



# CITY OF SALINAS

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Aeration Pond



Pond 1 near Farm Fields



Pond 1 - Mt. Toro

## Sewer System Management Plan Industrial Wastewater Collection System

General Waste Discharge Requirements (GWDR) Order 2006-0003-DWQ, May 2, 2006.

2016

# **INTRODUCTION**

## **City of Salinas**

### ***Maintenance Services Department***

David Jacobs, P.E , Public Works Director

The Wastewater Division of the Maintenance Services Department is in charge of developing and implementing the maintenance goals in the activities listed below. The Engineering and Transportation Department provides engineering services for development and implementation of capital improvement projects and sets standards for design and construction specifications. For questions regarding Wastewater Division activities please call (831) 758-7103.

The goal is to perform maintenance and repairs to the infrastructure that contribute to the health of the region and present a clean, safe, and sanitary environment for residents, businesses, and visitors to the City of Salinas.

This Sewer System Management Plan (SSMP), prepared by the City of Salinas, Maintenance Services Department, outlines and documents the activities that the City utilizes to manage its industrial wastewater collection system effectively. It is important to note that this SSMP is developed for the industrial waste collection system. The City maintains an additional WDR issued by the Central Coast Regional Water Quality Control Board WDR 2003-0008, that sets forth requirements for operation of the City's Industrial Wastewater Treatment Facility (IWTF). Effective management of the industrial collection system includes:

- Minimizing the number and impact of industrial wastewater collection system overflows (SSOs)
- Providing adequate sewer capacity to convey peak flows, and
- Maintaining and improving the condition of the collection system infrastructure to provide reliable service into the future.

The report was prepared to comply with the new requirements adopted May 2, 2006, by the State Water Resources Control Board (Water Board) under Water Quality Order Number 2006-003, State General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems.

There are eleven required elements for an SSMP. The numbering and titles are shown as they appear in the GWDR.

#### **SSMP Sections:**

- I. Goals
- II. Organization
- III. Legal Authority
- IV. Operations and Maintenance Program
- V. Design and Performance Provisions
- VI. Overflow Emergency Response Plan
- VII. FOG Control Program
- VIII. System Evaluation and Capacity Assurance Plan
- IX. Monitoring, Measurement, and Plan Modifications
- X. SSMP Program Audits
- XI. Communication Program

This document is intended to be a dynamic document that serves as a framework for implementation of the Sewer System Management Plan for the Industrial Waste Collection System.

## **Sewer System Management Plan Industrial Wastewater Collection System**

### **Summary**

**State of California Water Resources Control Board.**

**GWDR Order No. 2006-0003-DWQ**

The City entered into the General Statewide SSO Program in April 2008. The City's entry into the program was delayed by the Central Coast Regional Water Quality Control Board as the City already had a Sewer System WDR from the local board. While the CCRWQCB and the SWRCB resolved the issue of rescinding the City's CCRWQCB WDR the City entered into the statewide General Waste Discharge Requirements (GWDR), program one year past the point that the first required elements were due. The Regional Board's representative with CIQWIS was contacted regarding a modified schedule for development of the SSMP, however, the response was that the schedule for the final SSMP would remain the same.

The State Water Resources Control Board found that all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order.

Although the program specifically addresses plan development as a preventative measure to reduce or eliminate Sanitary Sewer Overflows the CCRWQCB determined that the City's industrial wastewater collection system met the technical requirement for inclusion into the GWDR. The City's industrial wastewater collection system does not convey sanitary sewage and historically not shown that it is subject to industrial sewer overflows. **In an effort to adapt the industrial collection system to the general SSO program, references to "SSO", "sanitary sewer" or "sewer", within this document should be understood to be industrial process wastewater.**

The City of Salinas operates a unique Industrial Wastewater Sewer Treatment System. While most municipalities maintain a Storm Sewer and a Sanitary Sewer System only, Salinas maintains a third collection system for a service area on the southern end of the City. The Industrial Wastewater Sewer receives industrial wastewater discharges from 24 industrial users via permitted connections; and conveys the discharge to a 200-acre treatment facility located along the Salinas River. The treatment facility consists of an aeration pond where process wastewater is pumped, and the water is oxygenated by twelve 50 hp aerators. The effluent then flows to a multi pond system for percolation into the soil or evaporation. Separate Sanitary Sewer and Storm Sewer Systems serve the same area to collect municipal sewage and storm water runoff, respectively. Both flows are prohibited in the Industrial Wastewater System with the exception of some incidental storm water inflow from exterior industrial process areas.

The Industrial Wastewater Facility (IWF) has been treating industrial wastewater from agriculture-based industries for many years. In an agreement with the City, E.H. Spiegl, a local businessman, originally built the facility in 1943, to serve his dehydrated vegetable manufacturing plant that supplied the civilian population and the armed forces during World War II. In accordance with the agreement, ownership and operation of the facility transferred to the City after the war. Since this early beginning the facility has undergone many expansions and improvements to its current state.

The IWTF is overseen by the Environmental and Maintenance Departments, Wastewater Manager, and day-to-day operations are managed by two Wastewater operator employees that have their Grade I Wastewater Treatment Plant Operator Certifications issued by the State of California State Water Resources Control Board.

The City's Wastewater Treatment Plant Operators maintain and operate the facility. The operator's goal is to determine and provide optimal treatment effectiveness and efficiency. Operational duties include flow and load monitoring, dissolved oxygen control, hydraulic loading control for the ponds, and the monitoring and evaluation of wastewater treatment efficiencies. The treatment plant operators are also responsible for meeting the requirements of the facility's Waste Discharge Requirements (WDR) Permit.

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## ***Definitions, Acronyms, and Abbreviations***

### ***Best Management Practices (BMP)***

Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

### ***Calendar Year (CY)***

### ***California Integrated Water Quality System (CIWQS)***

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

### ***Capital Improvement Plan (CIP)***

Refers to the document that identifies future capital improvements to the City's sanitary sewer system.

### ***Central Coast Regional Water Quality Control Board (CCRWQCB)***

Refers to the Central Coast Regional Water Quality Control Board, Region 3.

### ***City***

Refers to the City of Salinas.

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

Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

### ***County Health***

Refers to the Monterey County Health Services Agency.

### ***Dispatch***

Dispatch refers to Maintenance Services Department Dispatch.

### ***Fats, Oils, and Grease (FOG)***

Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

### ***Fiscal Year (FY)***

### ***Food Service Facilities***

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

### ***Full-time Equivalent (FTE)***

Refers to the equivalent of 2,080 paid labor hours per year by a regular, temporary, or contract employee.

### ***General Waste Discharge Requirements (GWDR)***

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006.

***Geographical Information System (GIS)***

Refers to the City's system that is used to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.

***Infiltration/Inflow (I/I)***

Refers to water that enters the sanitary sewer system from storm water and groundwater that increases the quantity of flow. Infiltration enters through defects in the sanitary sewer system after flowing through the soil. Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

***Lateral***

Refers to the piping that conveys sewage from a building to the City sewer system.

***Legally Responsible Official (LRO)***

Refers to the individual who has the authority to certify reports and other actions that are submitted through CIWQS.

***Million Gallons per Day (MGD)***

***Office of Emergency Services (OES)***

Refers to the California State Governor's Office of Emergency Services.

***Operations and Maintenance (O&M)***

***Overflow Emergency Response Plan***

For the purpose of this SSMP, this plan will be referred to as the Sewer Collection System Overflow Emergency Response Plan.

***Preventative Maintenance (PM)***

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, repair).

***Sewer Collection System Overflow Emergency Response Plan***

Refers to the City's Overflow Emergency Response Plan which is a component of this SSMP that addresses the City's response to SSO events.

***Sanitary Sewer Overflows (SSOs)***

Refers to the overflow or discharge of any quantity of partially treated or untreated wastewater from the sanitary sewer system at any point upstream of the wastewater treatment plant. SSOs are typically caused by blockages, pipe failure, pump station failure, or capacity limitation.

***Sanitary Sewer System***

Refers to the portion of the sanitary sewer facilities that are owned and operated by the City of Salinas

***Sewer System Management Plan (SSMP)***

***State Water Resources Control Board (SWRCB)***

Refers to the California Environmental Protection Agency (EPA) State Water Resources Control Board and staff responsible for protecting the State's water resources.

***Water of the State***

Water of the State means any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be

waters of the State unless the sewage is completely contained and returned to the sewer system. May also be referred to as surface water(s) or State waterway.

***Wastewater Division***

Refers to the City of Salinas, Maintenance Services Department, Wastewater Division.

## ***References***

***Sewer System Management Plan (SSMP) Development Guide***, San Francisco Bay Regional Water Quality Control Board in cooperation with Bay Area Clean Water Agencies, July 2005 ([www.swrcb.ca.gov/rwqcb2/download/](http://www.swrcb.ca.gov/rwqcb2/download/)).

***State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems***, California State Water Resources Control Board, May 2, 2006.

***Monitoring and Reporting Program 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems***, State Water Resources Control Board, May 2, 2006 ([www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2008/wqo/wqo2008\\_0002\\_exec.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2008/wqo/wqo2008_0002_exec.pdf)).

# Sewer System Management Plan

## Section I - Goals

### A. Introduction

The City's Industrial Waste Facility provides an economical and environmentally acceptable means of water treatment and disposal of process water from local agricultural industries and others with process water requirements.

Our goal is to perform maintenance and repairs to the infrastructure which contribute to the health of the region and present a clean, safe, and sanitary environment for residents, businesses, and visitors to the City of Salinas.

### B. Regulatory Requirements for Goals Section

The summarized requirements for the Goals section of the SSMP are:

#### GWDR Requirement

- a) The collection system agency must develop goals to properly manage, operate, and maintain all parts of its wastewater collection system in order to reduce and prevent SSOs, as well as to mitigate any SSOs that occur.

#### SSMP Goals (Item a)

The goals of the City of Salinas SSMP are to:

- a) Properly *manage, operate, and maintain* the wastewater collection system;
- b) *Maintain* design construction standards and specifications for the installation of new wastewater systems;
- c) *Verify* the wastewater collection system has adequate capacity to convey industrial wastewater during peak flows;
- d) *Minimize* the frequency of system overflows;
- e) *Respond* to system overflows quickly and mitigate the impact of the overflow;
- f) *Provide* training on a regular basis for staff in collection maintenance and operations;
- g) *Develop* a closed-circuit televising (CCTV) program for the industrial sewer collection system;
- h) *Identify* and *prioritize* structural deficiencies and implement short-term and long-term maintenance and rehabilitation actions to address each deficiency;
- i) *Meet* all applicable regulatory notification and reporting requirements; and
- i) *Provide* excellent customer service.

# **Sewer System Management Plan**

## **Section II - Organization**

### **A. Introduction**

This section of the SSMP identifies City staff that is responsible for implementing this SSMP, responding to SSO events, and reporting SSOs.

### **B. Regulatory Requirements for Organization Section**

The summarized requirements for the Organization section of the SSMP are:

#### **GWDR Requirement**

The collection system agency's SSMP must identify:

- a) The name of the responsible or authorized representative;
- b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in an organization chart or similar document with a narrative explanation; and
- c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, and/or State Office of Emergency Services (OES)).

### **Organization (Item a)**

#### **Reporting Structure**

The City of Salinas Wastewater Division of the City's Environmental and Maintenance Services Department is responsible for the City's Industrial Wastewater Collection System. The Transportation and Engineering Department provides engineering services, develops standards and collection system analysis for Capital Improvements. The Environmental and Maintenance Services Department and the Transportation and Engineering Department work independently and report to their Department Directors who in turn report to the City Manager.

The Wastewater Division is responsible for the daily operation and maintenance of the Wastewater Collection System. The Wastewater Crew Supervisor reports to the Wastewater Manager who in turn reports to the Public Works Superintendent.

#### **Authorized Representative**

The City's Authorized Representative in all wastewater collection system matters is the Wastewater Manager. The Wastewater Manager and the Wastewater Supervisor are authorized to submit electronic and written spill reports to the SWRCB, the County Health Agency, and the OES. The Public Works Director is the City's legally responsible official (

).

The Public Service Maintenance Crew Supervisor (Wastewater Supervisor) is authorized to act as the City's authorized representative in collection system matters in the Wastewater Managers absence. The Wastewater Supervisor, the Wastewater Manager are authorized to submit verbal, and written spill reports to the SWRCB, the CCWB, the County Health Agency, and the Governor's Office of Emergency Services.

### **Responsibility for SSMP Development, Implementation, and Maintenance**

The Wastewater Manager has responsibility for developing, implementing, periodically auditing, and maintaining the City's SSMP. The Wastewater Manager may delegate the responsibility for developing, implementing, periodically auditing, and maintaining portions of the City's SSMP to his staff.

Other City staff responsible for developing, implementing, and maintaining specific elements of the City's SSMP, along with their job titles and contact information, is shown in Appendix A.

### **SSO Reporting Chain of Communication (Item b)**

The SSO Reporting Chain of Command follows the Organization Chart shown on Figure 3. The SSO Reporting process and responsibilities are described in detail in Section VI of the SSMP, Sanitary Sewer Overflow Response Plan for Industrial Wastewater Collection System.

The following Organization Charts and SSO Reporting and Response Flow Charts are included in the following pages:

- Figure 1 - City of Salinas Organization Chart.
- Figure 2 - Organization chart for the City's Maintenance Services Department.
- Figure 3 - Organization chart for the management, operation, and maintenance of the City's Sanitary Sewer and Storm Water Collection Systems 3.
- Figure 4 - Sewer System Overflow Response Flow Chart.
- Figure 5 - Sewer System Overflow Reporting Flow Chart.

### **Service Calls/Sanitary Sewer Overflow Reporting**

The City of Salinas receives communications through the Maintenance Services Department's Administrative Office. During normal business operations (Monday through Friday, 8 a.m. to 5 p.m.), sewer calls are received through the Maintenance Services Department. Sewer related calls may be received by other City departments but are routed to Maintenance Services for response. During all other hours, calls are received by County Communications. This is the County 911 system and is staffed 24/7. The City's Maintenance Services Department's Administrative Office number is (831) - 758-7233.

Upon receiving the information, the Wastewater On-Call Person is immediately contacted. After hours, the Wastewater Duty Person is provided a cell phone, pager, and utility truck and must have a response time of 45 minutes or less. The Wastewater Duty Person will evaluate the situation and determine if additional help is necessary.

The Wastewater Duty Person must notify the Wastewater Supervisor if:

- The SSO is over 1,000 gallons;
- The SSO enters surface water or drainage channel;

- The SSO causes property damage or flooding in a home structure; or
- The SSO constitutes an imminent danger to the public or environment.

The Wastewater Duty Person completes a Sewer System Overflow Report, Flow Estimation Report and takes pictures for all SSOs. The report is forwarded to the Wastewater Supervisor for investigation and/or follow-up. The Wastewater Supervisor may also interview appropriate personnel and complete the Sanitary Sewer Overflow Report.

Figure 1:

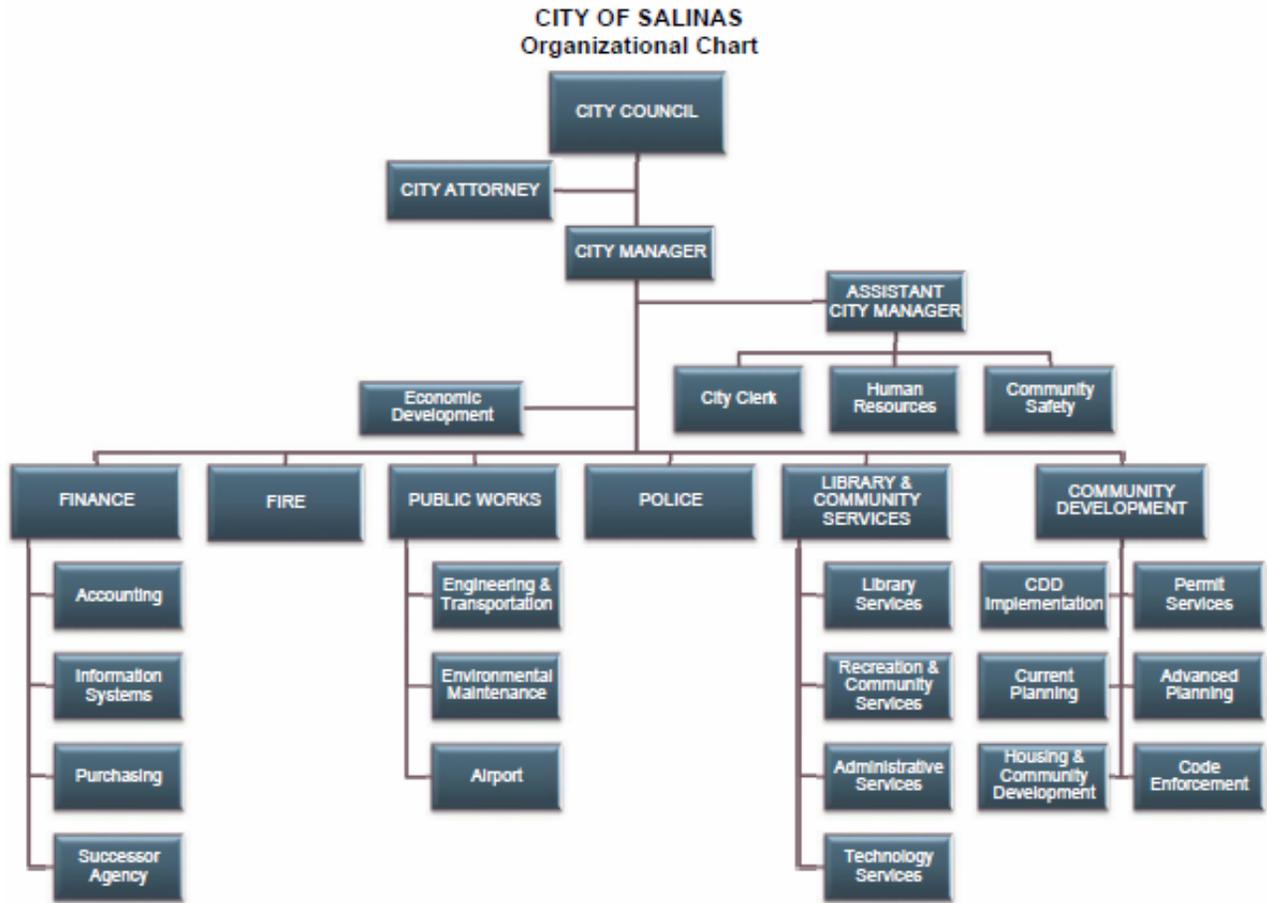
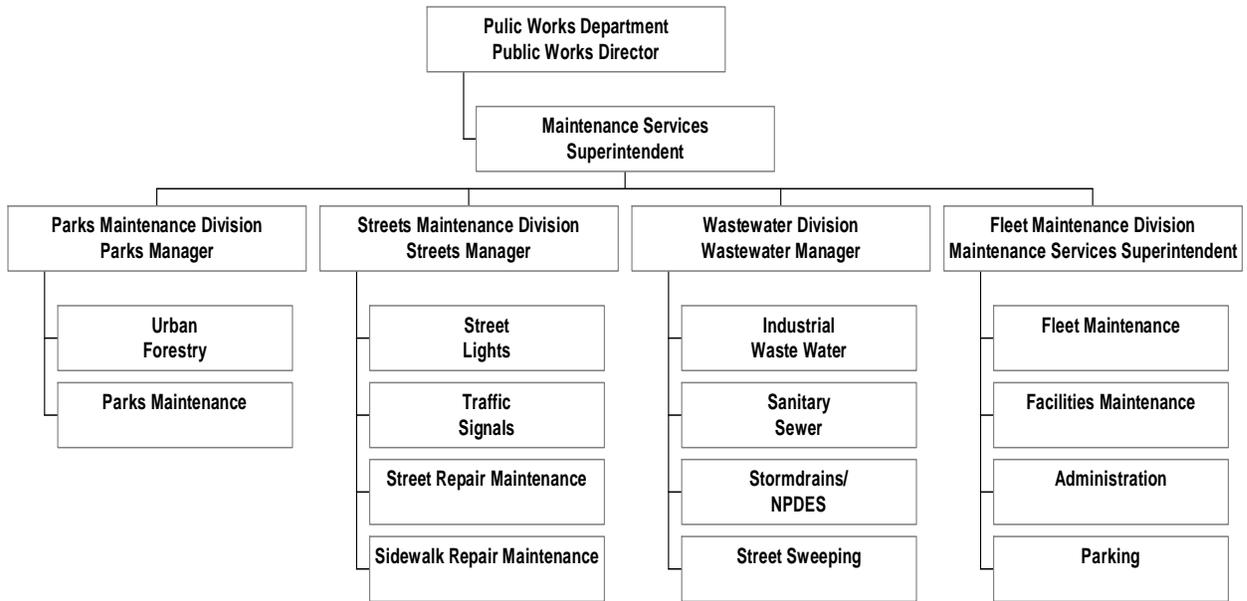


