coordinates:

---

---

---

GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_

GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_

7. Spill destination:

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Building/structure         | <input type="checkbox"/> Drainage Conveyance                        | <input type="checkbox"/> Other (specify below) |
| <input type="checkbox"/> Drainage Conveyance System | System that discharges to a surface water                           | <input type="checkbox"/> Paved surface         |
|   | <input type="checkbox"/> Groundwater infiltration basin or facility | <input type="checkbox"/> Street/curb, gutter   |
|   |   | <input type="checkbox"/> Surface Water         |
|   |   | <input type="checkbox"/> Unpaved Surface       |

7a. If Other, describe:

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---

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# PRIVATE SPILLS - SSO REPORTING FORM

7b. Description of spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill:

GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_

GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_

GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_

GPS Coordinates: \_\_\_\_\_, \_\_\_\_\_

8. Estimated spill start date \_\_\_\_\_ estimated spill start time \_\_\_\_\_

9. Estimated spill end date \_\_\_\_\_ estimated spill end time \_\_\_\_\_

10. Spill Cause. Check all that apply.

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Air relief valve/blow-off valve failure, | <input type="checkbox"/> Grease deposition,                            | <input type="checkbox"/> Pipe structural problem failure-mechanical, |
| <input type="checkbox"/> Construction diversion failure,          | <input type="checkbox"/> Inappropriate discharge to cs,                | <input type="checkbox"/> Pipe structural problem failure-power,      |
| <input type="checkbox"/> Maintenance caused spill/ damage,        | <input type="checkbox"/> Natural disaster,                             | <input type="checkbox"/> Rainfall exceeded design,                   |
| <input type="checkbox"/> Damage by other not related,             | <input type="checkbox"/> Non-dispersables,                             | <input type="checkbox"/> Root intrusion,                             |
| <input type="checkbox"/> Debris from construction,                | <input type="checkbox"/> Operator error,                               | <input type="checkbox"/> Siphon failure,                             |
| <input type="checkbox"/> Debris from lateral,                     | <input type="checkbox"/> Pipe structural problem failure,              | <input type="checkbox"/> Vandalism,                                  |
| <input type="checkbox"/> Debris general,                          | <input type="checkbox"/> Pipe structural problem failure-installation, | <input type="checkbox"/> Other                                       |
| <input type="checkbox"/> Debris-rags,                             | <input type="checkbox"/> Pipe structural problem failure-controls,     |  |
| <input type="checkbox"/> Flow exceeded capacity,                  |  |  |

10a. Spill cause explanation (required only if spill cause is Other). If Other, describe:

---

---

---

11. Where did the failure occur? Check all that apply.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Air relief valve/blow-off valve, | <input type="checkbox"/> Manhole,                         | <input type="checkbox"/> Siphon,                         |
| <input type="checkbox"/> Force main,                      | <input type="checkbox"/> Pump station failure - controls, | <input type="checkbox"/> Upper lateral (public/private), |
| <input type="checkbox"/> Gravity mainline,                | <input type="checkbox"/> Pump station-mechanical,         | <input type="checkbox"/> Other                           |
| <input type="checkbox"/> Lower lateral (public/private),  | <input type="checkbox"/> Pump station-power,              |  |

11a. Explanation of where failure occurred:

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---

12. Material of sewer pipe at the point of blockage or spill cause: \_\_\_\_\_

13. Diameter of sewer pipe at the point of blockage or spill cause: \_\_\_\_\_

13a. Estimated age of sewer pipe at the point of blockage or spill cause: \_\_\_\_\_



# PRIVATE SPILLS - SSO REPORTING FORM

14. Spill response activities. Check all that apply.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Cleaned-up,                        | <input type="checkbox"/> Returned all spill to sanitary | <input type="checkbox"/> Property owner notified,     |
| <input type="checkbox"/> Mitigated effects of spill,        | <input type="checkbox"/> sewer system,                  | <input type="checkbox"/> Enforcement agency notified, |
| <input type="checkbox"/> Contained all or portion of spill, | <input type="checkbox"/> Returned portion of spill to   | <input type="checkbox"/> Other                        |
| <input type="checkbox"/> Restored flow,                     | <input type="checkbox"/> sanitary sewer system,         |   |

14a. Explanation of spill response activities, including description of immediate spill containment and cleanup efforts:

---

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15. Spill response completion date \_\_\_\_\_ and time \_\_\_\_\_

16. Contact number of person who can answer specific questions about this SSO:

Name \_\_\_\_\_

Title \_\_\_\_\_ Phone Number \_\_\_\_\_

17. Were photos taken documenting the spill and clean-up? \_\_\_\_\_ Yes \_\_\_\_\_ No

18. If yes, please indicate where these photos can be located \_\_\_\_\_

19. Please note any additional comments here: \_\_\_\_\_

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20. This form was completed by:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_ Phone Number: \_\_\_\_\_



## **APPENDIX J**

### **LIFT STATION INFORMATION TABLE**

**City of Corona  
Utilities Department  
Lift Stations**

	Lift Station	Address	Diameter (ft)	Depth (ft)	Operating Height to Inlet (ft)	Operating Height to Overflow (ft)	Diameter of Inlet	Distance to Nearest Manhole (ft)	Average Flow (gpm)	Peak Flow (gpm)	Estimated Fill Time to Inlet Ave. Flow (hrs)	Estimated Fill Time to Overflow Avg. Flow (hrs)	Estimated Fill Time to Inlet Peak Flow (hrs)	Estimated Fill Time to Overflow Peak Flow (hrs)
1	Ahmanson Lift Station	11763 Chadwick Rd.	5	20	3.3	17.8	8	17'	8.8	24	0.9	4.9	0.3	1.8
2	Airport Lift Station	1973 Aviation Dr.	5	17	5.7	14	8	215'	3.5	10	4.0	9.8	1.4	3.4
3	Arantine Hills Lift Station	2590 Bedford Canyon Rd.	6x35.5	20	10.25	12.5	15	9'	337	453	2	13.4	1.5	10
4	Artisan Apartments Lift Station	211 W Rincon St.	6	21	19.8	25.6	8	68'	30	73	2.3	3.0	1	1.2
5	Green River Lift Station	4776 Golden Ridge Dr.	8	24	7.4	22.2	12	51'	175	368	0.3	0.8	0.1	0.4
6	Griffin Lift Station	Griffin Way near Berkley Cir.	5	23	5	22	8	15'	11	29	1.1	5.0	0.4	1.9
7	Joy and Parkridge Lift Station	Joy St. & Parkridge Ave.	5.5 x 12	20	6.4	16.8	8	23'	96	212	0.5	1.4	0.2	0.7
8	North Main Lift Station	786 N Main St.	5	17	5	14.8	8	315'	5.5	15	2.2	6.6	0.8	2.4
9	McKinley Lift Station	113 McKinley St.	6	21	3.6	15.8	8	191'	33	80	0.4	1.7	0.2	0.7
10	Prado Lift Station	4204 Prado Rd.	5	13	4	14	8	10'	3.8	11	2.6	8.9	0.9	3.1
11	Sierra Del Oro Lift Station	3915 Green River Rd.	8	32	9	28	10	44'	364	722	0.2	0.5	0.1	0.2
12	Smith and Rincon Lift Station	1505 Rincon St.	8	30	15.8	27.3	12	149'	421	826	0.2	0.4	0.1	0.2
13	Stagecoach Lift Station	2220 Stagecoach Dr.	4	18	5.1	16.3	8	26'	29	71	0.3	0.9	0.1	0.4
14	Bedford Lift Station	3695 Bedford Canyon	5	8	4.4	5.92	4	16'	0	0	n/a	n/a	n/a	n/a
15	Sunkist Lift Station	650 E Harrison St.	13 x 16.6	35.5	8	24.4	18	13'	1659	2456	0.32	1	0.2	0.7
16	WRF 3 Lift Station	3997 Temescal Canyon Rd												

Rev 03/02/2023

**APPENDIX K**

**THE FOUR C'S OF A SEWAGE  
OVERFLOW**



## **THE FOUR C'S OF A SEWAGE OVERFLOW**

### **CONTAINMENT – CONTROL – CALL – CLEANUP**

#### **FIRST THINGS FIRST:**

1. ASSESS THE SPILL
2. NOTIFY MANAGER
3. LOCATE STORM DRAINS THAT COULD BE AFFECTED
4. MOBILIZE RESOURCES TO CONTAIN AND CONTROL THE OVERFLOW
5. CONTAIN BEFORE CONTROL
6. NOTIFY THE APPROPRIATE AGENCIES

#### **CONTAINMENT:**

Containment is the most important aspect of responding to a sewer overflow. Use the entire inventory available to you to contain the spill. Keep it from entering the waterways, and remember that storm drains are considered to be waterways. Always block off and/or cover the storm drains that are receiving water from an overflow.

- A. Sewage Spill Containment: Goal is to keep the sewage where it can be recovered and returned to the sewer.
- B. Containment Opportunities or Making the Best of a Bad Situation: On streets, in flood control facilities, excavations, vacant lots, etc.
- C. Containment Materials: Dirt, sand, sand bags, poly sheeting.

## **CONTROL:**

Once the flow has been contained, work on relieving the spill by trying to stop the overflow, don't just wait. Plug the pick holes and park the truck on the manhole cover to force the water back up the line. Set up a pump and divert the flow to the next manhole.

- A. Sewage Spill Control : Use of bypasses

## **CLEAN UP:**

Clean up the affected areas:

- A. Remove debris
- B. Wash downs could be creating a larger problem somewhere else in the system.
- C. Clean up hard surfaces: What you put down must come back up, use power sweepers and sewer vacuum rigs. Beware of aerosols.
- D. Clean up soft surfaces: Decide when to leave it alone, disk it if you can, control public access, remove soil if necessary.
- E. Disinfect: Consider requirements of other agencies, consider beneficial use of receiving waters, and consider the uses and ownership of an affected area.
- F. Spills on Private Property: Check it out, as their problem could be our problem.

## **CALL:**

You must call all the necessary agencies as soon as possible.

**CONTAINMENT BEFORE CONTROL - KEEP THE OVERFLOW  
OUT OF THE DRAIN**

**OUR MISSION IS TO KEEP THE SANITARY SEWER  
OVERFLOW OUT OF THE STORM DRAIN**

## SEWER OVERFLOW RATES

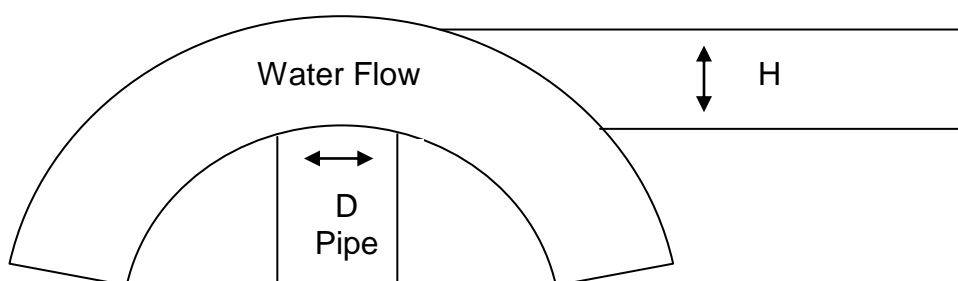
A one-inch opening with a water height of two inches will discharge 7 gallons per minute or 419 gallons per hour. Two two-inch holes will discharge 14 GPM or 839 GPH.

Overflow rates for a one inch opening:

1/2"	=	3.5 GPM or 210 GPH
3/4"	=	4.5 GPM or 257 GPH
1"	=	5.0 GPM or 297 GPH
1 1/4"	=	5.5 GPM or 332 GPH
1 1/2"	=	6.0 GPM or 363 GPH
1 3/4"	=	6.5 GPM or 392 GPH
2"	=	7.0 GPM or 419 GPH
2 1/4"	=	7.4 GPM or 445 GPH
2 1/2"	=	7.8 GPM or 469 GPH
2 3/4"	=	8.2 GPM or 492 GPH
3"	=	8.6 GPM or 514 GPH

Use this formula for flow heights not on sheet

### VERTICAL PIPE DISCHARGE



The following formula is an approximation of the output of a vertical pipe.

$$\text{GPM} = \sqrt{H} \times K \times D^2 \times 5.68$$

GPM = Gallon per minute

H = Height in inches

D = Diameter of pipe in inches

K = Constant from 0.87 to 0.97 for diameters of 2 to 6 inches and heights (H) up to 24 inches

# **APPENDIX L**

## **SSO WATER QUALITY MONITORING**

### **SOP**



# SSO WATER QUALITY MONITORING SOP

An SSO event in which 50,000 gallons or greater reach surface waters, requires water quality samples to be collected within **18 hours**. Follow procedures below unless directed otherwise by Regional Board or other regulatory agency.