Figure 2:

**City of Salinas**  
***Maintenance Services Department***  
***Organization Chart***

426 Work Street, Salinas, Ca. 93901

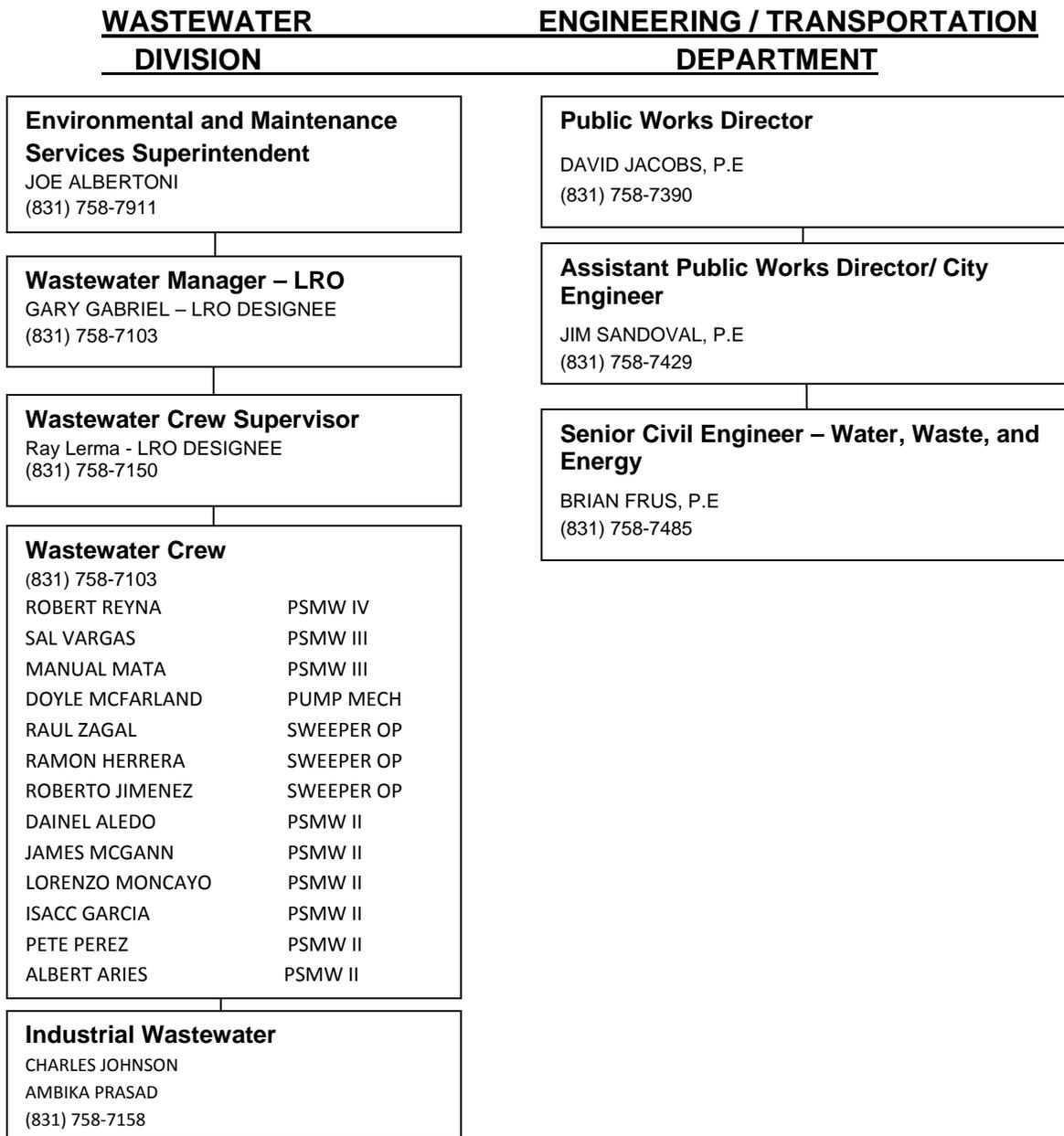
Administration: (831) 758-7233



**Figure 3:**

## PUBLIC WORKS ORGANIZATION CHART Persons Responsible for SSMP Implementation

**Maintenance Services Department-Wastewater Division  
And  
Transportation and Engineering Department**



# **JOB DESCRIPTIONS / RESPONSIBILITY MATRIX**

## **Superintendent of Maintenance Services**

To plan, organize, direct and review the activities of the divisions comprising the Maintenance Services Department including street and sewer maintenance, wastewater treatment, landscape construction inspection, parks and forestry operations, building and vehicle/equipment maintenance; and to provide professional and technical staff assistance. Receives administrative direction from the City Manager. Exercises general direction and supervision over professional, technical, and clerical positions.

Duties may include, but are not limited to the following:

Direct and participate in the development and implementation of goals, objectives, policies and procedures. Plan, organize, direct and review the operation and maintenance of the city's wastewater facilities. Plan, organize, direct and review public works maintenance and service functions. Review and approve plans for public works improvement projects. Supervise and participate in the development and implementation of the capital improvement program and budget.

## **Wastewater Manager**

Under general direction plan, organize, direct, and review the work in a Wastewater Division, including sanitary sewers, storm water sewers, and an industrial wastewater sewer treatment facility; to provide high level staff and technical support for Public Works operations.

Receives general direction from the Environmental and Maintenance Services Director. Exercises direction and general supervision over supervisory, maintenance, technical and clerical personnel.

Duties may include, but are not limited to the following:

Direct a city-wide maintenance for sanitary sewers, storm water sewers and an industrial wastewater facility. Provide operations supervision of a wastewater treatment plant, including on-going liaison with the California Water Resources Control Board. Oversee and administer the activities of sanitary sewer collections and maintenance, including representing the city to all involved outside agencies regulating these activities. Participate in the development and implementation of goals, objectives, policies and priorities for the maintenance services department; recommend and implement policies and procedures.

## **Wastewater Crew Supervisor**

To assume substantial responsibilities for the daily supervision of multiple small crews in the Street and Sewer Division of the Maintenance Services Department; and to perform a variety of semi-skilled and skilled task in the construction, maintenance, and repair of streets, sidewalks, signs, sewers, storm drains, pump stations, or traffic systems. Coordinate with the assigned Maintenance Manager in organizing and planning work assignments. Supervises, train and evaluate subordinate employees. Assign specific tasks to individuals and crew to accomplish assigned work. Lead a large crew for major construction and maintenance jobs. Assist the assigned Maintenance Manager with administration of division activities; keep records, prepare reports, estimate job costs, order materials, evaluate work procedures. Supervise and assist crews performing weed abatement projects; special event traffic and crowd circulation projects; and storm pipe, drain and catch basin cleaning and maintenance work. Direct and perform sewer and pump maintenance crew work;

operate and supervise others using maintenance equipment and tools such as power tools, hydraulic jet cleaner, vac-all, front loader, compressor, power wench, boom truck, main and auxiliary pumps, and related equipment and tools. Supervise and perform routine preventive maintenance on equipment per manual specifications. Supervise and assist in the installation and repair of underground pipes, and maintenance of sewer and storm drain systems.

#### **Public Maintenance Worker IV**

To lead and perform variety of semi-skilled and skilled work in the construction, maintenance, and repair of streets, sidewalks, signs, sewers, storm drains, pump stations, and traffic systems; to direct the work of small crews; and to provide guidance, assistance and training to less experienced personnel. Lead small work crews in the performance of a variety of maintenance duties on streets, sewers, storm drains, traffic signs, and other elements of the City's infrastructure. Provide leadership, guidance and training to less experience workers.

Oversee and perform storm drain and catch basin maintenance. Perform sewer and pump maintenance duties; operate maintenance equipment and tools such as power tools, sewer rodder, hydraulic jet cleaner, vac-all, front loaders, compressor, power wench, boom truck, main and auxiliary pumps, and related equipment and tools. Perform and assist others with preventive maintenance on tools and equipment as required by manual specifications. Coordinate and assist others in the installation and repair of underground pipes; and removal of sewer's line and storm drain blockages.

#### **Public Service Maintenance Worker III**

To operate heavy construction and maintenance equipment in performing excavating, grading, trenching, loading and related operations according to required standards; serve as a lead worker to less experienced personnel in performing semi-skilled and skilled tasks in the construction, maintenance and repair of streets, sidewalks, signs, sewers, storm drains, pump stations, or traffic systems.

Perform routine and complex street maintenance duties; operate construction and maintenance equipment such as backhoes, rollers, trucks, tractors, street sweepers, bulldozers, graders, gradealls, milling machine, paving box scrapers and front loaders for a variety of construction and maintenance operations involving streets, sidewalks, curbs, gutters, drainage channels, water and sewer lines. Perform sewer maintenance duties; operate maintenance equipment and tools such as power tools, hydraulic jet cleaner, vac-all, front loader, compressor, power wench, boom truck, main and auxiliary pumps, and related equipment and tools. Perform emergency and non-emergency street, sewer, storm drain or related public infrastructure maintenance work.

#### **Public Service Maintenance Worker II**

To perform a variety of semi-skilled and skilled tasks in the construction, maintenance, and repair of streets, sidewalks, signs, sewers, storm drains, pump stations or traffic systems.

**ASSIGNMENT TO THE WASTEWATER DIVISION:** Perform a variety of construction and maintenance operations involving sanitary sewer and storm sewer lines and drainage channels. Perform sewer maintenance duties; operate maintenance equipment and tools such as power tools, sewer maintenance equipment, hydraulic jet cleaner, vac-all, front loader, compressor, power wench, boom truck, main and auxiliary pumps and related equipment and tools. Read and interpret maps of underground sewer and drainage systems. Install and repair underground pipes; remove blockages from sewer and storm drain lines. Clean and maintain storm drainpipes and catch basins. Inspect ditches, drainage areas and roadside shoulders for noxious weeds; identify weeds; remove weeds and apply appropriate herbicides. Assist with performing operations, maintenance and repairs to lift stations.

### **Public Service Maintenance Worker I**

Under immediate supervision, to perform a variety of semi-skilled and skilled tasks in the construction, maintenance, and repair of streets, sidewalks, signs, sewers, storm drains, pump stations, or traffic systems.

**ASSIGNMENT TO THE WASTEWATER DIVISION:** Perform a variety of construction and maintenance operations involving sanitary sewer and storm sewer lines and drainage channels. Perform sewer maintenance duties; operate maintenance equipment and tools such as power tools, sewer maintenance equipment, hydraulic jet cleaner, vac-all, sweeper, front loader, compressor, power wench, boom truck, main and auxiliary pumps and related equipment and tools. Read and interpret maps of underground sewer and drainage systems. Install and repair underground pipes; remove blockages from sewer and storm drain lines. Clean and maintain storm drainpipes and catch basins. Inspect ditches, drainage areas and roadside shoulders for noxious weeds; identify weeds; remove weeds and apply appropriate herbicides.

### **Motor Sweeper Operator**

To operate a motor sweeper used in street, gutter and other paved surface cleaning; and to perform minor servicing to the sweeper. This position is in the maintenance services department, wastewater division. Receives general supervision from the public service maintenance crew supervisor. Functional supervision is also provided by other high-level maintenance services personnel. No supervision is exercised.

Duties may include, but are not limited to the following:

Operate a motor sweeper and sweep streets and gutters. Assist the supervisor in selecting effective and efficient method to cover assigned route; adjust gutter and pickup brooms to effectively sweep streets and gutters; dump hopper when full. Perform general servicing, including cleaning of motor sweeper; check for broom and chain wear; replace brooms; report mechanical or other equipment problems. Assist in trash and debris control activities such as picking up of litter and other public service maintenance activities as required or when weather does not permit sweeping operations. Operate other public service maintenance equipment such as trucks, vac-all, sewer jetting truck, tractors, and fork lifts as required. Perform general public service maintenance duties as required. Perform related duties as assigned.

## **Assistant Public Works Director/ City Engineer**

To plan, organize, direct and review the activities of a Municipal Engineering Division; and to provide professional and technical staff assistance to all City Departments as assigned by the Public Works Director.

Receives general direction from the Public Works Director. Exercises direction and general supervision over professional, technical and clerical positions.

Duties may include, but are not limited to the following:

Participate in the development and implementation of goals, objectives, policies, procedures, and priorities for the engineering function and related activities. Supervise, coordinate and review all engineering activities including design, engineering, development and transportation and construction management; meet with section heads to monitor engineering project work and review budgets. Resolve work problems and interpret administrative policies to subordinates; other departments and the public. Determine scope of engineering projects, review plans of private engineers, make technical engineering decisions, and establish technical criteria and standards. Review and approve engineering drawings. Attend and participate in meetings and conferences with City boards and commissions, the City Council, Department administrators, public officials, professional organizations, contractors, the City Manager's Office, and County, regional and State regulatory agencies regarding matter relating to areas of assigned responsibilities. Supervise and participate in the preparation and administration of the City capital improvement plan and budget and Engineering Division's operating budget. Prepare a variety of reports, correspondence and special studies. Respond to citizen inquiries and complaints. Select, supervise, train and evaluate subordinate staff. Promote and maintain safety in the work place. Perform related duties as assigned.

## **Senior Civil Engineer**

To supervise and participate in and conduct complicated engineering planning and design; to oversee activities of design engineering, surveying, engineering records management, development review and traffic engineering; and to participate in the enforcement of the City's standards and codes for development.

This is an advanced journey and supervisory level in the professional engineering class series. Work of this class involves the supervision of professional and technical personnel. Assignments are general and of a continuing nature, requiring the exercise of independent judgment and initiative in prioritizing, scheduling, assigning and coordinating work. Incumbents are also expected to perform the most complex professional engineering work requiring a substantial level of professional training and experience. Receives general direction from the City Engineer or Public Works Director. Exercises general supervision over professional and technical personnel.

Duties may include, but are not limited to the following:

Respond and take appropriate action to public inquiries and concerns related to capital improvement, development, traffic and public works programs/projects. Prepare and supervise the preparation of staff reports and make oral presentations at City Council, City Commissions and other boards as assigned. Prepare and monitor the annual budget for the assigned team. Program, process, budget and monitor State and Federal grants and funds for all types of public works projects and programs as assigned. Prepare grant applications for all types of capital improvements. Represent City at meetings with outside agencies. Select, supervise, train and evaluate professional and technical subordinates. Plan, assign, direct and review the work of staff engineers developing engineering designs, specifications, estimates, and contracts for a variety of municipal projects. Prepare and review plans specifications, estimates, survey maps and technical reports for accuracy, suitability, and completeness, and make recommendations for revision and improvement. Prepare preliminary and final cost estimates. Confer with contractors, consulting engineers; sub-dividers, and members of the public on engineering problems and public work programs. Perform and supervise difficult and complex civil engineering design work. Review and prepare comments for all levels of environmental review to address project and cumulative impacts to transportation and other public facilities. Review development proposals and building plan checks and prepare conditions of approval and recommend corrections. Supervise the preparation of official maps and the maintenance and filing of base maps, engineering drawings, street address maps, and related materials. May coordinate the preparation, distribution, explanation, tabulation and review of bid proposals. Promote and maintain safety in the work place. Perform related duties as assigned.

## **Public Works Director**

Direct and participate in the development and implementation of goals, objectives, policies and procedures. Plan, organize, direct, and review all engineering activities including design, and inspection. Plan, organize, direct and review transportation, parking, and traffic engineering activities. Oversee and provide general supervision of airport division and permit center. Confer with and advise administrative staff on problems related to building, housing and construction inspection and code enforcement and the design and operation of traffic systems. Review plans, engineering reports, budget estimates, and proposed ordinances submitted by administrative staff. Review and approve plans for public works improvement projects. Serve as technical advisor to the City Manager and City Council on engineering matters; develop comprehensive recommendations for management

use. Supervise and participate in the development and implementation of the capital improvement program and budget.