## 1. Coordinate laboratory sample pick-up

During work hours

Regulatory Compliance Division  
(951) 279-3688

After hours

Contact Laboratory Directly  
(626)386-1106

## 2. Gather sampling supplies before heading to site

Pick-up ice chest with supplies

### Sampling Supplies

- Chain of Custody
- Bacti bottles (100 ml with Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>)
- Ammonia bottles (250 ml with H<sub>2</sub>SO<sub>4</sub>)
- Ice chest with bagged ice
- Sharpie marker
- Pen
- Gloves
- Camera
- Notebook

Bag ice

## 3. Determine the point where the spill entered the waterway

Take a photo and record observations in a notebook

## 4. If spill enters...

- **Drainage Conveyance System, DCS-001:** Collect all samples A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water. **And/or...**
- **Receiving Water:**
  - **RSW-001:** A point in the receiving water where sewage initially enters the receiving water.
  - **RSW-001U:** Upstream of Point of Discharge- A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
  - **RSW-001D:** Downstream of Point of Discharge- A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

### Bacti Sample

- Fill out COC and bottle label with location, date and time
- Put on gloves
- Using unpreserved 500 ml bottle, hold bottle in one hand, face upstream and lower the bottle below the water surface, then sweep the bottle upstream and out of the water.
- Be careful not to disturb bottom sediment
- Use this bottle to fill the bacti bottle
- Remove seal from bacti bottle
- Remove cap and do not allow inside of cap to touch anything (do not rinse out preservative)
- Pour sample from unpreserved bottle into the bacti bottle, fill to the 100 ml line without overflowing the bottle
- If the bottle overflows, discard the bottle and start over with a clean bottle

### Ammonia Sample

- Fill out COC and bottle label with location, date and time
- Using 250 ml with H<sub>2</sub>SO<sub>4</sub>, hold bottle in one hand, face upstream and lower the bottle below the water surface, then sweep the bottle upstream and out of the water.
- Be careful not to disturb bottom sediment
- Use this bottle to fill the ammonia bottle
- Remove cap and do not allow inside of cap to touch anything (do not rinse out preservative)
- Pour sample from unpreserved bottle into the ammonia bottle without overflowing the bottle
- If the bottle overflows, discard the bottle and start over with a clean bottle
- Fill to just below the neck of the bottle

Move 25' upstream from 1<sup>st</sup> sample and collect 2<sup>nd</sup> sample according to previous instructions

Move upstream to where spill entered surface water and collect 3<sup>rd</sup> sample according to previous instructions

Move 25' upstream of entry point and collect 4<sup>th</sup> sample according to previous instructions

Repeat daily until authorized by regulatory agency

## 5. Place samples in cooler with ice

Make a copy of the chain of custody and place original COC with samples for pick-up

Provide a copy of the COC to the Regulatory Compliance Division

Provide copies of notebook and photos to the Regulatory Compliance Division

**Drop coolers off WRF No. 1 Lab. Samples can also be placed in the WRF No. 1 sample fridge.**



## Chain of Custody & Sample Information Record

(For Lab Use Only) Sample Integrity Upon Receipt					Lab Notes
Sample(s) Submitted on Ice?	Yes	No	Temperature		
Custody Seal(s) Intact?	Yes	No	N/A	°C	
Sample(s) Intact?	Yes	No	<input type="checkbox"/> Cooler Blank		

Page 1 of 1

# **APPENDIX M**

## **FOG BILL INSERT**

# Grasas y Aceites

***¡Mantenga sus drenajes libres de grasas!***

## ***¿Qué es Grasas y Aceites?***

Grasas y Aceites son artículos que usamos frecuentemente cuando cocinamos, o son productos que resultan de cocinar, tales como aceite, mantequilla o la grasa que sobra al cocinar tocino u otras carnes.



## ***¿Cómo debo desechar las Grasas y Aceites?***

Después de cocinar espere que las Grasas y Aceites se enfríen. Luego, simplemente raspe las grasas de cocinar sobrantes a la basura u otro recipiente, tal como una lata vieja metálica de café o un recipiente para reciclar restos de comida. Nunca eche las grasas y aceites por el desagüe.

## ***¿No puedo simplemente verter las Grasas y Aceites por el desagüe?***

Nunca tire las grasas y aceites por el desagüe, aún si utiliza agua caliente. Estos materiales se acumularán a lo largo del tiempo y tapan los drenajes de las alcantarillas. Los drenajes tapados pueden hacer que se devuelvan las aguas negras hacia su casa, y podrían resultar en costosas facturas por reparaciones. Las aguas negras también pueden salir a las calles y caer a los drenajes pluviales, los cuales drenan hacia los ríos y el océano. Los derrames de aguas negras pueden representar riesgos a la salud y al medio ambiente. Además, son costosos para limpiar y reparar.

**Recuerde – ¡Mantenga sus alcantarillas libres de Grasas y Aceites!**

**Departamento de Utilities de Corona**

*"Protegiendo la Salud Publica"*

[www.CoronaCA.gov](http://www.CoronaCA.gov)

951.736.2234

# FOG

## Fats, Oils and Grease

***Keep Your Drains “FOG” Free!***

### ***What is “FOG?”***

“FOG” stands for Fats, Oils, and Grease. These are items that we frequently use when we cook, or are the by-products of cooking, such as cooking oil, butter or leftover grease from cooking bacon or other meats.



### ***How Should I Dispose of “FOG?”***

After cooking, wait for the “FOG” to cool down. Then, simply scrape the leftover cooking fats into the trash or other container, such as an old metal coffee can or food scrap recycling bin. Never put fats, oils, or grease down the drain.