### **Wastewater Operator**

To operate and maintain a variety of equipment and machinery at the Industrial Waste Facility and perform other related duties in the Wastewater Division as assigned. Operate light to heavy construction equipment such as backhoe, roller, bulldozer, scraper, grader, grade all, and front-end loaders for a variety of construction and maintenance. Conduct regular inspections of all plant equipment and lift stations to assure proper operational efficiency. Lubricate pumps and other mechanical apparatus for proper operation. Adjust valves and controls as necessary to maintain proper flow and treatment of wastewater. Conduct periodic readings of motors and gauges and records data in the plant operating logs.

### **The Chain of Communication for Reporting SSO's (Item C)**

The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, and/or State Office of Emergency Services (OES)). Illustrated in Figures 4 and 5 on the following pages.

**Figure 4: Industrial Waste Collection System Overflow Response will follow same procedures as for Sanitary Sewer Collection System Overflow.**

City of Salinas  
Sanitary Sewer Overflow Response Flow Chart

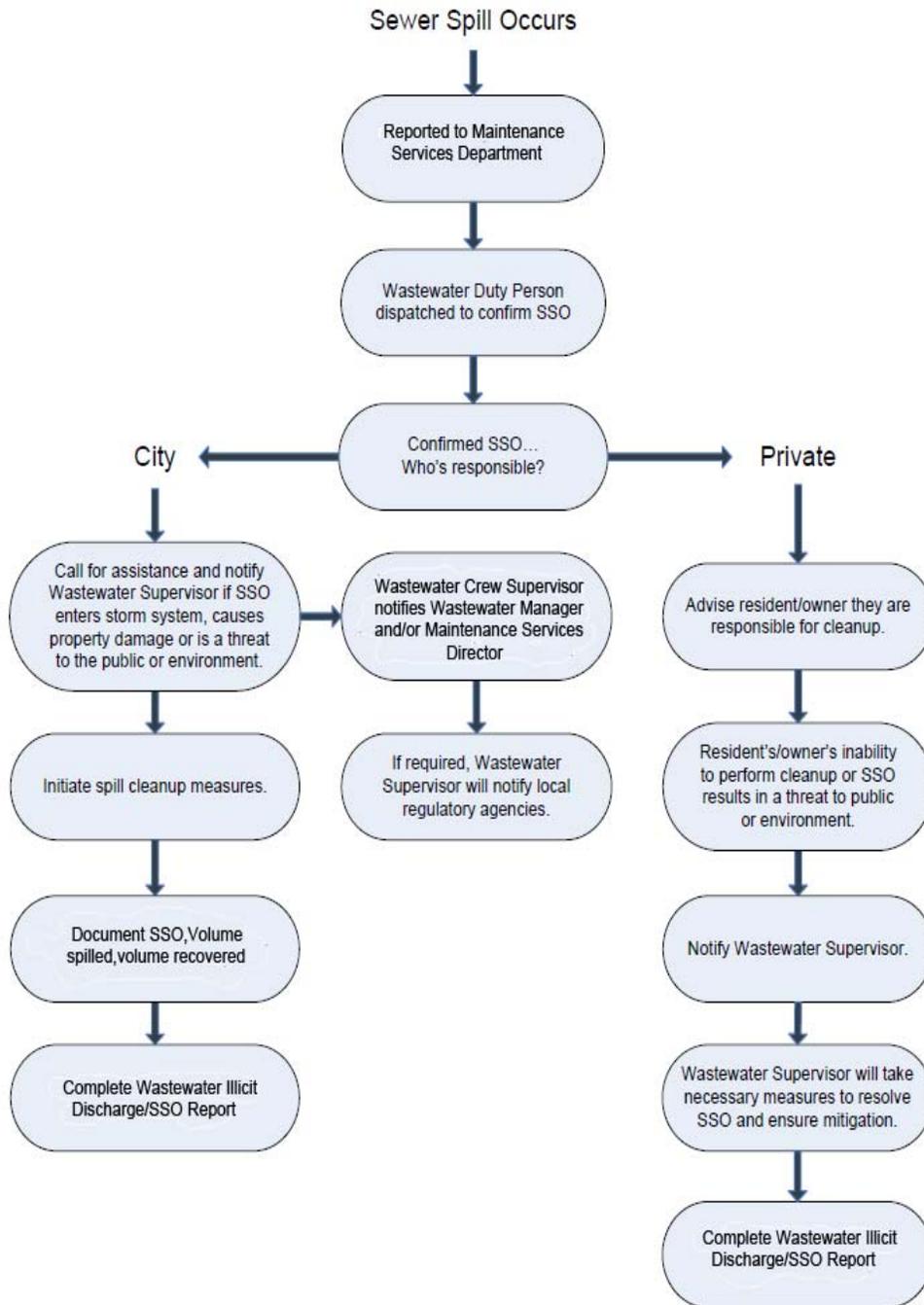
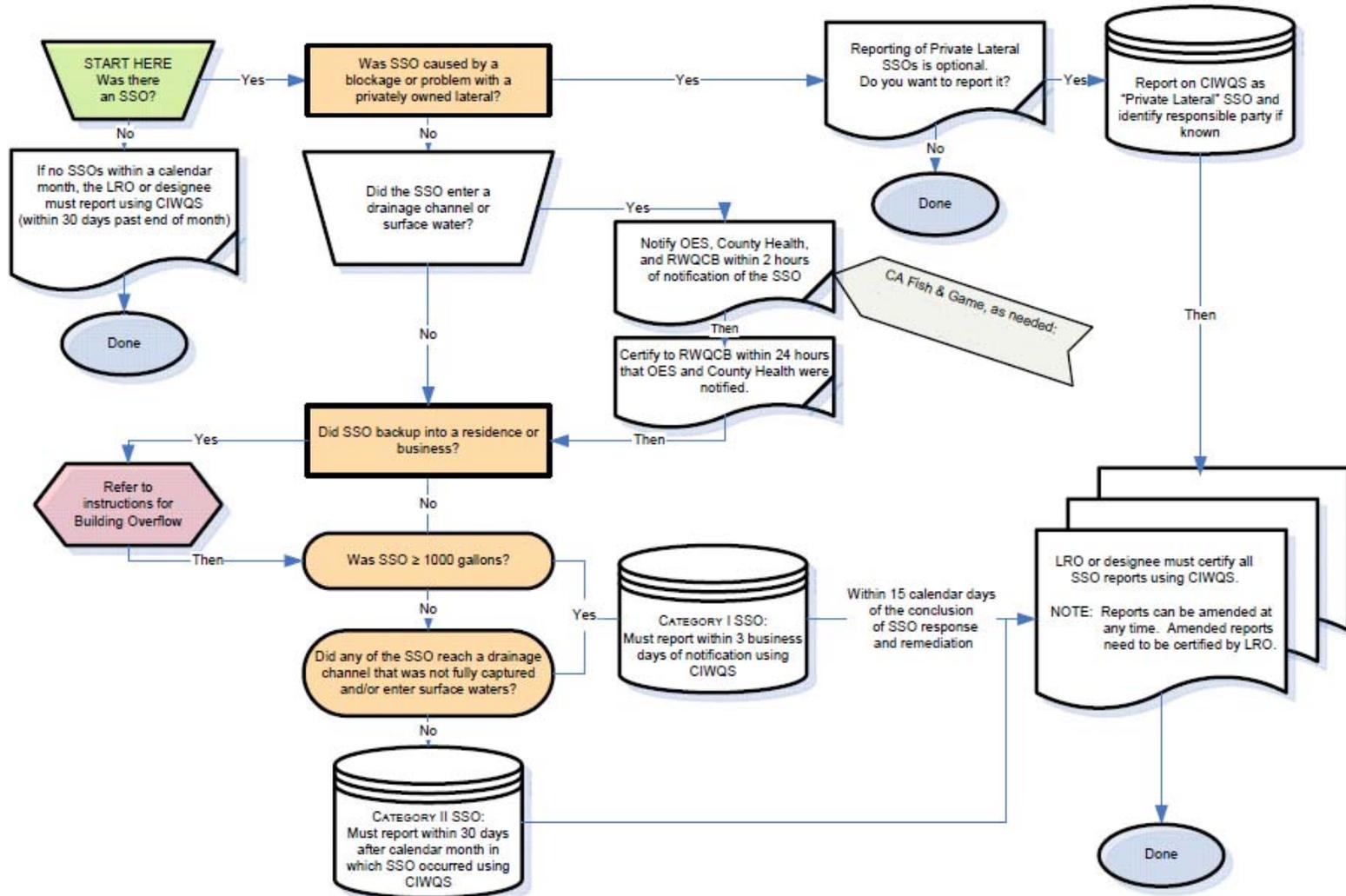


Figure 5: These procedures are required following an Industrial Waste Collection System Overflow

### City of Salinas SSO Reporting Flow Chart



# **Sewer System Management Plan**

## **Section III – Legal Authority**

### **A. Introduction**

This section of the SSMP discusses the City’s Legal Authority, including the Municipal Code and agreements with other agencies.

### **B. Regulatory Requirements for Legal Authority Section**

The summarized requirements for the Legal Authority section of the SSMP are:

#### **GWDR Requirement**

The wastewater collection system agency must demonstrate, through collection system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- a) Prevent illicit discharges into its wastewater collection system (examples may include infiltration and inflow (I/I), storm water, chemical dumping, unauthorized debris and cut roots, etc.);
- b) Require that sewers and connections be properly designed and constructed;
- c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City;
- d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages;
- e) Enforce any violation of its sewer ordinances;
- f) Authority to inspect grease producing dischargers; and
- g) Authority to enforce sewer-related ordinances.

### **Summary of Existing City of Salinas Authority**

As described in this section, the City of Salinas has adequate existing legal authority to meet the WDR requirements for its industrial wastewater collection system. The City of Salinas is a charter city with corporate powers derived directly from the California Constitution. California Constitution, Article XI, §3(a). Through its charter, the City of Salinas has supremacy over municipal affairs subject only to conflicting provisions in the state or federal constitutions and preemptive state law on matters of statewide concern. Unless preempted by state legislation on matters of statewide concern, the City’s laws will prevail over inconsistent state laws.

Consistent with this authority, the City has adopted a municipal code, a set of bylaws arranged by chapter and subject. The City has also established Standard Specifications, Design Standards and Standard Plans, with design and construction requirements for repair, rehabilitation and construction of infrastructure.

The sanitary sewer and industrial sewer requirements are addressed in Chapter 36 of the City Code. The two collection systems are addressed more specifically under separate articles within the Chapter. Additional requirements are established through City Council resolution. The City currently has adequate legal authority to regulate and to monitor its sanitary sewer and industrial sewer.

## **Prevent Illicit Discharge to Wastewater Collection System (Item a)**

Sec. 36-21.1. Prohibitions on industrial waste discharges.

No person shall discharge or cause to discharge any of the following into the industrial waste sewer lines:

- (a) Any gasoline, benzene, naphtha diesel, fuel oil or other flammable liquid, solid or gas that will cause fire and explosion;
- (b) Viscous materials which will cause obstruction in flow such as, but not limited to, tar, wax, glue and other synthetic adhesives;
- (c) Solid materials in quantities or of such size capable of causing obstruction to the flow in the sewer lines and upset in the treatment process such as, but not limited to, stone and marble dust, sand and gravel, mud, wood, cardboard, wastepaper, animal parts, entrails, feathers, hair, rags, glass and cans;
- (d) Nonbiodegradable solids such as: plastic materials, Styrofoam and other synthetic packaging or packing materials;
- (e) Materials which may exert excessive discoloration such as, but not limited to, dye, pigments of organic or inorganic origin used for printing which will cause the city's IWF effluent to exceed its national pollutant discharge elimination system limits;
- (f) Gas-producing substances which will produce strong offensive odor or release of toxic or malodorous substances which will contribute to air pollution;
- (g) Any pollutant, including oxygen-demanding pollutants released in discharge at such a flow rate and/or concentration that will upset or interfere with the industrial waste treatment facility;
- (h) Unusual volume or flow which will cause the industrial waste treatment facility to exceed its design capacity;
- (i) Materials which will cause foams and scum which will adversely affect the beneficial uses of receiving water;
- (j) Waste discharge which will cause pass-through or interference of the industrial waste facility as defined in Section 36-2 of this chapter. (Ord. No. 2102 (NCS).)

## **Require that sewers and connections be properly designed and constructed (Item b)**

The City's design criteria for new and rehabilitated sewers are specified in the *City of Salinas Standard Specifications, Design Standards and Standard Plans, 2008 Edition*. An electronic copy of the City of Salinas Standard Specifications, Design Standards and Standard Plans, 2008 Edition. is available on the City of Salinas web site at: <http://www.ci.salinas.ca.us/services/engineering/pdf/2008CityStandards.pdf>

The following sections of the municipal code address this requirement.

### **City Municipal Code:**

#### CHAPTER 2. ADMINISTRATION. \*

Article IX. Standards Specifications and Design Standards for Public Works. \*

- **Sec. 2-52.** Compliance required.

It shall be unlawful for any person, as a principal, agent or otherwise, to construct or have constructed public works facilities which do not conform to the standard specifications or design standards established in accordance with the terms of this article. (Ord. No. 1184 (NCS), Art. 3, § 1; Ord. No. 2009 (NCS), § 1.)

### **Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City (Item c)**

Sec. 36-34. Inspection of premises and access to records.

The director and other duly authorized representatives of the city shall inspect the facilities of the industrial user to ascertain that the purpose of this chapter is being met and all state and federal requirements are being complied with. Persons or occupants of the premises where wastewater is created or discharged shall allow the city representative ready access at all reasonable times to all parts of the premises for the purpose of inspection of or sampling or in the performance of any of their duties.

The city representative shall, at reasonable times, have access to inspect and copy the IU's wastewater discharge records, sample any effluent which the owner of such source is required to sample, inspect any monitoring equipment or method, and inspect any wastewater meter.

The city shall have the right to set up in the IU's property such devices which are necessary for collecting samples and measurement of flow.

Where the IU has security measures in force, the user shall make necessary arrangements with their security guards that personnel from the city with proper identification will be permitted to enter without delay for the purpose of performing their duties.

The director and other duly authorized employees of the city shall bear proper credentials and identification and shall be permitted to enter all properties for the purpose of but not limited to inspection, surveillance, measurement sampling, repair and maintenance of any portion of sewage works within the property, observation of pretreatment program and other activities related to the performance of the representative's duties. During an inspection, the property owner shall not limit the areas to be inspected by city representative. (Ord. No. 2102 (NCS).)

### **Limit the discharge of fats, oils, and grease and other debris that may cause blockages (Item d)**

Sec. 36-23.3. Discharge of oil and grease.

No person shall discharge oil and grease of animal, vegetable, mineral or petroleum origin in amounts which will cause stoppage at the collection system, damage at the influent pumping station and obstruction of flow at the IWF, resulting in interference and pass through. (Ord. No. 2102 (NCS).)

### **Enforce any violation of its sewer ordinances (Item E)**

Chapter 36, Article II Sanitary Sewers of the Municipal Code sets forth the requirements for discharge to the sanitary sewer system. Sec. 36-12.2 stipulates compliance with discharge requirements of Monterey Regional

Water Pollution Control Agency (MRWPCA) now Monterey One Water (M1W); expressly requires that all dischargers to the municipal sanitary sewer system (community sewer) must comply with all M1W (Agency) requirements. The M1W established Ordinance No. 2008-01, an ordinance establishing regulation for the interception, treatment and disposal of sewage and wastewater; providing for and requiring charges and fees therefore; and fixing penalties for the violation of said regulations. Article 4.07 gives the Agency the authority to inspect the facilities of any user to ascertain whether the purpose of the Ordinance is being met and all requirements are being complied with, and to conduct any sampling or metering operations as necessary.

For the purposes of the industrial waste facility the M1W ordinances do not apply.

The industrial waste requirements are established in Chapter 36, Article III Industrial Waste, of the Municipal Code.

Chapter 36, Article III. Industrial Waste, Division 6. Powers and Authority of Inspectors of the Municipal Code sets forth the enforcement provisions of the Industrial Waste system. Specific authority is addressed in the following Section of the Code:

- Sec. 36-38. Notice of violation, time schedule for compliance and penalties.

Any person found to be violating any provision of the chapter, requirements or conditions in the duly issued permits, or who discharges wastewater which causes pollution or violates any effluent limitation, pretreatment or toxicity standard shall be served by the city with a notice stating the nature of violation and providing a reasonable time limit for satisfactory correction.

Any person who violates any provision of this chapter shall be responsible for the cost of cleanup in addition to civil or criminal penalty in the sum of one thousand dollars per violation per day.

The City shall on annual basis publish in a local newspaper a list of all significant violators. A significant violator is one whose violations remain uncorrected forty-five days after notification of noncompliance; which is part of a pattern of noncompliance; which involves a failure to accurately report noncompliance; or which resulted in the municipality exercising its emergency authority. (Ord. No. 2102 (NCS).)

## **Authority to inspect grease producing dischargers (Item f)**

The City does not have Grease producing dischargers to the industrial waste system. Section 36-23.3 Discharge of oil and grease sets forth the prohibitions in regard to discharges of oil and grease.

The following Municipal Code Section provides the City's authority to inspect facilities for purpose of determining compliance with the provision of Chapter 36. Industrial Waste, Wastewater Collection and Discharge.

- Sec. 36-34. Inspection of premises and access to records.

The director and other duly authorized representatives of the city shall inspect the facilities of the industrial user to ascertain that the purpose of this chapter is being met and all state and federal requirements are being complied with. Persons or occupants of the premises where wastewater is created or discharged shall allow the city's representative ready access at all

reasonable times to all parts of the premises for the purpose of inspection of or sampling or in the performance of any of their duties.

The city representative shall, at reasonable times, have access to inspect and copy the IU's wastewater discharge records, sample any effluent which the owner of such source is required to sample, inspect any monitoring equipment or method, and inspect any wastewater meter.

The city shall have the right to set up in the IU's property such devices which are necessary for collecting samples and measurement of flow.

Where the IU has security measures in force, the user shall make necessary arrangements with their security guards that personnel from the city with proper identification will be permitted to enter without delay for the purpose of performing their duties.

The director and other duly authorized employees of the city shall bear proper credentials and identification and shall be permitted to enter all properties for the purpose of but not limited to inspection, surveillance, measurement sampling, repair and maintenance of any portion of sewage works within the property, observation of pretreatment program and other activities related to the performance of the representative's duties. During an inspection, the property owner shall not limit the areas to be inspected by city representative. (Ord. No. 2102 (NCS).)

## **Authority to enforce sewer-related ordinances (item G)**

The City of Salinas is a charter city with corporate powers derived directly from the California Constitution. California Constitution, Article XI, §3(a). Through its charter, the City of Salinas has supremacy over municipal affairs subject only to conflicting provisions in the state or federal constitutions and preemptive state law on matters of statewide concern. Unless preempted by state legislation on matters of statewide concern, the City's laws will prevail over inconsistent state laws.

Consistent with this authority, the City has adopted a municipal code, a set of bylaws arranged by chapter and subject and Standard Specifications, Design Standards and Standard Plans, with design and construction requirements for repair, rehabilitation and construction of infrastructure.

The following chapters of the Municipal Code address the requirements of this SSMP.

### CHAPTER 1. GENERAL PROVISIONS.

- Sec. 1-7. Misdemeanors; infractions; general penalty; continuing violations. \*

Whenever in this Code or in any other ordinance of the city or in any order, rule or regulation issued or promulgated by any duly authorized officer or agent of the city, any act is prohibited or is made or declared to be unlawful or an offense, or the failure to do any act is declared to be unlawful or an offense, the violation of any such provision of the Code or any other ordinance of the city or any such order, rule or regulation shall be a misdemeanor or infraction.

Whenever in this Code or in any other ordinance of the city or in any order, rule or regulation issued or promulgated by any duly authorized officer or agent of the city, any act or the failure to do any act is made or declared to be a misdemeanor, where no specific penalty is provided therefore, the violation

of any such provision shall be punishable by a fine not exceeding one thousand dollars or imprisonment for a term not exceeding six months, or by both such fine and imprisonment.

Whenever in this Code or in any other ordinance of the city or in any order, rule or regulation issued or promulgated by any duly authorized officer or agent of the city, any act or failure to do any act is made or declared to be an infraction, where no specific penalty is provided therefore, the violation thereof shall be punished upon conviction by a fine not exceeding five hundred dollars.

Any offense which would otherwise be an infraction is a misdemeanor if a defendant has previously been convicted thereof three times or more, and such prior convictions are admitted by the defendant or alleged in the accusatory pleading. For this purpose, a bail forfeiture shall be deemed to be a conviction of the offense charged.

This subsection shall not apply to any violations of any of the provisions of Chapter 20.

Every day any violation of this Code or any other ordinance of the city or any such order, rule or regulation continues to occur shall constitute a separate offense, except as otherwise specifically provided. (Ord. No. 1704 (NCS), § 1; Ord. No. 1912 (NCS), § 1; Ord. No. 2163 (NCS), § 1.)

For state law as to authority of city to impose fines not exceeding five hundred dollars and imprisonment for terms not exceeding six months, or both, for violation of ordinances, see Gov. C., § 36901. As to provision declaring violations of ordinances to be misdemeanors, see Gov. C., § 36900.

For charter provision as to penalty for violation of ordinances, see Char. § 111.

For provisions declaring signs and billboards in violation of Code a nuisance, see § 3-21 of this Code. For provisions declaring violation of provisions pertaining to keeping of livestock, see § 7-31. For penalty for violating house numbering provision, see § 9-30. For penalties for violation of the Fire Code, see § 13-17. For penalty for violation of provisions pertaining to going-out-of-business sales, see § 15-14.

- Sec. 1-7.1. Notice of violation.

Whenever in this Code, or in any other ordinance of the city, or in any order, rule, or regulation issued by any duly authorized agent of the city, such ordinance, order, rule or regulation requires advance written notice of the ordinance, order, rule, or regulation to be posted, signed, marked, or otherwise given, the service of written notice on the violator shall constitute adequate notice for any like violation occurring subsequent to service of the written notice. (Ord. No. 2207 (NCS), § 1.)

- Sec. 1-8. Issuance of citations for violation of Code or ordinances; written promise to appear.

If any person is arrested for a violation of any provision of this Code or other ordinance and such person is not immediately taken before a magistrate as prescribed in the Penal Code of the state, the arresting officer shall prepare in duplicate a written notice to appear in court, containing the name and

address of such person, the offense charged, and the time and place when and where such person shall appear in court.

Any person willfully violating his written promise to appear in court is guilty of a misdemeanor, regardless of the disposition of the charge upon which he was originally arrested. (Ord. No. 944 (NCS), §§ 1, 2.)

- Sec. 1-8.1. Civil action enforcement.

(a) In addition to the penalties provided for in this chapter, any violation of this code or city ordinance may be redressed by civil action. Any condition existing in violation of this code or a city ordinance or any order, rule or regulation issued or promulgated by any duly authorized officer or agent of the city, is deemed to be a public nuisance.

(b) The city attorney may bring civil suit or other action to enforce any ordinance or section of this Code, to enjoin or prevent any violation of any ordinance, or to abate any public nuisance as defined or declared by this Code.

(c) This remedy by civil action to enforce any ordinance this Code is in addition to any other remedies available under ordinance, city code, or statute and does not replace or support any other remedy but is cumulative thereto. (Ord. No. 2083 (NCS), § 1.)

The following Municipal Code Chapter 36. Industrial Waste, Wastewater Collection and Discharge is in support of the requirements of this SSMP.

## **MUNICIPAL CODE**

### **CHAPTER 36. INDUSTRIAL WASTE, WASTEWATER COLLECTION AND DISCHARGE.**

Article I. General.

Article II. Sanitary Sewers.

Article III. Industrial Waste.

Sec. 36-21. Applicability.

Sec. 36-21.1. Prohibitions on industrial waste discharges.

Sec. 36-21.2. Prohibition on dilution as a substitute for treatment.

Division 2. Requirements.

Sec. 36-22. Screening device.

Sec. 36-23. Measuring devices required.

Division 3. Pretreatment Program.

Sec. 36-23.1. Limits on specific pollutants.

Sec. 36-23.2. Limits on prohibited wastes.

Sec. 36-23.3. Discharge of oil and grease.

Sec. 36-23.4. Discharge of sanitary sewage.

Sec. 36-24. Periodic compliance report of industrial users.

Sec. 36-25. Application of federal categorical standards.

Sec. 36-25.1. Monitoring facilities for pretreatment program.

Division 4. Industrial Waste Permit.

Sec. 36-25.2. Permit application.

Sec. 36-25.3. Permit conditions.

Sec. 36-25.4. Duration of permit.

Sec. 36-25.5. Permit modification.

Sec. 36-25.6. Pretreatment modification.

Sec. 36-25.7. Transfer of permit.

Sec. 36-25.8. Revocation of permit.

Division 5. Fees and Charges--Industrial Waste.

Sec. 36-26. Connection fees.

Sec. 36-27. Service charges.

Sec. 36-28. Billing.

Sec. 36-29. Advance deposits.

Sec. 36-30. Persons responsible for payment.

Sec. 36-31. Grease traps required.

Sec. 36-32. Connections outside city.

Sec. 36-33. Prosecution for damage to system.

Division 6. Powers and Authority of Inspectors.

Sec. 36-34. Inspection of premises and access to records.

Sec. 36-35. Observance of safety rules.

Division 7. Enforcement and Penalties.

Sec. 36-36. Notification of accidental discharge.

Sec. 36-37. Notices to employees of industrial users.

Sec. 36-38. Notice of violation, time schedule for compliance and penalties.

Sec. 36-39. Confidential information.

# **Sewer System Management Plan**

## **Section IV – Operations and Maintenance Program**

### **A. Introduction**

This section of the Sewer System Management Plan (SSMP) is intended to provide an overview of the City's sewer system operations and maintenance program.

### **B. Regulatory Requirements for the Operations and Maintenance**

The requirements for the Operations and Maintenance Program section of the SSMP are:

#### **GWDR Requirement (Operations and Maintenance):**

The GWDR requirements for the Operations and Maintenance Program are:

- a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;
- b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
- e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

### **Operations and Maintenance Program**

#### **Collection System Maps (Item a)**

The WDR calls for maintaining an up-to-date map of the collection system showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and storm water conveyance facilities. The City's maintains field maps that are an up-to-date representation of the industrial waste collection system. The City currently has several sources of mapping for the industrial waste collection system. The following maps are maintained by the City's Engineering and Transportation Services Department, under the direction of the City Engineer:

- The industrial waste collection system map is available as a digital overlay on aerial maps. This map is specific to the industrial waste collection system and does not include sanitary sewer or storm water collection systems
- System-wide wall maps showing the industrial waste, sanitary sewer and storm sewer collection systems including line sizes and manhole locations collectively on one map (paper maps, not electronic). These wall maps are displayed in the City's Public Works office at City Hall and the Wastewater Division Office at the Maintenance Services Division Corporation Yard. These maps are also reproduced in binders for field use in the sewer maintenance trucks and response vehicles. Field maps are up-to-date and include 100% of the sanitary sewer collection system. Storm sewer maps in proximity to the industrial waste collection system are included in the field maps for recovery response for sewer overflows that reach the local storm system.
- Complete system maps are available from as-built plans maintained at the Public Works Department, located at City Hall, 200 Lincoln Ave., Salinas, CA 93901.

Improvement plans for sewers constructed in new development. The City Public Works Department maintains copies of all sewer plans upon completion of construction and acceptance by the City. New development with connections to the industrial waste collection system is anticipated within the next five years. New pipelines and connections will be added to existing mapping.

## **Routine and Scheduled Maintenance (Item b)**

### **Staffing, Equipment and Funding**

The City's Maintenance Services Department, under the direction of the Environmental and Maintenance Services Director, is responsible for operation and maintenance of the City's sanitary sewer collection system. The City's Wastewater Manager is the lead person to plan and implement these responsibilities.

Current City staffing for operation and maintenance of the sewer collection systems includes 7.75 full time equivalent (FTE) employees. The employees may also perform other functions for the storm sewer and industrial waste systems. The position allocations and duties for the sanitary sewer system are as follows:

- Wastewater Manager (0.5 FTE) - Provide oversight of Division activities and manage budget.
- Wastewater Crew Supervisor (0.5 FTE) – Supervise work crew and maintenance activities.
- Public Service Maintenance Worker IV (0.5 FTE) – Lead worker, journey level position.
- Pump Mechanic (0.5 FTE) – Sanitary sewer lift station pump mechanic.
- Public Service Maintenance Worker III (1.75 FTEs) – Equipment operator.
- Public Service Maintenance Worker II (4.75 FTEs) – Journey level maintenance worker.
- Wastewater Operator (2 FTE) – Journey level Treatment Plant Operator

The City has adequate facilities and equipment to maintain the industrial waste collection system. The Maintenance Services Department operates from the City's Corporation Yard on Work Street at John Street, and the City's TP1 Site off Hitchcock Road (site of the former City wastewater treatment plant). Maintenance equipment is stored at both locations.

Major equipment owned by the City that can be utilized for sewer system operation and maintenance includes:

- Sanitary Sewer Program – 6 pickup trucks, 3 sewer vac trucks, 1 lift truck, 1 CCTV van, 5 portable (towable), generators and 1 six-inch pump with suction and layout discharge hose.
- Storm Drain Sewer – 1 vac-all (10 cu. yd. capacity vacuum truck)
- Industrial Waste – 2 tractors, 1 spray rig, 2 pickup trucks, 1 small boat and trailer to access aeration motors on the influent treatment pond and 1 six-inch trailered water pump.
- Street Sweeping – 1 pickup and 4 sweepers

The City maintains 5 portable towable diesel-powered generators to provide emergency power to the single industrial waste lift station and sanitary sewer lift stations not equipped with permanent on-site electrical generators. This gives effective coverage of all sewer lift stations and reduces the potential for overflows during power outages.

The City keeps an inventory of key replacement parts for the sewer lift stations, so breakdowns and malfunctions can be repaired quickly to avoid potential overflow situations. A spare motor controller, air compressor, alarm dialer, air lines and misc. minor parts are kept in inventory for repairs to the industrial lift station. A lift station maintenance truck with an overhead lift boom and power winch is used to carry a full complement of tools and minor repair parts. Spare manhole risers and covers are kept in inventory for repairs in the streets. Emergency contact numbers for local parts vendors and contractors are kept for emergency response to pipeline and other system repairs

The City owns the necessary equipment to respond to most overflow situations. This equipment includes vacuum trucks, hydro/vac flushers, pumps, temporary bypass hoses, and portable generators. The City also maintains files, 24-hour contacts, and informal agreements with many contractors and businesses that can be called in response to a major event.

The City keeps key materials on-site at the City Yard to respond quickly to overflows. Sandbags and sandbagging material, absorbents, absorbent booms and pads are kept for containment and cleanup. Pipeline plugs for pipe sizes of 6 inches to 16 inches are kept on site for containment and repairs. A 6-inch pump and flexible hosing are kept in inventory for local bypass operations or pumping of overflows back into the sanitary sewer.

The Industrial Waste is an enterprise fund. The treatment facility and collection system are solely funded by user fees from the current roster of 24 industrial users. The industrial waste fund is adequate for the immediate operations and maintenance of the treatment facility and collection system.

Funding sources for ongoing industrial waste system operation, maintenance and improvements include:

- It is anticipated that system operation and maintenance would continue to be funded from the Industrial Waste Fund.
- The City currently has sufficient capacity for current user discharge flows. Future capacity improvements to accommodate future growth areas may be funded by user fees. However, funding for future capacity improvements and pipeline rehabilitation may be sought through a variety of economic stimulus grants.
- Capacity projects to correct any future deficiencies and/or improvements to rehabilitate/replace existing sewers may be funded by several sources such as: another increase in user fees, another

municipal bond issue, federal/state loans or grants (e.g., economic stimulus funds and other programs), and assessment districts.

## **Preventive Operation & Maintenance Activities**

### **Prioritization of Activities**

The main goal of the Sewer System Management Plan that is required by the WDR is to prevent overflows and to provide a plan and schedule for measures to be implemented to prevent overflows. Activities proposed by the City in the Sewer Management Plan will be prioritized based on their usefulness and effectiveness in meeting this goal. The City will focus its efforts on those activities that are most effective in preventing overflows. Although the industrial wastewater characteristics do not present a health hazard to the public as a spill of sanitary sewer does, the City's will aggressively approach its SSMP activities to focus on spill prevention, containment and recovery.

Objectives to be considered in prioritizing activities will include:

Prevent any discharges from reaching surface waters. Surface waters that may be affected by discharges from the industrial waste collection system include: Reclamation Ditch 1665, and the Salinas River.

Prevent discharges from reaching the storm drain system and completely contain and clean any discharges that do reach the storm drain system before such discharges reach surface waters.

Prevent dry weather overflows from public sewers.

Prevent wet weather overflows from public sewers.

Prevent overflows from private laterals.

The City's drinking water supply is solely from groundwater wells maintained by the California Water Service Company and Alco Water Service. This supply is not impacted by potential overflows.

The City maintains sewer overflow records in accordance with SWRCB requirements. This information includes but is not limited to location, date, time, quantity of spill and cleanup activities. As this comprehensive information is collected over time, it can assist in illustrating trends in overflows, such as problem locations, frequency, and volume. Historically (30 years +) the industrial waste collection system has not experienced a collection system overflow.

### **O & M Activities**

Historically the City's industrial waste collection system has required minimal maintenance to the collection system. The system consists of approximately 30,000 ft of gravity sewers, 2,000 ft of force main pipeline and one industrial waste lift station. O&M program include: Routine inspection and preventive maintenance of the industrial lift station and periodic CCTV inspection. Maintenance to the smaller lines 24-inch in diameter or less will be cleaned once annually between the months of November of each year following the winter agricultural slowdown and start of the new agricultural process season in March the following year. Maintenance records are maintained at the Wastewater Division office at 426 Work Street Salinas, CA 93901.

The City's maintenance program addresses the following elements:

- Preventive maintenance – identifying and fixing system weaknesses which, if left unaddressed, could lead to overflows;
- Corrective maintenance – fixing system components that are functioning but not at 100% efficiency

- Emergency maintenance – reactive maintenance, overflows, equipment breakdowns.

As part of the Sewer System Management Plan implementation, the City has developed a more formalized Operation and Maintenance Plan for the sanitary sewer collection system. The maintenance plan addresses the following components identified in the WDR:

- The City will implement a system for scheduling regular maintenance and cleaning of industrial waste collection system of pipeline 24 inches in diameter or less on a once annually basis. A sample form for documenting pipeline maintenance is included in SSMP Appendices, Appendix A.
- The City implements a regularly scheduled program of preventative maintenance to the industrial waste lift station. The industrial waste lift station is inspected weekly. The City has a pump maintenance mechanic log book to log maintenance activity at the sewer pump station. Routine maintenance includes but is not limited to: inspection of electrical panels, pump and level controls, air compressors, wet well and dry well conditions and pump motor operation. Site visits for maintenance activities are logged on a lift station inspection form maintained by the Wastewater Supervisor. This worksheet also includes maintenance visits performed at sanitary and storm water lift stations and on miscellaneous small pumps throughout the City. In the absence of the pump mechanic other maintenance personnel are cross trained to address any lift station problems. SSMP Appendices, Appendix A provides an example of the pump maintenance inspection record and maintenance checklist.
- A sample form for documenting lift station maintenance is included in SSMP Appendices, Appendix A.
- The City implements a tracking system for recording maintenance activities. The City currently uses service request slips that are completed in response to requests for service by residents or other departments. Routine maintenance is conducted according to schedules established by the Wastewater Manager and documented on maintenance forms developed by the Department.
- Procedures for coordinating with contractors responsible for sewer collection system cleaning and maintenance. The City has not historically contracted cleaning and maintenance of the industrial waste collection system. Contracting is done only for the purpose of supplementing the ongoing maintenance effort when required or because of the need for specialized equipment not in the City's inventory. Contract work will be accomplished with ongoing oversight from City staff.

The City's Wastewater Division staff, which includes Sanitary Sewer, Storm Sewer, Street Sweeping and Industrial Waste Facility personnel, participate in plan reviews for new construction and improvement projects to ensure compliance with the City's sanitary sewer requirements. The City's Engineering and Transportation Department staff also review plans for compliance with all City requirements for proper design of new sewers and connections and prohibitions on inflow sources, as well as inspect construction projects to ensure that plan provisions are implemented.

## **Rehabilitation and Replacement Plan (Item C)**

In February 2014 the City completed designs for Industrial Wastewater Conveyance System (IWWCS) improvements to construct two pipeline segments. Nearly 9,600 feet of 42" diameter High Density Polyethylene (HDPE) pipeline leading from the Treatment Plant 1 (TP1) site to the IWTF influent pump station was installed to replace the deteriorated 33-inch reinforced concrete pipe (RCP). Another 2,325 feet of 36-inch diameter HDPE pipeline was installed along West Blanco Road leading to the TP1 location. This replaced the 27-inch RCP at the same location. The above work was complete in April 2015.