### ***Can’t I Just Wash “FOG” Down the Drain?***

Never wash fats, oils or grease down the drain, even if you use hot water. These items will build up over time and block sewer lines. Blocked sewer lines can cause raw sewage to backup into your home, and could lead to costly repair bills. Raw sewage could also backup onto neighborhood streets and into storm drains, which drain to rivers and the ocean. Overflows can pose health and environmental hazards, in addition to being costly to repair.

**Remember - keep your sewer lines “FOG” - free!**

**City of Corona**  
**Utilities Department**  
*“Protecting Public Health”*  
[www.CoronaCA.gov](http://www.CoronaCA.gov)  
951.736.2234

## **APPENDIX N**

### **RESTAURANT BMP FLYER**



# RESTAURANT

## BEST MANAGEMENT PRACTICES (BMPs)

1. Prior to washing plates, pots and pans, and cooking utensils, scrape all solid material into a proper waste receptacle and contain material so it doesn't leak. Properly dispose material to a solid waste trash receptacle to be hauled away.
2. Install screens in all pot sinks, 2 and 3 compartment sinks, and floor sinks to catch solid materials to be properly disposed of to solid waste containers.
3. Dispose waste deep fryer grease to proper waste storage containers to be hauled away by licensed waste hauler.
4. Schedule to have grease interceptor pumped on a regular basis by a licensed waste hauler. The grease interceptor needs to be inspected regularly to determine if your pumping schedule is adequate.
5. Make sure all waste storage areas and containers (dumpsters, compactors, used oil containers) are covered and kept clean.  
*Note: Any disposal of wash water to outside paved surfaces and storm drain is strictly prohibited. Whenever possible, use dry cleaning methods by sweeping, damp mopping (as opposed to hosing) or absorbents.*
6. Management should conduct ongoing inspections and training for employees to ensure that these BMP's are implemented regularly.
7. The City of Corona prohibits all water softeners that are regenerated on site for all Commercial and Industrial dischargers.

City of Corona – Utilities Department  
755 Public Safety Way  
Corona, CA 92878  
(951) 736-2234



# **RESTAURANTE**

## **MEJORES PRACTICAS DE MANEJO DEL RESTAURANTE**

1. Antes del lavado de platos, de ollas, de cazuelas, y de utensilios de cocina, raspar todo el material sólido en un recipiente de desecho apropiado para contener el material y no permitir que se escape for el drenaje. Deposite este material en el contenedor de basura sólida.
2. Instalar coladeras en todos los fregaderos de la cocina y áreas de drenaje en el suelo para atrapar el material sólido y desecharlo apropiadamente en la basura.
3. Depositar la grasa usada de la freidora en un recipiente apropiado para almacenarla hasta que sea retirada por una persona autorizada para remover este tipo de desecho.
4. Contrate regularmente a una persona con licencia para que realice la limpieza del interceptor de grasa y la retire del restaurante. El interceptor de grasa necesita ser revisado periódicamente para determinar si el servicio de limpieza es adecuado.
5. Asegúrese que todas las áreas de almacenamiento de desecho, los contenedores, y los recipients de aceite vacios estén cubiertos y limpios.

**Nota:** Está prohibido tirar el agua con que se laven las superficies pavimentadas hacia la calle o hacia los drenajes de lluvia ubicados en la calle. Siempre que sea posible utilice métodos de limpieza en seco como barrer, o un trapeador humedo en lugar de usar la manguera del agua, o utilice materiales absorbentes.

6. El Supervisor o el Gerente deben conducir inspecciones regularmente y entrenar a los empleados para asegurarse que las mejores practicas de manejo del restaurante se están usando.
7. La Ciudad de Corona prohíbe a los negocios industriales y comerciales poseer equipo para suavisar el agua donde el material activo es regenerado localmente.

**City of Corona – Utilities Department  
755 Public Safety Way  
Corona, CA 92878  
(951) 736-2234**

## **APPENDIX O**

### **AUTOMOTIVE REPAIR BMP FLYER**





# Auto Repair Industry

## Best Management Practices

Here are a few simple practices to reduce unwanted pollutants from entering the sewer system from local businesses such as auto repair shops, car rental garages, gas stations, and auto dealerships.

### 1. Proper Disposal of Hazardous Waste

**Recycle** solvents, antifreeze, lubricants, batteries, oil and filters, and metal filings. Contact a licensed hazardous waste hauler to dispose of saturated absorbents.



### 4. Cleaning Auto Parts

**Minimize** the use of solvents. Scrape parts with a wire brush or use a water-based solvent for cleaning. Arrange drip pans, drying racks, and drain boards so that excess fluids are directed back into the holding tank.



### 2. Material and Waste Handling

**Properly Store** your used motor oil, coolant, and other fluids in a special designated area where there are no connections to a sewer or storm drain. Store all materials inside or under cover to prevent contamination from rain water.



### 5. Good Housekeeping

**Maintain** all service areas using drip pans underneath vehicles. Clean up spills with rags and absorbent agents. Do not use water and detergents to hose down service areas to the sewer or storm drain.



### 3. Spill Response

**Immediately** clean up all oil, solvent or fuel spills using absorbent cleaning materials. Follow your hazardous materials response plan and make sure your employees are aware and capable of implementing each phase of the plan.



### 6. Metal Grinding and Polishing

**Contain** all metal filings in a bin under your grinder or lathe to better facilitate recycling efforts. Properly dispose of cutting oils as required by your hazardous materials plan.



To report illegal discharge or dumping:

Call (951) 736-2234



# Auto Repair Industry

## Best Management Practices

Aquí se encuentran unas formas sencillas para reducir la contaminación de sustancias indeseadas en el sistema de drenaje provenientes de negocios como talleres de autos, bodega de renta de autos, estaciones de gasolina, y concesionarias de autos.

### 1. Manera apropiada de eliminar materiales peligrosos

**Recicle** solventes, anticongelante, lubricantes, baterías, aceite y filtros, y viruta de metal. Contacte una persona autorizada para remover los absorbentes usados.



### 2. Manejo de Material y Desperdicio

#### **Guarde apropiadamente**

el aceite de motor usado, el anticongelante, y otros fluidos en un área especial donde no se tiren hacia el drenaje o alcantarilla de lluvia. Guarde todos los materiales bajo techo y tapados para prevenir que la lluvia los moje.



### 3. Responda a Derrames

**Inmediatamente** limpie todo aceite, solvente, y combustible usando materiales absorbentes. Siga el plan de ataque para materiales peligrosos y asegure que sus empleados saben y pueden aplicar cada etapa del plan.



### 4. Limpieza de Partes de Autos

**Minimize** el uso de solventes. Limpie las partes con un cepillo de metal o use un solvente a base de agua. Utilice charolas, rejillas de lavado y secado encima del recipiente para no tirar material en el suelo.



### 5. Buena Organización

**Mantenga** todas las áreas de servicio con recipientes para juntar el aceite. Limpie derrames con toallas absorbentes. No use jabón ni agua de la manguera para limpiar las áreas de servicio hacia el drenaje o hacia las alcantarillas de lluvia.



### 6. Moldeado y Pulido de Metales

**Contenga** toda la viruta o rebaba de metal en un recipiente debajo de su máquina para que pueda reciclar este material. Deságase del aceite usado como es requerido por su plan de ataque sobre materiales peligrosos.



Para reportar descargas de desechos ilegales :

Llamar al (951) 736-2234

**APPENDIX P**

**RESTAURANT QUESTIONNAIRE**



# City of Corona

## Water Discharge Questionnaire

### Restaurants/Food Service

#### NAME/ADDRESS AND CONTACT INFORMATION

Applicant Business Name:

Address of Premise Discharging Industrial Waste:

City:

State:

Zip:

Mailing Address:

City:

State:

Zip:

Primary Contact Person/CEO:

Title:

Mailing Address:

City:

State:

Zip:

Phone:

Emergency Phone:

Is Premise:    Owned ☐    Leased ☐

Name and Address of Landlord:

City:

State:

Zip:

#### BUSINESS DESCRIPTION

*The Business Description is primarily used to determine the substances which may enter into the Industrial Waste discharge from the Business Activity. The production quantities are necessary for State and Federal Reports.*

##### Type of Business

Full Service Restaurant: ☐

Single Service Restaurant: ☐

Retail Food Items: ☐

Description of restaurant services (type of food, etc.):

Seating Capacity:

Maximum meals served at peak hour:

##### Kitchen Equipment

Equipment	Quantity	Equipment	Quantity
Dishwasher		Ice Machine	
Deep Fryer		Three Compartment Sink	
Mop Sink		Two Compartment Sink	
Garbage Disposal		Floor Sinks	

**City of Corona**  
**Water Discharge Questionnaire**  
**Restaurants/Food Service**

<b>Hours of Operation:</b> From	To (circle) S M T W T F S
<b>Industrial Waste Pretreatment:</b> Check the type of treatment, if any, given industrial waste from this building sewer before it is discharged to the community sewer.	
<b>Grease Trap:</b> Yes <input type="checkbox"/> No <input type="checkbox"/> Size _____ How Many _____ Inside <input type="checkbox"/> Outside <input type="checkbox"/>	
If Yes, Cleaning Schedule: _____	
<b>Grease Interceptor:</b> Yes <input type="checkbox"/> No <input type="checkbox"/> Size _____ /Gallons	
If Yes, indicate Pumping Company and pumping schedule: _____	
<b>Used Oil Disposal (Deep Fryer):</b> Yes <input type="checkbox"/> No <input type="checkbox"/> Indicate Hauling Company _____	
<b>Best Management Practices (BMP's):</b> I understand and use BMPs at my facility -- Yes <input type="checkbox"/> No <input type="checkbox"/>	

This document must be signed by the most responsible person of the organization applying for the discharge permit. This includes the owner, president, corporate officer, or any other representative of the organization in a decision making capacity.

This document and any 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 informaton 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.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

<b>Responsible Person</b>	<b>Date</b>
<b>Print Name</b>	<b>Title</b>

**City of Corona - Utilities Department**  
**755 Public Safety Way**  
**Corona, CA 92878**  
**(951) 736-2234**

## **APPENDIX Q**

### **FOG DOOR HANGER**



# Dear Utility Customer,

You received this door hanger because of a problem observed in the sewer line downstream of your residence or business.

## The Problem

- \_\_\_\_\_ Fats, oil, and grease (FOG)
- \_\_\_\_\_ Wipes, towelettes, rags, diapers, etc.
- \_\_\_\_\_ Oily or other sediment
- \_\_\_\_\_ Other: \_\_\_\_\_

## Help solve the problem

Please read the suggested solutions on the back of this door hanger. For more information on keeping our sewers clear of blockage please visit: [www.CoronaCA.gov](http://www.CoronaCA.gov)

With your cooperation the City of Corona will experience fewer sewer backups and lower maintenance costs, which will help keep the sewer system operating smoothly.

In addition, you will prevent exposure to potential health hazards, costly claims and repairs, and unnecessary rate increases.

*Para pedir una copia en español acerca de las grasas y aceites por favor llamar al (951) 736-2234.*

**FOG** - Fats, oils, and grease are items used when cooking. After cooking, wait for the “FOG” to cool down then store the item in a container such as an old coffee can or food scrap recycling bin. Never put fats, oil, or grease down the drain.



The Corona Municipal Code Section 13.02.110 requires food service establishments to have, and properly maintain, a grease removal device.

**Wipes, towelettes, rags, diapers** - “Disposable” and “biodegradable” do not mean permissible discharge to the sewer. The sewer system does not provide the right conditions to properly break down these products. These products need to be disposed of in the trash.



**Oily or other sediment** - Typically observed from carwash and vehicle/equipment service type facilities. These facilities are required under the Corona Municipal Code Section 13.08.150 to have and properly maintain a gravity separation interceptor.



**Other** - Section 13.08.210 of the Corona Municipal Code prohibits waste discharges. Discharging unacceptable or excessive wastes can lead to a sewer backup, lift station failure, wastewater treatment plant problem, and environmental concerns.