In March 2015, the City and M1W entered into an agreement to share the costs of design and construction of permanent diversion facilities to divert the industrial wastewater to the municipal wastewater system near the Salinas Pump Station for conveyance to the Regional Treatment Plant (RTP) in lieu of conveyance to the IWTF. Construction of the permanent diversion was completed in 2016. Facilities include a diversion structure for controlling the amount and timing of flow diverted to the M1W system, a flow metering device and water quality monitoring station with communication equipment.

M1W in coordination with the City, successfully secured a \$10M state grant to construct improvements at the City's Industrial Wastewater Treatment Facility (IWTF) and the Salinas Pump Station to advance the capture and reuse of stormwater. Plans for Phase 1B of the Salinas Treatment Facility Storage and Recovery Project prepared under the joint direction of the City and M1W to implement the grant-funded improvements are complete and include electrical improvements to the facility. Bids were received in January 2019 and construction is anticipated to begin by June 2019.

## **Scheduled Inspection and Condition Assessment**

The City's goal is to inspect the condition of its industrial sewer on a 10-year cycle. The last CCTV pipeline inspection occurred in 2013. The video assessment was used for improvements and rehabilitation. In November 2014 the City began replacing an older section of the Industrial Waste pipeline that was in poor condition. The old pipeline replacement was approximately 9000 feet of 42-inch HDPE pipeline replacing the older 33-inch cast in place concrete pipeline. In 2015, Phase II was completed upgrading 2,400 feet of 27-inch cast in place concrete with 36-inch HDPE pipe. Video assessments must be conducted between the months of November of one year and March of the next year. This is the period when the majority of industrial users are not in production therefore reducing pipeline flows that are significantly higher during production season. Assessment results will be prioritized and submitted for consideration for repair/rehabilitation or replacement. Decisions on actions to be taken will be a joint effort of the Maintenance Services Department and the Engineering and Transportation Department.

Projects that are currently included in the City's Capital Improvement Program are shown in SSMP Appendices, Appendix A. Capital Improvements includes improvements at the Industrial Waste Treatment Facility.

The funds that support the Capital Improvement Program come from the Industrial Waste Fund. The Industrial Waste Fund is an enterprise fund and provides funds for Capital Improvements and Operations and Maintenance.

## **Training (Item D)**

The City uses a combination of in-house classes; on the job training; and conferences, seminars, and other training opportunities to train its wastewater collection system staff.

Long-term senior experienced City staff provides in-house training regarding sewer collection system operations, maintenance and monitoring. Training is accomplished by a combination of initial orientation, monthly "tailgate" training sessions, and on-the-job training.

New sewer maintenance employees receive a first day orientation and safety training. The monthly tailgate training sessions and individual instruction include discussion of the following items at various times:

- Sewer system regulatory requirements,
- Maintenance and operation procedures,

- Reporting and monitoring requirements, and
- Safety issues, including sewer gases and exposure to sewage.

The Wastewater Manager or Wastewater Supervisor conducts the initial orientation, tailgate training sessions, and individual instruction.

New employees receive on-the-job training as part of a team supervised by an experienced senior staff person. Training continues while proficiency performing each job task is determined, prior to conducting unsupervised field operations. The new employee's role on the team is as a helper to the more experienced senior staff persons, with review by the Crew Supervisor and Wastewater Manager. Annual training is being implemented and topics include but are not limited to:

- Operations and Maintenance of Sanitary Sewer Systems (video)
- Lockout Tagout
- Operation of Wastewater Lift Stations
- Lift Station Emergency Generator Hookup
- Confined Space Training
- CPR/First Aid Training
- Pesticide Use and Safety including Hazardous Material spills and cleanup
- NPDES / BMP Training (BMP Packets/Video)
- Haz Mat Training – First Responder – Hazmat Containment Procedures
- Annual Environmental Compliance Workshop - a joint venture of the Monterey County Environmental Health Department and the City of Salinas.
- All members certified NIMS (National Incident Command Systems- 2006)
- H2S and multi meter training

The Wastewater Crew Supervisor keeps a training log for each maintenance employee, and also documents training in annual performance reviews.

The City's contractors will receive written or verbal training regarding the Cities SSO response obligations during pre-construction meetings before wastewater collection system construction activities begin.

## **Outreach to Sewer Service Contractors**

The City does not contract with plumbing contractors for services to the industrial waste system.

## **Contingency Equipment and Replacement Inventories (Item E)**

The City maintains 5 portable towable diesel-powered generators to provide emergency power to sanitary sewer lift stations not equipped with permanent on-site electrical generators. This gives effective coverage of all sanitary lift stations and reduces the potential for overflows during power outages.

The City keeps an inventory of key replacement parts for the sewer lift stations, so breakdowns and malfunctions can be repaired quickly to avoid potential overflow situations. A spare motor controller, air compressor, alarm dialer, air lines and misc. minor parts are kept in inventory for repairs to lift stations. A lift

station maintenance truck with an overhead lift boom and power winch is used to carry a full complement of tools and minor repair parts. Spare manhole risers and covers are kept in inventory for repairs in the streets. Emergency contact numbers for local parts vendors and contractors are kept for emergency response to pipeline and other system repairs

The City owns the necessary equipment to respond to most overflow situations. This equipment includes hydro/vac flushers, pumps, temporary bypass hoses, and portable generators. The City also maintains 24-hour contact information, with contractors and businesses that can be called in response to a major event.

The City keeps key materials on-site at the City Yard to respond quickly to overflows. Sandbags and sandbagging material, absorbents, absorbent booms and pads are kept for containment and cleanup. Pipeline plugs for pipe sizes of 6 inches to 16 inches are kept on site for containment and repairs. A 6-inch pump and flexible hosing are kept in inventory for local bypass operations or pumping of overflows back into the sanitary sewer.

## **Standard Operating Procedure for Sewer Cleaning**

### **Purpose**

The purpose of this Standard Operating Procedure is to ensure that sewer cleaning is performed in a manner that will produce a high-quality work product. Quality is important because it ensures that the sanitary sewers will not experience problems prior to their next scheduled cleaning.

### **Goal**

The goal of cleaning a gravity sewer is to restore the flow area to 95% of the original flow area of the pipe.

#### **Required Equipment and Tools**

1. Personal protective equipment (steel toe boots, gloves, eye/face protection, hearing protection)
2. Calibrated gas detector
3. Proper safety cones/barricades/flagging/signs or other traffic control devices
4. Confined space equipment – tripod, harness, and ventilation blower
5. Sanitary sewer system map book
6. Combo (jet rodder/vacuum) truck
7. Cleaning nozzles, chain flail and (root saw by contracted services if required)
8. Debris traps in the sizes that will be encountered during the day or vacuum tubes for debris removal
10. Manhole hook or pickaxe
11. Measuring wheel (available through the Wastewater Crew Supervisor)
12. Disinfectant hand cleaner

#### **Required Forms**

Cola inspection form for commercial vehicle

Hotspot or routine cleaning documentation form

## **Procedures for Sewer Cleaning Crew**

### **Cleaning of gravity sewers**

1. Plan the work so that it starts in the upstream portion of the area and moves downstream.
2. Wherever possible, plan to clean sewers from the downstream manhole.
3. Inspect the sewer cleaning nozzles for wear. Replace nozzles that are excessively worn.
4. Routinely inspect service hose and couplings for damage or wear.

### **At the Jobsite**

1. Wear proper personnel protective equipment (PPE).
2. Fill the water tank at a California Water Company system hydrant at or near the jobsite.
3. Determine and confirm location of upstream and downstream manholes (use system maps)
4. When using the vacuum boom look for any overhead utilities that may come into contact during the cleaning operation.
5. When setting up the Hydro/Vac truck in the street ensure that all warning lights, flashers and the traffic directional arrow board is active on the service truck.
6. Set up proper traffic control by placing traffic signs, flags, cones, and other traffic control devices as required.
7. Operate the cleaning unit inside the traffic control area so that the hose reel is positioned over the manhole.
8. Open the manhole and allow manhole to vent before proceeding with the cleaning operation.
9. Install the appropriate sewer cleaning nozzle consistent with the maintenance goal. (Routine flushing, grease or root removal)

### **Cleaning Operation**

1. Insert a debris trap or use vacuum tube if debris is verified during the cleaning process.
3. Lower the hose, with a guide or roller to protect the hose, into the manhole and direct it into the sewer to be cleaned.
5. Open the water valve and increase pump pressure to allow the hose to proceed up the sewer. The hose speed may be determined by the operator dependent on determined pipe cleaning conditions or cleaning method desired.
4. Set pump pressure to provide adequate pressure for the sewer cleaning operation.
6. As a general guideline, allow the hose to proceed 25% of the length of the sewer (or 50 feet minimum) and pull the hose back.
7. Observe the nature and the quantity of debris pulled back to the manhole.
8. If there is little or no debris, allow the hose to proceed to the upstream manhole.
9. If there is moderate to heavy debris, clean the remaining portion of the sewer in steps not to exceed 50% of the length of the sewer (or 50 feet minimum).
10. Open the upstream manhole or verify measured hose length and the length of pipe segment and verify that the nozzle is at or past the manhole.

11. The sewer has been adequately cleaned when:  
Successive passes with a cleaning nozzle do not produce any additional debris, and the sewer nozzle in use easily passes through the pipeline without obstruction.
12. If nature and quantity of debris removed during the cleaning operations indicates a condition problem, report information to the Wastewater Crew Supervisor for follow-up.
13. Remove the debris (if present) from the manhole using the vacuum unit.
14. Rewind the hose on the reel.
15. Remove the vacuum unit or debris trap.
16. Clean surfaces or manhole interior if needed and close the manhole. Ensure that the manhole is properly seated.
17. Enter the results on the cleaning record.
18. Move the cleaning unit, break down and stow the traffic controls.
19. Proceed to the next cleaning jobsite.

### ***At the End of the Day***

1. Inspect the equipment and tools for problems.
2. Report any problems with equipment, tools, or sewers that were cleaned during the day to the Supervisor.
3. Submit daily work reports to the Supervisor at end of shift.

# Sewer System Management Plan

## Section V - Design and Performance Provisions

### A. Introduction

The City's design and construction standards are used by the City staff and are communicated to consulting engineers and/or developers at the start of a design process or proposed development.

### B. Regulatory Requirements for the Design and Performance Provisions Section

The regulatory requirements for the Design and Performance Provisions section are:

#### ***GWDR Requirement (Design and Performance Provisions):***

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

#### **Design Criteria (Item a)**

The City's design criteria for new and rehabilitated sewers are specified in the ***City of Salinas Standard Specifications, Design Standards and Standard Plans***, 2008 Edition. An electronic copy of the City of Salinas Standard Specifications, Design Standards and Standard Plans, 2008 Edition. is available on the City of Salinas web site at: <https://www.cityofsalinas.org/file/847/download>

#### **Procedures and Standards (Item b)**

The City's construction standards are specified in the City of Salinas Standard Specifications, Design Standards and Standard Plans, 2008 Edition. Inspection and testing procedures are included in the Plan. Specific standards for testing pipeline installations new and rehabilitated are embedded in Section 71 Sewers of the plan.

Specific information regarding standard specifications, design plans and construction standards can be generally found in the follow Sections and page numbers in the plan.

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**PART III**

**STANDARD PLANS**

# **Sewer System Management Plan**

## **Section VI - Sanitary Sewer Overflow Response Plan**

### **Industrial Wastewater Collection System**

#### **A. Introduction**

**This SSO Response Plan serves as a standard response plan for any wastewater conveyance system. In this case the response plan is intended as a response guide to a system overflow or catastrophic pipeline failure in the industrial wastewater collection system. References to SSO's should be understood to be wastewater overflows from the industrial wastewater collection system and not from the sanitary sewer collection system as this SSMP is intended to convey.**

The City of Salinas, Wastewater Division of the Maintenance Services Department is responsible for the operation and maintenance of the industrial wastewater collection system. The City of Salinas industrial collection system is mostly gravity fed with 1 industrial waste lift station that conveys industrial process discharges from a limit area of industrial users near Airport Blvd. in the southwest industrial area of the City.

##### **1. Purpose**

The Sewer Collection System Overflow Emergency Response Plan is designed to ensure that every report of a confirmed industrial sewer overflow (SSO) is immediately dispatched to the appropriate crews. This plan provides a procedure that, when enacted in response to the sewer overflow/spill, reduces or eliminates public health hazards, prevents unnecessary property damage, and minimizes the inconvenience of service interruptions. This plan provides procedures for City staff to follow in responding to, cleaning up, and reporting SSOs.

##### **2. Safety**

Whenever qualified City personnel respond to a report of an overflow/spill, they may encounter an emergency situation that requires immediate action. The most critical aspect of resolving an incident of this nature is to safely and competently perform the actions necessary to return the system or facility to normal operations as soon as possible.

The most important item to remember during this type of incident is that safe operations always take precedence over expediency or shortcuts.

Upon arrival at an SSO, the Wastewater Duty Person will conduct a hazard assessment to determine potential safety hazards. There is always a possibility that a sewage overflow may contain unknown hazardous waste or chemicals. If a hazardous waste is suspected the responding field crew will immediately request the Fire Department's Hazardous Materials Response Team.

The Wastewater Supervisor should be notified as soon as possible. Personnel shall stay clear of any hazards and secure the area from the public.

Depending on the nature or cause of the SSO, personnel may be required to remove a mainline blockage with a hydro-flusher, repair a damaged section of pipeline, or wash/clean a City street. At this point, it is essential that all standard safety procedures and/or duties are followed as deemed appropriate.

Typical responses may require personnel to implement the following types of safety procedures:

- a) Standard personal protective equipment;
- b) Lock-out/tag-out of equipment for repairs;
- c) Confined space entry procedures;
- d) Traffic control;

- e) Adequate communication via two-way radio and/or cellular telephone.

## **B. Regulatory Requirements**

### **GWDR Requirement**

The collection system agency shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- b) A program to ensure appropriate response to all overflows;
- c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The Sewer System Management Plan should identify the officials who will receive immediate notification;
- d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- f) A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to Waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

## **Sewer System Overflow Response**

### **City of Salinas Overflow Emergency Response Plan**

The City of Salinas has an emergency response plan for the Industrial Waste Water Collection System that addresses all the WDR requirements. A copy of the plan is documented on the following pages. This plan is modified from the Sewer Collection System Overflow Emergency Response Plan for the Sanitary Sewer Collection System as an emergency response to overflows from the industrial waste collection system.

## **CITY OF SALINAS, MAINTENANCE SERVICES**

### **SEWER COLLECTION SYSTEM**

# **OVERFLOW EMERGENCY RESPONSE PLAN**

### **Actions to Take In Response to Sewer Overflow, Main Collapse or Pump Station Failure**

The Wastewater Duty Person responding to a sewer backup has the immediate responsibility to protect people, property, and the environment from the effects of a sewage spill overflow. The initial goal in responding to a sanitary sewer overflow is to:

- a) REDUCE or STOP the overflow at its source.
- b) CONTAIN spilling sewage from entering waterways.
- c) CAPTURE the sewage where it can be recovered and returned to the sewer system.
- d) CONTAIN sewage in advantageous locations (i.e., vacant lots, plugged storm system, curb/gutter, etc.) containment materials include sand, sand bags, etc.
- e) CONTROL the spill area and bypass the area if necessary
- f) BYPASS the obstructed line by pumping the spillage into another non-restricted line or vacuum with a VacCon.
- g) CLEANUP the affected public areas to ensure public safety. (The Wastewater Supervisor should be informed of the need for cleaning on private property.)
- h) WASH DOWN and CONTAIN run-off, being careful not to wash sewage into storm drainage system.

To meet these objectives in a rapid, effective, and organized manner, staff will respond and fulfill the duties in the following categories as directed by this plan.

1. Notification of an overflow, break or occlusion in a trunk or sewer line of the Salinas Sewer Collections System can be received by City personnel in the following manner:
  - a) Phone call to Monterey County Dispatch Center from citizen or agency that then notifies City personnel.
  - b) City personnel observe defect in line or physical indicators of possible problems. (Sinkhole, cave-in, debris in line, inappropriate odor, flow blockage, surcharged manhole, etc.)

- c) Other agencies note discrepancies in water or air quality and contact City to alert them of possible problems within the collection system.
2. If notification comes from a knowledgeable source, (trained personnel or observer) the person receiving call notifies proper supervision, management and engineering staff. If the call comes from an *unknown or untrained source the person receiving the call will immediately initiate an on-site* inspection before implementing this plan.
  3. A sanitary sewer overflow or collapse or occlusion of a major sewer line constitutes a real or potential emergency and shall be treated as such by City staff. The process to be followed for procurement of the staff, equipment, and resources necessary to restore normal service are outlined in the City's Emergency Plan. The organization created to deal with the emergency/event will utilize established Incident Command System (ICS) procedures as outlined in the plan.

Priority of actions shall be based on the following considerations, in the following order:

- a) Preservation of life for those in immediate danger.
  - b) Treatment and transport of life-threatening injuries
  - c) Treatment and transport, as needed, of lesser-injured persons.
  - d) Reduction of real, or potential, life-threatening events.
  - e) Protection of community as a whole from immediate threat including providing traffic and crowd control as needed.
  - f) Preservation of property and equipment from immediate loss and/or further damage.
  - g) Restoration of essential facilities, systems and services.
  - h) Utilization of appropriate resources to reduce, repair, or contain hazards from, and damage to, the collection system.
4. Containment of the effluent
    - a) Contain the sewage flow as close to the overflow location as possible.
    - b) Shore exposed cave-in/break areas to stop continued debris entry into the collection system and possible contamination of the M1W Pump Station.
    - c) If any effluent escapes containment and flows onto a street, property, and/or enters a stormdrain or drainage system, that area should be sealed off in a perimeter large enough to prevent any errant sewage flows from leaking to adjacent areas or from continuing downstream in the storm water drainage system.
    - d) If practicable build a temporary berm across the channel or affected drainage system to trap any leakage from around the upstream seal, as necessary.
  5. Remove any occluding debris. Shoring should be used as needed to prevent further collapse of trench walls, damaged pipe, and/or flow-caused erosion of surrounding surface areas.
  6. Restore minimal service flows by trenching, temporary piping, diversion, and/or above ground piping, as needed and as appropriate for the situation
  7. Remove contaminated water that has escaped the collection system and place it back in the system at a suitable location. This can be accomplished by trenching, temporary piping, diversion, and/or above ground piping, as needed and as appropriate for the situation.
  8. Protect site from intrusion and/or accidental entry of unauthorized persons using appropriate barricades, caution tape, plating, and fencing as needed. Provide 24-hour security for pumps and maintain a watch for possible additional collapses, as needed.