Questions - call (951) 736-2234

City of Corona  
Utilities Department  
[Utilities@CoronaCA.gov](mailto:Utilities@CoronaCA.gov)



# **APPENDIX R**

## **SSMP CHANGE LOG**

CITY OF CORONA UTILITIES DEPARTMENT			
SSMP CHANGE LOG			
SECTION	DATE	CHANGE	AUTHORIZED BY
Entire SSMP	2/21/2014	Revised entire SSMP	Jonathan Daly
10. SSMP Program Audits	11/10/2015	Revised entire audit form to reflect regulatory requirements	Jonathan Daly
1. Goals	1/22/2016	Update regulatory language and page formatting	Jonathan Daly
		Condensed the list of goals and removed objectives	
		Streamlined sewer system language	
2. Organization	2/22/2016	Updated regulatory language and page formatting	
		Updated phone list and standby schedule	
		Updated org chart, job responsibilities, and SSO flow chart	Jonathan Daly
		Updated job titles and duties and contact information	
		Added pretreatment program contractor and utility system modeler	
		Streamlined sewer system language	
3. Legal Authority	3/18/2016	Updated regulatory language and page formatting	
		Streamlined sewer system language	Jonathan Daly
		Added hyperlinks for referenced documents	
5. Design and Performance Provisions	4/4/2016	Updated regulatory language and page formatting	
		Added hyperlinks for referenced documents	Jonathan Daly
		Added Greenbook reference	
4. Operation and Maintenance Program	4/14/2016	Update regulatory language and page formatting	
		Streamlined sewer system language	Jonathan Daly
		Updated hot spots list	
		Updated job titles and duties	
		Updated CIP program years	
		Updated number of pump stations	
7. Fats, Oils, and Grease (FOG) Control Program	7/27/2016	Updated regulatory language and page formatting	Jonathan Daly
		Streamlined sewer system language	
		Added hyperlinks for referenced documents	
		Updated public outreach material and links	
		Added FOG disposal section	
		Removed outdated information	
		Added FOG program implementation	
6. Overflow Emergency Response Plan	8/5/2016	Updated regulatory language and page formatting	Jonathan Daly
		Streamlined sewer system language	
		Updated SOPs	
		Updated reporting forms	
		Updated lift station table	
		Updated response activities	
		Updated notification procedures	
		Added monitoring and training	
8. System Evaluation and Capacity Assurance Plan	9/14/2016	Updated regulatory language and page formatting	Tom Moody
		Updated number of lift stations	
		Removed statement for capacity for a 10 year wet weather event	
9. Monitoring, Measurement, and Program Modifications	9/16/2016	Updated regulatory language and page formatting	Tom Moody
		Streamlined sewer system language	
		Added language on program updates	
11. Communication Program	9/21/2016	Updated regulatory language and page formatting	Tom Moody
		Updated outreach activities	
10. SSMP Program Audits	10/14/2016	Updated regulatory language and page formatting	Tom Moody
Appendix H	5/10/2017	Updated Roto Rooter phone number	Eugene Silvas
Appendix B	5/10/2017	Updated 2017 standby schedule	Eugene Silvas
Appendix A	10/18/2017	Updated Contact List	Eugene Silvas
2. Organization	10/18/2017	Updated General Manager	Eugene Silvas
4. Operation and Maintenance Program	10/18/2017	Added quarterly hot spot, 5 year contract for contractors, NexGen tracking system	Eugene Silvas
4. Operation and Maintenance Program	12/21/2017	Added quarterly hot spot MH 4620-4621	Julian Rojas
2. Organization	9/5/2018	Updated org chart, job responsibilities, and SSO flow chart	Tom Moody
Appendix A	9/5/2018	Updated City Contacts	Tom Moody
Appendix D	9/5/2018	Updated to use total spill volume	Tom Moody
Appendix E	9/5/2018	Updated to use total spill volume	Tom Moody
Appendix F	9/5/2018	Minor edits	Tom Moody
Appendix G	9/5/2018	Updated contacts	Tom Moody
Appendix D, F	11/1/2018	Updated Regional Board Contact	Jennifer McMullin
4. Operation and Maintenance Program	12/3/2018	Added quarterly hot spot	Julian Rojas
4. Operation and Maintenance Program	5/9/2019	Added monthly hot spot	Eugene Silvas
2. Organization	2/4/2020	Updated City Staff	Kristian Alfelor
4. Operation and Maintenance Program	2/4/2020	Updated high maintenance area cleaning	Kristian Alfelor
Entire SSMP	2/4/2020	Updated all hyperlinks and other minor changes	Kristian Alfelor
Appendices	2/4/2020	Updated to include changes in staff and programs	Kristian Alfelor
Appendix E	2/20/2020	Added additional volume estimation documentation	Kristian Alfelor
Entire SSMP	2/23/2023	Updated Dept. name from DWP to Utilities Department, updated hyperlinks	Korina Rangel
2.4 & 2.6 Organization & Communication	2/23/2023	Updated organization chart, job responsibilities and titles, and SSO flow chart	Korina Rangel
Appendix D, I	2/23/2023	Updated LRO Contact Information	Korina Rangel
Entire SSMP	3/2/2023	Minor edits	Korina Rangel
4.4 & 4.5 High Maintenance Area Cleaning	3/13/2023	Updated monthly and quarterly high maintenance areas	Korina Rangel
Appendix B	3/13/2023	Updated standby schedule	Korina Rangel
Appendix F	11/18/2024	Updated reporting forms	Korina Rangel
Sections 1-4	11/18/2024	Updated sections to meet requirements of Order	Korina Rangel
Sections 5-11	1/13/2025	Updated sections to meet requirements of Order	Korina Rangel

CITY OF CORONA UTILITIES DEPARTMENT			
SSMP CHANGE LOG			
SECTION	DATE	CHANGE	AUTHORIZED BY
Entire SSMP	1/28/2025	Updated sections to meet requirements of Order	AH, KR, PT
Entire SSMP	2/4/2025	Updated sections to meet requirements of Order; Chain of Comm. & Org. Chart	AH, KR, PT
Appendices	2/12/2024	Various appendices updated, department name, contact information	Korina Rangel
Entire SSMP	2/18/2025	Updated compliance summary throughout	Korina Rangel

# **APPENDIX S**

## **AUDIT FORM**

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR  
SANITARY SEWER SYSTEMS  
STATE WATER RESOURCES CONTROL BOARD  
ORDER NO. 2022-0103-DWQ



CITY OF CORONA  
**2024**  
SEWER SYSTEM MANAGEMENT PLAN AUDIT REPORT

WDID No.: 8SSO10565

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## CERTIFICATION STATEMENT

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Per the State Water Resources Control Board Order No. 2022-0103-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, the City of Corona Utilities Department is required to develop a Sewer System Management Plan (SSMP) and conduct periodic internal audits to evaluate compliance, implementation, and the effectiveness of the SSMP.