9. Monitor water/air quality through the use of accepted testing equipment and methods that are appropriate for the situation. Maintain a log of all testing.
10. Document activities, procedures, and personnel using applicable forms and charts. This documentation can be useful for tracking and controlling emergency and restoration activities, economic recovery, future analysis of incident operations, updates, reports and potential future litigation.
11. Maintain public and agency information updates as necessary or as required. Depending on the size and severity of the incident, a Public Information Officer can be appointed to deal with multiple levels of information dissemination.
12. Identify causes that led to, or contributed to, the system failure. Visual and technical inspection, employing staff and other professional services, should be utilized according to the uncertainty of causation and/or current condition of the collection system.
13. Plan permanent repairs based on the identified causes and condition of the system.
14. Effect repairs in a timely fashion, according to the above priorities and utilization of available resources. During, or after, the repair/replacement project, sever and stabilize any old abandoned pipe systems.
15. Clean up and sanitize impacted areas and facilities using appropriate methodology. Flush out any contaminated storm drain system and dispose of wash water in sanitary sewer system before placing storm drain back in service.
16. Where practicable, if sanitary sewer overflows should reach receiving waters (Salinas River, creeks, Reclamation Ditch) where complete recovery is not practical and will cause severe oxygen depletion of existing surface waters, use portable aerators to temporarily oxygenate surface waters.
17. Review incident and causation events and identify any preventative steps that could avert future occurrences.
18. Complete all regulated and required reports and updates in a timely fashion, as needed.

### **Ensuring Timeliness of Response**

The City of Salinas, Maintenance Services Department, provides 24-hour on-call personnel that are trained to respond to all types of emergencies, including sewer overflows and main line collapses. This on-call list is furnished to and can be accessed through Monterey County Communications. When overflow situations arise, whether through system collapse, blockage, or station failure, early detection is the prime method for fast response, quick resolution, and reduction of excessive damage.

The City has a hotline system to direct potential health, safety and environmental issues, such as overflows, to responsible City staff as well as other associated agencies. The hotline is active all week, including weekends, ensuring that appropriate staff is notified immediately. The City has coordinated with the City police department to establish an appropriate means to relay information. The City has a central dispatcher who is trained on specific issues, including overflows, and has an easy-to-use contact flipbook. The City also has two back-up dispatchers.

Overflows or other emergency spill incidents reported via the hotline or directly by City crews are forwarded to the City's Incident Command System (ICS). The ICS is a network through which selected City staff coordinates emergency response actions.

Personnel call lists and 24-hour call-out and response procedures are in place. The City's on-call personnel have the necessary communications equipment for additional contact of City personnel, as needed, up to and including the declaration of a local emergency.

The declaration of a local emergency, or a request for limited/partial activation by Maintenance Services staff, triggers the City's **Emergency Plan**. This plan, based on the **City of Salinas Multi-Hazard Plan (9/86)**, provides the structure and authority for the processes necessary to focus all available resources, up to and including the Federal Emergency Management Agency's (FEMA), to resolve the emergency and protect lives and property. The activation of the plan, implementation of the ICS process, and successful resolution of multiple breaks in the Kipling 27" sewer trunk line (10/3/97 to 10/13/97) has validated the effectiveness of this strategy when used for response to a major sewer line failure.

The City maintains 24-hour contact numbers with local or regional firms that will respond, 24-hours a day, with equipment, personnel, supplies, and materials, as needed.

### **Catastrophic System Overflow – Bypass Preparation and Response**

The M1W, by mutual agreement with the City constructed an overflow valve that would allow the diversion of industrial waste flows to the M1W sanitary sewer pump station at 153 Hitchcock Road. In the event of a catastrophic failure of the industrial waste pipeline between Hitchcock Road and the Industrial Waste Treatment Facility at 240 Davis Road the industrial waste flows can be diverted to the M1W pump station. The diversion could also serve in a catastrophic event that limits the Treatment Facilities ability to accept additional flows. The M1W and the City of Salinas have established protocols for implementing the diversion process. In any event, the issues are the reduction or elimination of waste water/debris flow to the environment and eventually to a storm drain or waterway, containment of overflow, restoration of service, and cleanup. The same actions would be undertaken as described for response to a sewer overflow.

In the event of a catastrophic pipeline failure, the collapse area must be located, isolated and by-passed for repair and/or safety. The by-pass pumping can be accomplished by breaking into the line above the collapse or by using the next upstream manhole. Shoring will be required to stop the erosion of the trench sides and provide safety for workers during repairs. The overland piping will go to another industrial wastewater manhole structure for pumping back into the industrial system or with permission from the M1W the discharge may be placed into a manhole into the sanitary sewer system.

If the upstream collapse has allowed an overflow of industrial process water to surrounding surface area, the escaping effluent should be contained and pumped back into the system. The primary response to any overflow should be to keep the effluent out of occupied property and the stormdrain system. Should the effluent reach either location, a potential hazard exists and should be treated as so. Although industrial wastewater does not have the same environmental impacts or threats to public health as untreated sanitary sewer effluent, in the event the stormdrain is impacted, every effort should be made to isolate the effluent and keep it from flowing downstream and contaminating the system. This may not be a viable option during wet weather. Either way, proper notification and consultation of authorities shall proceed as required.

### **Available Equipment to Handle Overflows**

The City owns the necessary equipment to respond to most overflow situations. This equipment includes vacuum trucks, hydroflushers, pumps, temporary bypass hoses, portable generators, and containment and

cleanup materials. The City also maintains files, 24-hr contacts, with contractors and businesses that can be called in response to a major event.

### **Training Regarding Emergency Response Plan**

Long-term senior experienced City staff provides in-house training regarding the Overflow Emergency Response Plan by means of “tail-gate” training sessions and on-the-job training. The tailgate training sessions include background on the requirements, response and clean-up procedures, reporting and monitoring procedures, and safety issues. New employees receive on-the-job training as part of a response team supervised by an experienced senior staff person.

## **NOTIFICATION PROCEDURES**

As part of the implementation process, notification of impacted agencies and citizens will be accomplished in a timely manner as possible.

### **Public Notification**

Public notification is required when an SSO poses a threat to public health or the environment. Although an industrial waste discharge does not pose a public health threat the City will follow County Health Department guidelines as the lead agency following an industrial wastewater overflow. The notification methods are described in the following sections.

Creeks, streams, and beaches that have been contaminated as a result of an SSO should be posted at visible locations until the risk of contamination has subsided to acceptable background levels. The Environmental Safety Section will make this determination. The warning signs should be checked every day to ensure they are still in place.

Posting signs and barricades may be necessary to keep vehicles and pedestrians away from spilled sewage. Posting should be done at the direction of the Wastewater Supervisor or Monterey County Health Department. Post the warning signs and block access to the contaminated water areas with yellow “Caution” tape and barricades if necessary. Do not remove these until directed.

In the event the overflow occurs at night, the location should be inspected as soon as possible the following day. The site should be inspected for any signs of sewer-related debris/material that may warrant additional cleanup activities.

Major spills may warrant broader public notice. Local media may need to be notified when significant areas may have been contaminated by sewage. The Wastewater Supervisor will notify the Wastewater Manager, Environmental Safety Section, Assistant Public Works Director, Public Works Director, and OES Coordinator in the event of a major SSO.

### **a. Responder Documentation**

This section will explain documentation requirements when responding to an SSO.

The Wastewater Duty Person must complete a Wastewater Sanitary Sewer Overflow Report to record basic information for all Wastewater calls. When an SSO occurs, the sanitary sewer overflow section must be completed. If additional space is needed to explain the incident, attach a separate letter.

The information provided on the form will be used to file an SSO Report with the State Water Resources Control Board and the California Regional Water Quality Control Board.

If needed, for potential litigation or estimating quantity of spill or environmental impacts, take pictures of the spill. If property damage is suspected inside a building or residence, the Wastewater Duty Person and

Wastewater Supervisor will request permission to enter and take pictures. Ask the resident to identify the damage and document with pictures. If you are denied entry, note this on the report.

Use methods outlined in SSMP Appendices, Appendix B, to estimate the volume of the spilled sewage.

Whenever possible, if there is a need to photo document the SSO site, take photos before the recovery operation.

When the cleanup has been completed, document the volume of sewage recovered. In most cases you will have to estimate.

## **b. SSO Investigation**

All SSOs should be investigated by the Wastewater Supervisor to determine the cause of the overflow. This information will determine if additional maintenance is needed or a repair/replacement is required; all records are maintained at the Wastewater Division offices at the Maintenance Services Department Corporation Yard located at 426 Work Street, Salinas, CA 93901.

The procedures for investigating the SSO are:

- Review the incident/overflow report;
- Interview responding crew members;
- Review past maintenance records;
- Review past CCTV records if available;
- Conduct CCTV inspection if necessary;
- Evaluate all information and determine necessary course of action to avoid future SSOs; and
- Document results of investigation and course of action.

## **c. Post SSO Debriefing**

Every SSO is an opportunity to thoroughly evaluate response and reporting procedures. Each overflow event is unique, with its own elements and challenges that might include volume, location terrain, and other parameters.

As soon as possible after major SSO events, all of the participants – from the person who received the call to the last person to leave the site – should meet to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future SSO events.

## **d. SSO Categories**

The California State Water Resources Control Board (SWRCB) has established guidelines for classifying and reporting SSOs. These guidelines are established by the State Water Resources Control Board Monitoring and Reporting Program No. 2006-0003-DWQ (as revised by Order No. WQ 2008-0002.EXEC) Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. Reporting and documentation requirements vary based on the type of SSO.

There are three categories of SSOs as defined by the SWRCB<sup>1</sup>:

**Category 1** - All discharges of sewage resulting from a failure in the City's sanitary sewer system that:

- A. Equal or exceed 1,000 gallons; or
- B. Result in a discharge to a drainage channel and/or surface water; or

- C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

**Category 2** - All other discharges of sewage resulting from a failure in the City's sanitary sewer system.

*Private Lateral Sewage Discharges* - Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.

## SSO Documentation and Reporting

All SSOs should be thoroughly investigated and documented for use in managing the sewer system and meeting established reporting requirements. The procedures for investigating and documenting SSOs are:

### 1. Internal SSO Reporting Procedures

- a) The Wastewater Duty Person or the Wastewater Supervisor will fill out the Sanitary Sewer Overflow Report.
- b) The Wastewater Supervisor will notify the Wastewater Manager.
- c) The Wastewater Supervisor will investigate the SSO to insure accuracy of reported information.
- d) The SSO will be entered in the Statewide Electronic Reporting Database.

### Category 1 SSOs

- a) The Wastewater Duty Person will immediately notify the Wastewater Supervisor or Wastewater Manager.
- b) The Wastewater Supervisor will notify the Environmental and Maintenance Services Director
- c) The Wastewater Duty Person or the Wastewater Supervisor will fill out the Sanitary Sewer Overflow Report and turn it in to the Wastewater Manager.
- d) The Wastewater Supervisor will meet with field crew(s) at the site of the SSO event to assess the situation and to document the conditions.
- e) The Wastewater Supervisor will investigate the SSO to determine cause and appropriate follow-up actions.

### 2. External SSO Reporting Procedures

The California Integrated Water Quality System (CIWQS) electronic reporting system should be used for reporting SSO information to the SWRCB whenever possible. A flow chart is included as Figure VI-5 showing the external reporting response requirements based on the type of SSO.

#### **Category 1 SSOs that reach Waters of the State**

If a Category 1 SSO results in a discharge to waters of the State (a drainage channel or surface water, if not fully recovered), the following reporting requirements apply:

1. **Within two hours** of being notified of the spill event, the Wastewater Supervisor will:  
Notify the CCRWQCB by phone or through use of the CIWQS Electronic Reporting System,  
Notify OES (and obtain spill number for use in other reports), and  
Notify the Monterey County Health Services Agency (County Health)
2. **Within 24 hours** of being notified of the spill event, the Wastewater Manager will certify to the CCRWQCB that OES and County Health were notified.

3. **Within 3 business days** of being notified of the spill event, the Wastewater Manager will certify the initial report using CIWQS.
4. **Within 15 calendar days** of the conclusion of SSO response and remediation, the Wastewater Manager or Environmental and Maintenance Services Director will certify the final report using CIWQS.
5. The Wastewater Manager or Environmental and Maintenance Services Director will update the certified report as new or changed information becomes available. The updates can be submitted at any time and must be certified by the Wastewater Manager or Environmental and Maintenance Services Director.
6. **Within 72 hours** the Wastewater Manager will submit a letter to the Central Coast Water Board certifying that all appropriate agencies were notified of the Category 1 SSO.

### **Category 2 SSOs**

1. Within 30 calendar days after the end of the calendar month in which the SSO occurs, the Wastewater Manager or Environmental and Maintenance Services Director will submit an electronic report using CIWQS. Wastewater Manager or Environmental and Maintenance Services Director will certify the report. The report will include the information to meet the GWDR requirements.

#### *c. Private Lateral Sewage Discharges*

The Wastewater Manager or Environmental and Maintenance Services Director may report private lateral SSOs using CIWQS at the City's discretion, specifying that the sewage discharge occurred and was caused by a private lateral and identifying the responsible party (other than the City), if known.

#### *d. No Spill Certification (Monthly)*

Within 30 calendar days after the end of each calendar month, if there are no SSOs during the calendar month, the Wastewater Manager or Environmental and Maintenance Services Director will submit an electronic report and certify that the City did not have any SSOs.

#### *e. CIWQS Not Available*

In the event that CIWQS is not available, the Wastewater Manager will fax all required information to the CCRWQCB office in accordance with the time schedules identified above. In such event, the City will submit the appropriate reports using CIWQS as soon as practical.

## **SSO Recovery and Cleanup Procedures**

This section provides guidelines and procedures for cleaning and disinfecting the area contaminated by a sanitary sewer overflow.

### **1. SSO on Public Property**

To minimize health affects to the public and to protect the environment:

- a) Start cleaning the wastewater spill area as soon as possible.
- b) Secure the affected area with cones, barricades, caution tape, etc.
- c) Take pictures to document the overflow if the overflow causes environmental or property damage.

- d) Inspect the storm drain catch basins to determine whether wastewater has entered the storm system and to what extent.
- e) If necessary, install plugs, sandbags, sand/rock, etc. to contain the sewage. Flush the area with water and vacuum up all liquid and/or pump it back into the collection system.
- f) Remove all debris found in the spill area.
- g) If a disinfectant is used, it must be collected and deposited in the collection system.
- h) Thoroughly inspect the spill area before you leave.

## **2. SSO on Private Property**

- a) City crews may work on private property if immediate public health or safety concerns are determined or if responsible persons for the private property are unable to mitigate the overflow to prevent movement from the private property to a public drain or provide for adequate cleanup.
- b) Cleaning on private property (outside) may be necessary when there is potential danger to the general public or public stormwater drainage system. An example would be an overflow in a public parking lot, school, apartment complex or private property.
- c) If an SSO results in flooding/damage inside a building or residence, advise the owner/occupant to call a professional cleaning service for cleaning, sanitizing, placing of blowers and/or dehumidifiers. Do not recommend specific contractors or companies.
- d) If it is necessary to perform an SSO cleanup on private property, follow the same procedure used for public property.

## **3. SSOs that reach Surface Water**

- a) If an SSO is confirmed to have entered a creek or waterway, determine the extent of the SSO:
- b) It must be determined if the creek or waterway is safe to enter. During the winter storm season, cleaning the creek or waterway may not be possible due to high water flows.
- c) Cleaning a waterbody can be very difficult. If a cleanup is determined get plenty of help; contact additional Wastewater crewmembers if necessary.
- d) If possible, block the creek downstream of the contaminated flow based on visual evidence. Block the creek in an area that is safe to enter and is accessible to pumps and/or hydro/vac truck. Pump or vacuum contamination from creek and return it to collection system.
- e) As soon as possible, contact the Wastewater Supervisor who will notify required State agencies. Post public SSO spill signs and sample the creek. Follow-up sampling will also be required.

## **Water Quality Sampling and Testing**

Water quality sampling and testing is required whenever spilled sewage enters a body of water to determine the extent and impact of the SSO. However, the characteristics of industrial process water do not present the same water sampling requirements as a sanitary sewer overflow. The water quality sampling procedures are listed below:

- a) Field test for ph and chlorine residual.
- b) The Wastewater Duty Person should notify the Wastewater Supervisor and/or Monterey County Health Department to determine if the collection of samples is needed. Samples should be collected as soon as possible after the discovery of the overflow event.

- c) Only take samples when it is safe to do so. Do not enter a confined space area or collect samples during hours of darkness without adequate lighting or physical access.
- d) The water quality samples should be collected from upstream and downstream of the spill (e.g. creeks). The water quality samples should be collected near the point of entry of the spill and 100 feet above and below the point of discharge. Additional sampling may be required dependant on the assessment of the affected area.
- e) The Monterey County Health Department will be the lead agency to determine posting requirements as a discharge of industrial process water does not present a hazard to public health.

## Documentation

### Internal SSO Documentation

#### a) *Category 1 and 2 SSOs*

- The Wastewater Duty Person will complete a work order and the Wastewater Service Call Report and provide copies to Wastewater Supervisor.
- The Wastewater Supervisor will prepare a file for each individual SSO. The file should include the following information:

Initial service call information

Wastewater Service Call Report form

Copies of the CIWQS report forms

Volume estimate

Failure analysis investigation results (Cause of SSO)

#### b) The following are optional for Category 2 SSOs:

Appropriate maps showing the spill location

Photographs of spill location (if taken)

Water quality sampling and test results, if applicable

#### c) *Private Lateral SSOs*

The Wastewater Duty Person or Wastewater Supervisor will complete the Wastewater SSO Report and maintain electronic copy. A separate file will be prepared for each individual SSO, at the Wastewater Supervisor's discretion. The file should include any relevant information from the above list.

### External SSO Record Keeping Requirements

The GWDR requires that individual SSO records be maintained by the City for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer.

- All records shall be made available for review upon State or Regional Water Board staff's request.
- Records shall be retained for all SSOs, including but not limited to the following when applicable:
- Record of Certified report;
- Service call records and complaint logs of calls received by the City;
- SSO calls;

- SSO records;
- Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
- Work orders, work completed, and any other maintenance records from the previous five years which are associated with responses and investigations of system problems related to SSOs;
- Documentation of performance and implementation measures for the previous five years.
- If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the City or its agent(s), as a result of any SSO, records of monitoring information shall include:

The date, exact place, and time of sampling or measurements;

The individual(s) or laboratory that performed the sampling or measurements;

The date(s) analyses were performed;

The individual(s) or laboratory that performed the analyses;

The analytical technique or method used; and

The results of such analyses.