The City of Corona Utilities Department initiated an internal audit on May 2, 2024 and completed the audit on October 24, 2024. The City's sewer system operators were presented with the Audit findings and their input has been considered.

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Aftab Hussain  
Maintenance Manager,  
Legally Responsible Official

## SYSTEM OVERVIEW

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**Table No. 1 - System Overview**

Miles of gravity sewer lines	
Miles of force main	
Total miles of all sewer lines	
Number of lift stations	
Miles of private sewer lines	
Population served	
Current average monthly single-family residential sewer rate	

**Table No. 2 - Volume of SSOs**

Year	Total Number of SSOs	Number of City CS SSOs	Number of Private SSOs	Total Volume SSOs (gallons)	Total Volume Recovered (gallons)	Total Volume Not Recovered (gallons)	% Volume Recovered
2021							
2022							
2023							
<b>Avg</b>							

**Table No. 3 – City SSOs by Cause**

Causes of SSOs	2021	2022	2023	Totals
Capacity Related				
Roots				
FOG				
Debris/Rags				
Construction				
Infrastructure Failure				
Power Failure				
Vandalism				
Other				
Unknown				

## PRE-AUDIT CHECKLIST

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<b>SEWER SYSTEM MANAGEMENT PLAN</b>	<b>YES</b>	<b>NO</b>	<b>Needs Updating</b>	<b>Comments</b>
Has the SSMP been approved by City Council?				
Are the most recent approval records included in the SSMP?				
Has the SSMP been updated within the last year?				
Has an internal audit of the SSMP been conducted within the last 3 years?				
Is the SSMP publicly available?				
Does the SSMP include records documenting any changes made to the SSMP, sections updated, and who authorized the change?				
<b>GOALS &amp; INTRODUCTION</b>				
Does the SSMP contain goals that are appropriate and accurate?				
Does the SSMP contain an introduction that is appropriate and accurate?				
Are there additional goals that are not currently included in the SSMP?				
Does the introduction include a Plan Update Schedule?				
Does the introduction contain an asset overview that is accurate and up to date?				
<b>ORGANIZATION</b>				
Is the named Legally Responsible Official (LRO) up to date?				
Is there more than one LRO registered in CIWQS?				
Are names, titles, contact info. and responsibilities of staff included in the SSMP?				
Are organizational lines of authority included in the Plan?				
Is a chain of communication for receiving and reporting SSOs included?				
Are all positions responsible for implementing the SSMP included in the organization portion of the SSMP?				
<b>LEGAL AUTHORITY</b>				
Does the SSMP contain legal authority to prevent illicit discharges into the sanitary sewer system?				
Is storm water agency collaboration included in the Plan?				
Does the SSMP contain legal authority to require sewers and connections to be properly designed and constructed?				
Does the SSMP contain legal authority to ensure access for maintenance, inspection, or repair of the laterals owned by the City?				
Does the SSMP contain legal authority to enforce any violation of its sewer ordinances?				



<b>SEWER SYSTEM MANAGEMENT PLAN</b>	<b>YES</b>	<b>NO</b>	<b>Needs Updating</b>	<b>Comments</b>
Does the Plan contain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable?				
Are all links or references to legal documents up to date?				
<b>OPERATION AND MAINTENANCE PROGRAM</b>				
Are maps of the collection system up to date and available to staff?				
Are procedures available for maintaining and providing the SWRCB access to the maps?				
Are collection system maps being updated regularly?				
Is there a process for notating changes and updates to collection system maps?				
Are routine and preventative maintenance activities described in the SSMP?				
Is there a scheduling system and data collection system for preventative operation and maintenance activities by staff and contractors?				
Is the system being used regularly?				
Does the Plan include a schedule of inspection and maintenance activities including known problem areas (areas with tree root problems)?				
Has a plan been developed to identify and prioritize areas in need of rehab or replacement?				
Have short term and long-term projects been identified?				
Is there a schedule for visual and TV inspections of the collection system?				
Is there a current CIP for the collection system?				
Is there a schedule for developing funds for the CIP?				
Has all collection system staff completed the SSO training through Class Web?				
Does the training cover practice drills?				
Does the training cover skilled estimation of spill volume?				
Are procedures for CIWQS reporting available for data submitters?				
Have any staff completed any CWEA or other related training?				
Is collection system staff familiar with and able to locate the SSMP?				
Are contractors required to be appropriately trained?				
Are equipment and replacement parts inventoried?				
Have critical replacement parts been identified?				

<b>SEWER SYSTEM MANAGEMENT PLAN</b>	<b>YES</b>	<b>NO</b>	<b>Needs Updating</b>	<b>Comments</b>
<b>DESIGN AND PERFORMANCE PROVISIONS</b>				
Does the SSMP contain design and construction standards and specifications for construction and installation of new sanitary sewer systems, pump stations, and other appurtenances?				
Does the SSMP contain design and construction standards and specifications for the rehabilitation and repair of existing sanitary sewer systems?				
Have the design and construction standards been updated within the last 5 years?				
Does the SSMP contain procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects?				
Have the standards for conducting inspections been updated within the last 5 years?				
<b>SPILL EMERGENCY RESPONSE PLAN</b>				
Does the Plan contain a Spill Emergency Response Plan (SERP)?				
Are notification procedures up to date with correct personnel and contact information?				
Are appropriate personnel and agencies in the notification procedure identified, including notification to agencies of spills that potentially affect public health?				
Do notification procedures include who and when to notify and how?				
Are response procedures in the Plan appropriate to ensure that the proper parties are notified of SSOs in a timely manner?				
Does the Plan comply with the notification, monitoring, and reporting requirements of the order?				
Are response procedures appropriate for different types of SSOs?				
Are first responders and contractors are aware of and appropriately trained to follow the SERP?				
Does the SERP include procedures to address emergency operations, traffic control and other response activities?				
Does the SERP contain adequate procedures for containment and prevent/minimize discharge to waters or drainage conveyance systems?				
Does the SERP include procedures to minimize and remediate public health impacts and adverse impact on beneficial uses of waters to the State?				