## Equipment

This section provides a list of City-specialized equipment required to support this SSORP.

### ***Vector type hydro/vac Truck***

A hydro/vac truck is required to clear blockages in gravity sewers and to vacuum up spilled sewage. The truck can also be used for wash down and cleanup.

### ***Pump and Hoses***

The City maintains a towable six-inch pump to pump spilled sewage and/or contaminated water back into the sewer system or for emergency bypass of lift stations.

### ***Street Sweeper***

A street sweeper may be used to assist in the cleanup of roadways and parking lots.

### ***Closed Circuit Television (CCTV) Inspection Unit***

The City has a CCTV Inspection Unit to determine internal pipeline problems from gravity sewers. CCTV inspection services can be provided by a contractor.

### **Emergency Response Truck(s)/Trailer**

Pickup trucks to store and transport equipment needed to effectively respond to sewer emergencies.

### ***Photographic Equipment***

A digital, instant, or disposable camera to record SSO conditions (If needed).

### ***GPS/or Internet Mapping Software***

Global Positioning is required to determine the coordinates of spills for use in meeting SWRCB SSO reporting requirements. Currently the City uses Google Earth for GIS positioning information.

## Training

This section provides information on the training that is required to support this SSORP.

## **1. Initial and Annual Refresher Training**

All Wastewater Division personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow should receive training. All new employees should receive training before they are placed in a position where they may have to respond. Current employees should receive annual refresher training on this plan and the procedures to be followed.

## **2. Record Keeping**

Records shall be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event should include date, time, place, content, name of trainer(s), and names of attendees.

## **Sewer Backup Claims Procedures**

It is the responsibility of the City of Salinas staff to gather information regarding the incident. The Wastewater Crew Supervisor or the Wastewater Manager are responsible for a department response to a filed claim, all information will be forwarded to the Risk Management Analyst or to the requesting party.

In the event of personal injury or property damage in which the owner/occupant feels the City is responsible, staff will inform the owner/occupant that a claim form may be obtained at the City Clerk's Office.

The claim form must be completed in its entirety and the claim form must be returned to the City Clerk's Office located on the first floor of City Hall at 200 Lincoln Avenue, Salinas, Ca.

Once the City receives a completed claim form, the City will investigate the claim.

Any and all questions concerning a claim, or the claims process should be directed to the City Clerk or the Risk Benefits Analyst.

Some suggested guidelines for customer relations can be found in SSMP Appendices, Appendix B.

# **Sewer System Management Plan**

## **Section VII - FOG Control Program**

### **A. Introduction**

This section of the SSMP presents the results of an evaluation of the extent and nature of SSOs related to Fats, Oils, and Grease (FOG), the need for a FOG Control Program, and outlines the elements of the City's FOG Control Program.

### **B. Regulatory Requirements for FOG Control Section**

The requirements for the FOG Control section of the SSMP are:

#### ***GWDR Requirement***

The collection system agency shall evaluate its service area to determine whether a FOG control program is needed. If the collection system agency determines that a FOG program is not needed, the collection system agency must provide justification for why it is not needed. If FOG is found to be a problem, the collection system agency must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. The FOG source control program shall include the following as appropriate:

- a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- b) A plan and schedule for the disposal of FOG 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 FOG generated within a sanitary sewer system service area;
- c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, best management practices (BMP) requirements, record keeping and reporting requirements;
- e) Authority to inspect grease producing facilities, enforcement authorities, and determination of whether the collection system agency has sufficient staff to inspect and enforce the FOG ordinance;
- f) An identification of sewer system sections subject to FOG blockages and the establishment of a cleaning maintenance schedule for each section; and
- g) Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified in (f) above.

### **City Determination That A Fog Program Is Not Required.**

The Cities industrial waste collection system has neither historically nor currently had Fats, oils or grease issues within its collection system. Most of the IWF users are fresh vegetable processors, packers, and coolers. Included in this group are the fresh-pack salad producers that continue to be the fastest growing segment of the City's users. Chlorinated effluent, ammonia refrigerant, solids, and hydraulic oil spills typify the potential concerns with their wastewater discharge. Two box companies comprise the next group of users. These companies manufacture corrugated cardboard containers using pre-fabricated rolled paper and use ink and waxes in the process of labeling and finishing the boxes. Control of heavy metals, hydraulic oil spills, wax and starch spills, high TDS, varying pH and slug discharges are potential concerns from this group.

*Monterey Fish Company* is the sole processor of seafood at one facility. Squid, herring, crab and shrimp are among the products prepared at this facility. From this seafood group, the City specifically monitors BOD, screening and sanitation. Although oils from fish processing present a potential concern, the oils, if any, do not present an issue for buildup in the collection system. Due to the small percentage of flow from this facility this user does not present a fats oils or grease source control problem for the collection system. Monterey Fish Company accounted for less .0085 percent of the annual flow to the industrial waste system in 2008. There are no fats or grease discharged from the facility.

A FOG program is not indicated with the current industrial waste dischargers group.

# **Sewer System Management Plan Industrial Wastewater Collection System Section VIII - System Evaluation and Capacity Assurance Plan**

## **A. Introduction**

This section of the SSMP formally states the System Evaluation and Capacity Assurance Plan.

## **B. Regulatory Requirements for System Evaluation and Capacity Assurance Section**

The summarized requirements for the System Evaluation and Capacity Assurance section of the SSMP are:

### **GWDR Requirements**

The SSO-WDR requirements for the System Evaluation and Capacity Assurance Plan include the following:

The Enrollee shall prepare and implement a capital improvement plan that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- a) Evaluation – Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system limiting capacity) and the major sources that contribute to the peak flows associated with overflow events.
- b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria.
- c) Capacity Enhancement Measures – The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe sizes, I/I reduction, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- d) Schedule – The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a) – (c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements.

## **Evaluation of Industrial Sewer System (Item a)**

### **Overview and Background**

The City of Salinas IWTF is located south of the City adjacent to the Salinas River. It treats industrial wastewater discharges from industrial customers located in the southeastern part of the City. The industrial

wastewater is conveyed from customer sites to the industrial treatment facility by the City's industrial sewer system. This chapter addresses the industrial sewer system.

The industrial sewer system is completely separate from the sanitary (domestic) sewer system. All sanitary (domestic) wastewater is collected in a separate sanitary sewer system and conveyed to the MIW RTP located north of Marina. A separate Sanitary Sewer Management Plan addresses the sanitary sewer system.

The City has conducted several studies over the past years to evaluate capacity needs in the industrial sewer system. These studies include:

- “Relocation Feasibility Study for Industrial Wastewater Treatment Facility”, prepared for City of Salinas by CDM, December 2001.
- “Industrial Wastewater Main Line Capacity Analysis”, prepared for City of Salinas by C&D (Creegan & D’Angelo) Consulting Engineers, November 2003.
- “Recommended Capital Improvement Program for Industrial Wastewater Treatment Facility”, prepared for City of Salinas by CDM, June 2004.
- “Industrial Wastewater System – Conceptual Approach for System Expansion”, Summary Report prepared for City of Salinas by CDM, July 2008.
- “Industrial Waste Conveyance System Study”, prepared for the City of Salinas by Wood Rodgers, December 2008.

### **Existing Industrial Sewer System**

The major industrial sewer conveyance system consists of approximately 24,000 feet of 20-, 27-, 33-, 36- and 42-inch reinforced concrete and HDPE pipe. The pipeline system conveys industrial flows from the customer locations to the industrial wastewater plant.

The 27-inch pipe originates where Sanborn Road crosses over the railroad tracks, passes through a 60-foot long inverted siphon at the Abbott Street and East Blanco Road intersection, and then continues downstream for about 1600 feet where it intersects the east 27-inch trunk line. From there, it continues for an additional 2600 feet before it enters the 36-inch pipeline near the intersection of East Blanco Road and La Mesa Way.

The 36-inch pipeline then drains to and through the former Salinas wastewater treatment plant site (TP1 site). At that point, it discharges into a new 42-inch HDPE pipeline that flows southerly to the IWTF.

### **Industrial Wastewater Flow Projections**

The industrial customers are primarily food processing and related businesses. Many customers conduct fresh vegetable packing operations. Some customers provide related services such as manufactured ice, refrigerated warehousing, and corrugated and solid fiber boxes.

The industrial wastewater facility operates year-round. However, different from a sanitary sewer system, the industrial sewer flows are lower in the winter because some customers, particularly fresh vegetable packing and cooling facilities, move their operations to warmer southern locations. A few industries remain open year-round.

The industrial system must be able to accommodate the flows during the high use periods, which occur during the summer peak growing/harvesting season. The treatment facility must be able to treat the average monthly flow during the high use periods and have peaking ability to accommodate the high day flows. The conveyance system from customers to the treatment facility must accommodate the high day (peak) flow.

Table 1 summarizes the total projected flows for the existing, immediate (by 2020), near-term (2021-2025), and ultimate timeframes. The City expects new customer locations will be added to the system in the future and is planning accordingly. Additional future flows will actually be phased in according to actual development schedules.

The average daily and peak daily flows are important for treatment facility design. The estimated instantaneous peak flows are short duration, e.g., 15–minute to hourly peaks, that are used in evaluating pipeline conveyance needs.

<b>Timeframe (approximate, will be based on actual development needs)</b>	<b>Total Estimated Flows during High Use Periods (mgd)</b>		
	<b>Average Daily (during high use periods)</b>	<b>High (Peak) Day (at 1.25 times Average Daily Flow) (1)</b>	<b>Instantaneous Peak Flow (at 1.5 times Average Daily Flow) (2)</b>
Existing	3.1	3.9	4.7
Immediate (by 2020)	4.3	5.4	6.5
Near-Term (anticipated to occur around 2021-2025)	6.0	7.5	9.0
Ultimate	8.0 – 10.0	10.0 – 12.5	12.0 – 15.0

(1) Average daily and peak daily flows are important for treatment facility design.

(2) Estimated instantaneous peak flows are short duration, e.g., 15-minute or hourly, peaks that may also impact conveyance system design.

## Capacity Evaluation

Table 2 shows the maximum capacities of the major existing conveyance pipelines, according to the previous hydraulic analysis of the major industrial wastewater pipeline system<sup>1</sup>. The three segments with the lowest capacity, about 5.6-5.9 mgd, are due to flat slope relative to the pipe diameter.

The instantaneous peak flow projections shown in Table 1 were compared with the design capacity of the existing system to determine requirements for additional facility capacity. Then, as discussed below under “Capacity Enhancement Measures”, recommendations were developed for future improvements to accommodate the projected flows.

Based on the hydraulic evaluation, the existing major conveyance system is adequate to meet estimated peak flows for immediate needs. Some additional capacity will be required for near-term and ultimate needs.

<sup>1</sup> Pipeline capacity analysis information obtained from “Industrial Waste Main Line Capacity Analysis” prepared for City of Salinas by C&D (Creegan & DiAngelo) Consulting Engineers, November 2003.

The reinforced concrete pipe (RCP) from its upstream end at Sanborn Road to the TP1 site is in good condition for its age. With one segment having been replaced with 36-inch HDPE along Blanco Road. While the 42-inch pipe that conveys flow from the TP1 site to the industrial treatment facility is new and replaced a badly deteriorated 33-inch line.

**Table 2**  
**Current Capacities of Existing Major Industrial Sewer Conveyance Facilities <sup>(1)</sup>**

<b>Conveyance Reach (upstream to downstream)</b>	<b>Length of Segment (feet)</b>	<b>Diameter (inches)</b>	<b>Capacity (mgd)</b>
Upstream end of 27-inch main line at Sanborn Road and railroad to Abbott Street (connection point for flows from tributary pipelines)	50	27	12.7
	70	27	5.9
Between railroad and Abbott Street	840	27	9.5
	500	27	7.0
	60 (siphon at Abbott)	27	7.0
Between Abbott Street and connection point for flows from tributary pipelines (East Blanco Dr near end of Blanco Circle)	1620	27	7.0
Between connection point for tributary pipeline on East Blanco Drive (near end of Blanco Circle) and start of 36-inch pipe in East Blanco Dr	840	24	8.1
	2300	36	Assumed greater than 5.7, Engineer's estimate needed
East Blanco Drive just east of La Mesa Way to Stephanie Drive	4955	36	15.7
Stephanie Drive	850	36	14.9
	500	36	15.7
Between Stephanie Drive and TP1 Site	5210	36	14.1
At TP1 Site	405	36	16.0
	1290	36	8.8
From TP1 Site to Hitchcock Road	2000	42	Assumed greater than 5.6, Engineer's estimate needed
From Hitchcock Road to Treatment Facility	7450	42	Assumed greater than 10.9, Engineer's estimate needed

<sup>(1)</sup> Pipeline capacity analysis information obtained from "Industrial Waste Main Line Capacity Analysis" prepared for City of Salinas by C&D (Creegan & DiAngelo) Consulting Engineers, November 2003.

## Design Criteria (Item b)

Chapter 36 "Industrial Waste, Wastewater Collection and Discharge" of the City's Municipal Code specifies the requirements for discharge to the City's industrial wastewater system. These requirements are applicable to existing and new customers of the industrial wastewater system.

As discussed above regarding the system evaluation, the existing IWWCS was evaluated for its adequacy to convey existing and future peak flows to the IWTF. The estimated instantaneous peak flows are short duration, e.g., 15-minute to hourly peaks, are used in evaluating and designing pipeline conveyance needs.

Unlike the sanitary sewer system, the peak flows for the industrial wastewater system occur during the summer peak growing season months. Winter rainfall (RDII) is not an issue for capacity of the IWWCS, as industrial wastewater flows are very low in the winter months. During the period with high industrial wastewater discharges, there is no or negligible rainfall.

The hydraulic criteria evaluated the pipes adequacy to handle the projected flows without surcharge, i.e., flowing full but no surcharge based on Manning's equation. Those pipes without adequate capacity to meet the criteria have been identified for improvement.

The City's Standard Specifications (current version) specify the requirements for sewer pipe materials, installation methods, and testing for new sewer improvements.

## **Capacity Enhancement Measures (Item c)**

The July 2008 Summary Report "*Conceptual Approach for Industrial Wastewater System Expansion*" lays out a plan of action for future steps to be undertaken by the City to assure adequate capacity in the industrial wastewater system for existing and future users. The Summary Report addresses the following three major issues at a conceptual planning or "feasibility" level:

- Conceptual plan for industrial waste system facilities – feasible overall approach to meet future capacity needs.
- Conceptual phasing for plan implementation, and conceptual "order-of-magnitude" cost estimates.
- Conceptual identification of potential alternative funding methods.

The Summary Report identifies near-term and ultimate needs while providing a feasible framework for meeting those needs. It is not intended to provide detailed information on specific designs to provide additional capacity. The City will conduct subsequent detailed evaluations to adequately select, design and implement the improvements, including environmental review.

Below is a summary of the recommended capacity enhancement measures. These measures are prioritized for implementation by the timeframe needed.

### **Immediate Needs to 2020**

The City's industrial wastewater system will require some improvements in order to meet estimated immediate needs. The Industrial Lift Station located at the south end of Airport Boulevard near Hansen Street will require increased capacity to accommodate any additional flows upstream. However, the major industrial pipeline system has adequate capacity for estimated peak flows. Some system redundancy is provided by the Industrial Wastewater Diversion Project which consists of a shunt/bypass to the M1W sanitary sewer system installed at the TP1 site. M1W's Salinas Sanitary Sewage Pump Station is located at the TP1 site which conveys sanitary wastewater from the City to the RTP operated by M1W. The Industrial Wastewater Diversion Project was completed in 2016. This project also included construction of an emergency wastewater bypass system to allow mixed wastewaters to flow to the IWTF instead of to the Salinas River in the event of a catastrophic failure at the M1W Salinas Pump Station.

## Near-Term Needs

The near-term timeframe is anticipated to occur sometime from 2021 to 2025, or longer, whenever discharge during high use months increase by 2 mgd on an average daily basis. Recommended near-term improvements were implemented to provide additional capacity for future flows from new customers. However additional studies may be necessary to determine if other improvements are required.

In the near-term timeframe, the majority of additional future flows from future customers are expected to enter the existing major conveyance system at the 36-inch tributary pipeline located at East Blanco Road and Blanco Circle. Upstream of this 36-inch tributary pipeline, the existing minimum capacity is 7 mgd with the exception of a short 70-foot hydraulic bottleneck at Sanborn Road and the railroad with a capacity of 5.9 mgd. It is anticipated that the existing capacity in the upstream portion will be adequate to handle future needs. If needed, the short hydraulic bottleneck could be improved.

The identification of required improvements assumes that some wastewater flows will be diverted to the RTP from the TP1 site.

In addition, there may be improvements needed to the industrial wastewater laterals that connect from the industry sites to the major conveyance pipeline. It is assumed that these improvements would be done by the individual developers as part of the development plans and may consist of both on-site and some off-site improvements depending on the specific connection locations.

## Ultimate Needs

The improvements identified above for near-term implementation are sized to accommodate the anticipated buildout total instantaneous peak flows of 12 to 15 mgd reaching the TP1 site and treatment facility.

Ultimately, the need for additional pipeline improvements would depend on future additions of industrial customers, and the City’s decisions in the near-term on the appropriate location for additional treatment capacity. This plan will be updated as needed consistent with future updates to the conceptual expansion plan.

## Schedule and Funding for Capacity Improvements (Item D)

Table 3 summarizes the timeframe and estimated capital costs for the conceptual improvements to provide additional capacity in the industrial wastewater system. These order of magnitude costs by timeframe are at a conceptual planning level and are based on previous studies. The costs should be updated and refined as part of subsequent detailed studies to refine and select specific improvement projects.

<i>Item</i>	<i>Estimated Capital Cost (\$ Million, in 2018 dollars)</i>
<b>Immediate Measures (by 2020)</b>	
New Industrial Lift Station at Airport Boulevard	\$2.26
<b>Subtotal for Immediate Measures</b>	<b>\$2.26</b>
<b>GRAND TOTAL FOR ALL PIPELINE IMPROVEMENTS</b>	<b>\$2.26</b>

The City currently funds the industrial wastewater system through a monthly user rate consisting of: a monthly service charge, total flow charge, and an average BOD charge. The rates cover operations and maintenance expenses, capital improvements and past debt service on any outstanding bonds that have been issued for capital improvements.