<b>SEWER SYSTEM MANAGEMENT PLAN</b>	<b>YES</b>	<b>NO</b>	<b>Needs Updating</b>	<b>Comments</b>
Are procedures included to remove sewage from the drainage conveyance system?				
Are procedures to clean the spill area and drainage conveyance system that does not adversely impact beneficial uses?				
Does the SERP include procedures to implement technologies, practices, equipment, and interagency coordination to expediate spill containment and recovery?				
Does the SERP include implemented pre-planned coordination//collaboration with storm drain agencies and other utility agencies/departments prior, during, ad after a spill event?				
Are procedures to conduct post-spill assessments of spill response activities included in the SERP?				
Are procedures to document and report spill events as required in the Order?				
Are procedures to annually review and assess effectiveness of the SERP and update as needed?				
<b>SEWER PIPE BLOCKAGE/FOG CONTROL PROGRAM</b>				
Does the SSMP contain a FOG program?				
Does the SSMP contain an implementation program and schedule for public outreach and education about FOG and pipe-blocking substances disposal?				
Does the SSMP contain a plan and schedule for disposal of pipe-blocking substances and FOG generated within the service area?				
Does the SSMP contain the legal authority to prohibit discharges to the sewer system?				
Does the SSMP contain measures to identify sources of FOG and pipe-blocking substances?				
Does the SSMP contain requirements to install grease removal devices design standards, maintenance requirements, BMP requirements, record keeping and reporting requirements for grease interceptors?				
Does the SSMP contain the legal authority to inspect grease producing facilities and enforce the FOG ordinance? Does the Enrollee have sufficient staff to inspect and enforce the fats, oils, and grease ordinance?				
Does the SSMP identify service areas that require regular maintenance due to FOG/ pipe-blocking substances and a schedule for each?				
Are source control measures implemented to control FOG?				

**Table No. 4 – FOG Program**

	2021	2022	2023	Avg
Number of Interceptor Inspections				
Number of Interceptors				

<b>SEWER SYSTEM MANAGEMENT PLAN</b>	<b>YES</b>	<b>NO</b>	<b>Needs Updating</b>	<b>Comments</b>
<b>SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS</b>				
Does the Plan include procedures and activities for routine evaluation and assessment of system conditions?				
Does the Plan include procedures and activities for capacity assessment and design criteria?				
Does the Plan include procedures and activities for prioritization of corrective actions?				
Is there a Capital Improvement Plan?				
Does the Plan identify and justify the amount (percentage) of its system for its condition to be assessed each year?				
Are the following condition assessments of system areas prioritized:  Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies				
Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas				
Are within the vicinity of a receiving water with a bacterial-related impairment on the most current CWA 303(d) List				
Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods				
Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State				
Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities;				
Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.				
Does the plan include procedures to identify spills caused by hydraulic deficiency and/or limited capacity, including:				

<b>SEWER SYSTEM MANAGEMENT PLAN</b>	<b>YES</b>	<b>NO</b>	<b>Needs Updating</b>	<b>Comments</b>
Dry-weather peak flow conditions that cause or contributes to spill events;				
The appropriate design storm(s) or wet weather events that causes or contributes to spill events;				
The capacity of key system components; and				
Identify the major sources that contribute to the peak flows associated with sewer spills.				
Does the Capacity Assessment consider:				
Data from existing system condition assessments, system inspections, system audits, spill history, and other available information				
Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;				
Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;				
Increases of erosive forces in canyons and streams near underground and above-ground system components due to larger and/or higher-intensity storm events;				
Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and				
Necessary redundancy in pumping and storage capacities				
The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.				
Has the sanitary sewer system been evaluated to identify areas in need of improvement, repair, or replacement?				
Have CIPs been created to address these areas?				
Do the CIPs include an implementation schedule, including completion dates, and internal/external funding sources for each project?				

<b>SEWER SYSTEM MANAGEMENT PLAN</b>	<b>YES</b>	<b>NO</b>	<b>Needs Updating</b>	<b>Comments</b>
Is this section of the SSMP up to date?				
Are resources used to evaluate the sanitary sewer system up to date?				
Are procedures included to evaluate the sewer system assets utilizing the best practices and technologies available?				
<b>MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS</b>				
Does the Plan must include an Adaptive Management section that addresses Plan-implementation effectiveness and the steps for necessary Plan improvement?				
Are steps included to maintain relevant information, including audit findings, to establish and prioritize appropriate Plan activities?				
Monitoring the implementation and measuring the effectiveness of each Plan Element;				
Assessing the success of the preventive operation and maintenance activities				
Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and				
Identifying and illustrating spill trends, including spill frequency, locations and estimated volumes				
<b>INTERNAL AUDITS</b>				
Does the Plan include internal audit procedures, appropriate to the size and performance of the system?				
<b>COMMUNICATION PROGRAM</b>				
Does the Plan include procedures to communicate with the Public for spills resulting in public area closures, or that enter a source of drinking water?				
Does the Plan include procedures for the development, implementation, and update of the Plan, including opportunities for public input to Plan implementation and updates?				
Does the Plan include procedures to communicate with Owners/Operators of systems that connect into the Enrollee's system, including satellite systems, for system operation, maintenance, and capital improvement-related activities?				

# AUDIT REPORT

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**SSMP Audit Requirements:**

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills;
- Evaluate the Enrollee's compliance with this General Order;
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and
- Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.

The Enrollee shall submit a complete audit report that includes:

- Audit findings and recommended corrective actions;
- A statement that sewer system operators' input on the audit findings has been considered; and
- A proposed schedule for the Enrollee to address the identified deficiencies.

**Audit Summary and Recommendations:****Schedule to Address Deficiencies:****Operator Input**