Capital improvements to provide capacity for future customers also benefit existing customers by improving the overall function of the IWWCS. the existing treatment facility. Potential funding methods to cover the costs of these capital improvements are identified below. The potential funding methods must be further evaluated to determine their applicability. While all the options are feasible, some may be more applicable or more desirable for the specific conditions. It is anticipated that a combination of options will be utilized.

As recommended in the conceptual expansion plan, the City is planning to conduct a detailed financing study to determine the preferred approach and appropriate methods for funding the required improvements for both pipeline conveyance (addressed in this chapter) and for treatment facility expansion. It is anticipated a combination of multiple funding sources will be used. Most of the methods are available only to municipalities or other government agencies; however, there are some that could be utilized by the individual industries.

Grant programs from the EDA Public Works and Economic Development Program, the State Water Resources Control Board and others are preferred funding sources for IWWCS upgrades. If grant funding proves to be unavailable other potential funding options may also include:

- User rates
- Connection fees
- Municipal bonds
- Special assessment districts
- Public/private partnerships
- California Infrastructure and Economic Development Bank: infrastructure state revolving fund program; industrial development bonds
- California State loans and grants: State Revolving Fund (SRF); direct state appropriations
- Federal grants and loans: EDA Public Works and Economic Development Program; direct federal appropriations

The schedule for implementation of future capacity improvements will depend on the available funding and the schedule for future additions and expansion of the IWWCS. As part of its annual budgeting and CIP process, City staff will refine the implementation schedule for specific projects.

As the City refines and implements the “*Conceptual Approach for Industrial Wastewater System Expansion*”, this plan will be updated accordingly.

**Important Note:** In addition to the conceptual analysis presented above an additional study was conducted recently by Wood Rogers Consultants that found similar findings to the Camp Dresser and McKee (CDM) study but provides greater detail regarding system capacity needs for future development and a more detailed estimate of associated costs. A copy of the Wood Rogers study is available upon request at the City’s Maintenance Services Department, 426 Work Street, Salinas, CA 93901.

# **Sewer System Management Plan**

## **Section IX - Measurement, and Program Modifications**

### **A. Introduction**

This section of the SSMP outlines the process that the City will follow to evaluate the effectiveness of the SSMP and to identify updates that may be needed for a more effective program.

### **B. Regulatory Requirements for the Monitoring, Measurement, and Program Modifications Section**

The requirements for the Monitoring, Measurement, and Program Modifications (MMPM) section of the SSMP are:

#### **GWDR Requirement**

The City shall:

- a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- c) Assess the success of the preventative maintenance program;
- d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- e) Identify and illustrate SSO trends, including: frequency, location, and volume.

#### **Performance Measures**

The indicators that the City will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

- Total number of SSOs;
- Number of SSOs by each cause (roots, grease debris, pipe failure, capacity, pump station failures, and other);
- Portion of sewage contained compared to total volume spilled;
- Volume of spilled sewage discharged to surface water; and
- Planned to actual performance for preventive maintenance.

The City's historical, or baseline, performance information dates to a minimum of 1980 for the selected performance measures (see SSMP Appendices, Appendix C). The industrial waste collection system has not historically proven to be subject to pipeline blockages and has not experienced a collection system overflow in the last 30 years. Current trends indicate that the ongoing Management Plan is successful in preventing collection system overflows and impacts to the local environment. The performance data noted above will continue to be monitored and these trends will be reviewed annually to determine that the program continues to be effective and successful in this regard.

#### **Performance Monitoring and Program Changes**

The City will evaluate the performance of its industrial wastewater collection system at least annually using the performance measures identified in Performance Measures, above and include in the program audit. The

City will update the data and analysis in this section at the time of the evaluation, monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP

The City may use other performance measures in its evaluation. The City will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation.

# **Sewer System Management Plan**

## **Section X - Program Audits**

### **A. Introduction**

This section of the SSMP outlines the process that the City will follow to evaluate the effectiveness of the SSMP to identify updates that may be needed for a more effective program.

### **B. Regulatory Requirements for the SSMP Program Audits Section**

#### ***GWDR Requirement***

- a) As part of the SSMP, the City shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the City's compliance with the SSMP requirements identified in this subsection (D.13 [of the GWDR]), including identification of any deficiencies in the SSMP and steps to correct them.

#### **Audits (Item a)**

The City will audit its implementation and compliance with the provisions of this SSMP. Initial Audit will be on a two-year cycle. Calendar Year 2018 will be the first year audited. The Audit Report will be completed by March 30 following the year that was the subject of the audit.

The audit will be conducted by a team consisting of City staff selected from the Maintenance Services Department and the Engineering and Transportation Department.

The scope of the audit will cover each of the major sections of the SSMP.

The results of the audit, including the identification of any deficiencies and the steps taken or planned to correct them, will be included in an Audit Report. The first Audit Report will be completed by March 30, 2019.

#### **SSMP Updates**

The City will determine the need to update its SSMP based on the results of the audit and the performance of its wastewater collection system based on information from the Monitoring and Measuring Program Modifications Section of the SSMP. In the event that the City decides that an update is warranted, the process to complete the update will be identified. The City will complete the update within one year of completion of the audit.

# **Sewer System Management Plan**

## **Section XI - Communication Program**

### **A. Introduction**

This section of the SSMP outlines the process involved in communicating with interested members of the public regarding the development, implementation, and performance of this plan.

### **B. Regulatory Requirements for the Communication Program**

#### **Section**

The requirements for the Communication Program section of the SSMP are:

#### **GWDR Requirement**

- a) The City shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the City as the program is developed and implemented.
- b) The City shall also create a plan of communication with systems that are tributary and/or satellite to the City's sanitary sewer system.

### **Communication during SSMP Development and Implementation (Item a)**

The City entered into the General Statewide SSO Program in April 2008. The City's entry into the program was delayed by the Central Coast Regional Water Quality Control Board as the City already had a Sewer System WDR from the local board. While the CCRWQCB and the SWRCB resolved the issue of rescinding the City's CCRWQCB WDR the City entered into the statewide General Waste Discharge Requirements (GWDR), program one year past the point that the first required elements were due. The Regional Boards representative with CIQWIS was contacted regarding a modified schedule for development of the SSMP however the response was that the schedule for the final SSMP would remain the same. The City's late entry into the GWDR resulted in a significantly shortened schedule for SSMP development. In an effort to meet the established due dates for SSMP development the City's public communication during development was limited.

### **Communicating Sanitary Sewer System Performance (Item b & c)**

The City will make information on the performance of its sanitary sewer system performance available for review. The performance information will include the performance indicators listed in Section IX of the SSMP; Monitoring, Measurement, and Program Modifications and will be compiled annually. Notice that the performance information is available for review will be posted on the agency's website. The notice is:

The most recent compilation of the City's sanitary sewer system performance information is available for review (City web site) and at 426 Work Street during normal business hours. Interested parties can contact Gary Gabriel at 831-758-7233 or [garyg@ci.salinas.ca.us](mailto:garyg@ci.salinas.ca.us) for additional information.

The City reports SSOs electronically to the California Integrated Water Quality System (CIWQS). The electronic SSO data, as well as information regarding regulatory actions, is available at:

<http://www.waterboards.ca.gov/ciwqs/publicreports.html>.

The City will direct interested parties to the CIWQS public access website.

## **Agreements with Satellite Collection Systems**

The City industrial wastewater collection system does not have any industrial users or contributing tributary systems outside the City proper.

# SSMP

## Appendices

### Appendix A

#### Section IV - Operations and Maintenance Program

- Industrial Waste and Sanitary Sewer Lift Stations
- Current CIP for Sanitary Sewer System
- Daily Sewer Maintenance Log
- Sewer Manhole Inspection List Lift Station Maintenance Log
- Lift Station Maintenance Log

### Appendix B

#### Section VI - Overflow Emergency Response Plan

- Sanitary Sewer Overflow Report
- Customer Relations Guidelines
- Methods of Estimating Spill Volumes

### Appendix C

#### Section IX - Measurement, and Program Modifications

- Performance Measures

# Appendix A

## Section IV - Operations and Maintenance Program

1. Industrial Waste and Sanitary Sewer Lift Stations
2. Current CIP for Industrial Wastewater Facility
3. Daily Routine Pipeline Maintenance Form
4. Sewer Manhole Inspection List
5. Lift Station Maintenance Form

## INDUSTRIAL WASTE AND SANITARY SEWER LIFT STATIONS

LIFT STATION	STREET ADDRESS	PHONE	BACKUP POWER SOURCE	ALARM SWITCH	ALARM TYPE
Industrial Lift Station	150 Airport Blvd		70 kv Towable Generator	Air Bubbler	Sense-a-Phone
Lake Street	146 E. Rossi Street	424-7144	Propane Powered Generator/Natural Gas Backup	Air Bubbler	Sense-a-Phone
Carpenter Hall	516 N. Main Street	424-2172	Propane Powered Generator	Air Bubbler	Sense-a-Phone
Mill Lake	81 Gardenia Drive	424-0333	Propane Powered Generator/ Completion March 2008	Electronic Probe	Sense-a-Phone
Spicer Street	59 Spicer Street	424-5986	70 kv Towable Generator	Air Bubbler	Sense-a-Phone
De La Torre	1200 De La Torre	424-3507	70 kv Towable Generator	Air Bubbler	Sense-a-Phone
Harkins Road	1200 Harkins Road	424-4517	70 kv Towable Generator	Air Bubbler	Sense-a-Phone
Las Casitas	721 Las Casitas Drive	758-8507	Natural Gas-Powered Generator/ Completion March 2008	Air Bubbler	Sense-a-Phone
Santa Rita	2021 Sucre Court	449-1151	Propane Powered Generator/Natural Gas Backup	Air Bubbler	Sense-a-Phone
Treatment Plant II	650 Elvee Drive	754-0896	Propane Powered Generator/Natural Gas Backup	Air Bubbler	Sense-a-Phone
Airport	730 La Guardia Street	422-1191	Propane Powered Generator/ Completion March 2008	Electronic Probe	Sense-a-Phone
Vista Nueva	Garner Ave	None	Assessment District Agreement - Station upgraded 05	Electronic Probe	Sense-a-Phone
1*Community Center	940 N. Main Street	N/A	Emergency Building Generator	Float Switch	Local Audible
2*City Hall	200 Lincoln Ave.	N/A	Emergency Building Generator	Float Switch	MK II Dialer
3*Police Department	222 Lincoln Ave.	N/A	Emergency Building Generator	Float Switch	Local Audible

Note: The City maintains 5 portable towable diesel-powered generators. These are used to provide emergency power to sanitary sewer lift stations not equipped with permanent on-site electrical generators as listed above. This gives effective coverage of all sanitary lift stations and reduces the potential for overflows during power outages. Mill Lake, Las Casitas and the Airport lift station received permanent generator installations in 2007 with project completion scheduled for March 2008.

1\* Community Center Use Only    2\* & 3\* Basement pumps for downstairs sinks and bathroom

## Current CIP Budget for Industrial Waste

<b>Industrial Waste</b>
-------------------------

Fund / CIP - Project Name	PrevYrs.	16-17	17-18	18-19	19-20	20-21	21-22	Total Years
9794 - IW Treatment Facility Repairs	3,179,800	1,950,000	1,250,000	900,000				7,279,800
9940 - IW Shunt Connection	385,900							385,900
9941 - IW Conveyance Sys/Treat Fac Impvt	2,875,000				1,500,000			4,375,000
<b>Grand Total</b>	<b>6,440,700</b>	<b>1,950,000</b>	<b>1,250,000</b>	<b>900,000</b>	<b>1,500,000</b>			<b>12,040,700</b>

Ongoing assessments of capital projects required for current industrial waste facility improvements or expansion improvements needed for future development may add to this list as some items may be removed dependent on findings of recent studies.



# **Maintenance Services Department**

## **Wastewater Division**

wastewater Collection Systems – NPDES – Industrial Waste – Street Sweeping – Hazardous Materials – Water Resources Planning

### **Daily Sanitary Sewer Maintenance Log**

**2016**

**Sewer Truck # \_\_\_\_\_**

#	GRID	LOCATION	FOOTAGE SERVICED	COMMENTS/PROBLEMS	DATE SERVICED
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					

# Sewer Manhole Service Maintenance Checks

(Revised 4-13-16)

**W. Salinas / S. Salinas Locations:**

Please check all manholes within the following streets and look for any unusual flow patterns/non-flow patterns, evidence of grease, and any other type situations that would warrant an immediate service to that line.

**Crews**, please indicate whether the sewer manhole location needed service (yes/no ), provide the date checked, and initial.

		Service	Date	Initial
		Yes / No	Checked	
1.	Station Place	_____	_____	_____
2.	Market at Capitol	_____	_____	_____
3.	On Capitol bet. Market and Central	_____	_____	_____
4.	W. Alisal bet. Lorimer and Capitol	_____	_____	_____
5.	Riker bet. Lang and Clay	_____	_____	_____
6.	Lincoln bet. San Luis and chestnut	_____	_____	_____
7.	Main bet. Chestnut and Harvest	_____	_____	_____
8.	Geil and Iverson	_____	_____	_____
9.	E. Acacia and Main	_____	_____	_____
10.	San Joaquin bet. Main and Pajaro	_____	_____	_____
11.	Stephanie at Main	_____	_____	_____
12.	Shelley Wy	_____	_____	_____
13.	Las Cruces	_____	_____	_____
14.	Woodside and Baywood	_____	_____	_____
15.	On Palma bet. W. Alisal and Carmelita	_____	_____	_____

# SEWER PUMP MAINTENANCE INSPECTION RECORD

## CITY OF SALINAS

Lift Station: \_\_\_\_\_

Month/ Year \_\_\_\_\_

Maintenance/ Check	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Check Wet Well																																		
<b>Check Panel/ Flow Rates/Micro mat</b>																																		
<b>Purge System/ Check Compressor/ Bleed</b>																																		
<b>Check and Observe Motors Running</b>																																		
<b>Check Sensa Phone/ Check Alarm System</b>																																		
<i>Check Generator Operate/ Run</i>																																		
<b>Check for Water Leaks/ Air Leaks</b>																																		
<b>Check Fans/ Dehumidifiers</b>																																		
<b>Exercise Valves Check Clappers</b>																																		
<b>Lube All Moving Parts / Grease Fittings</b>																																		
<b>Service Wet Pit</b>																																		
<b>Exercise Sump Pumps</b>																																		
<b>COMMENTS</b>																																		
<b>REPAIRS</b>																																		
<b>ORDER PARTS</b>																																		

# Appendix B

## Section VI - Overflow Emergency Response Plan

1. Sanitary Sewer Overflow Reporting Form
2. Customer Relations Guidelines
3. Methods of Estimating Spill Volumes



## City of Salinas Maintenance Services Sanitary Sewer Overflow Reporting Form

Location/Cross Street \_\_\_\_\_ Date \_\_\_\_\_

Message Taken By \_\_\_\_\_ Reporting Party \_\_\_\_\_ Phone Number \_\_\_\_\_

Times: Notified: \_\_\_\_\_ Arrival: \_\_\_\_\_ Spill Ended: \_\_\_\_\_ Cleanup Ended \_\_\_\_\_

Spill Details

Spill Response Activities

Notification Details

<input type="checkbox"/> Estimated Spill _____ Gals.	<input type="checkbox"/> Spill Fully Recovered	<input type="checkbox"/> Owner/Resident
<input type="checkbox"/> Spill to Street/Gutter	<input type="checkbox"/> Contained S.S.O	<input type="checkbox"/> Monterey County Health Dept.
<input type="checkbox"/> Spill to Storm Drain	<input type="checkbox"/> Storm System Serviced	<input type="checkbox"/> Salinas Fire Department
<input type="checkbox"/> Spill to Ditch/Creek	<input type="checkbox"/> Sanitized Affected Areas	<input type="checkbox"/> Salinas Police Department
	<input type="checkbox"/> Washed Affected Areas	<input type="checkbox"/> City Code Enforcement
	<input type="checkbox"/> Wash Water Contained	<input type="checkbox"/> Regional Water Board
<input type="checkbox"/> Private Lateral Spill	<input type="checkbox"/> Disposed /Sanitary Sewer	<input type="checkbox"/> Office of Emergency Services
<input type="checkbox"/> City Main Line Spill		<input type="checkbox"/> City Building Inspection
		<input type="checkbox"/> County Water Resources Agency
<input type="checkbox"/> Blockage	<input type="checkbox"/> Hydro Vacuum Trucks # _____	<input type="checkbox"/> Department of Fish and Game
<input type="checkbox"/> Grease, Paper, Rags	<input type="checkbox"/> Pickup Trucks # _____	Personnel Mitigating Cleanup
<input type="checkbox"/> Other	<input type="checkbox"/> 6" Pump Used	
	<input type="checkbox"/> Inspected Sewer (CCTV)	
<input type="checkbox"/> Manhole	<input type="checkbox"/> Contract Services	
<input type="checkbox"/> Flushing Inlet	<input type="checkbox"/> Other	

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

First Responder \_\_\_\_\_

## Customer Relations Guidelines

It is important for employees to communicate effectively with City of Salinas customers, especially in an SSO situation. How we communicate – on the phone, in writing, or in person – is how we are perceived. Good communication with the homeowner results in greater confidence in staff's ability to address the problem satisfactorily and potentially reduces the time needed to resolve the claim.

As a representative of the City, staff will occasionally have to deal with an irate homeowner. A sewer backup is a stressful event and even a reasonable homeowner can become irate should he/she perceive staff as being indifferent, uncaring, unresponsive, or incompetent.

Although sometimes difficult, effective management of a sewage backup situation is critical. If it is not managed well, the situation can end up in a costly, prolonged process with the homeowner. The City wants the homeowner to feel assured that we are responsive and the homeowner's best interest is a top priority.

### *A Few Communication Tips*

Give the homeowner ample time to explain the situation or to vent. Show interest in what the homeowner has to say, no matter how many times you have heard it before, or how well you understand the situation.

As soon as possible, let the homeowner know you will determine the cause of the sewer backup and correct it if possible.

Acknowledge the homeowner's concerns. For example, if the homeowner seems angry or worried about property damage, explain that a PROFESSIONAL CLEANUP CREW can restore the area. The owner/occupant has a right to file a claim for any reasonable repairs or losses resulting from the incident.

It is important to inform the owner/tenant that the City does not automatically assume responsibility for property damage or cleanup. The City's liability will be determined from the follow-up investigation.

Express regret for any inconveniences caused by the incident, but do not admit fault.

As much as possible, keep the homeowner informed on what is being done and will be done to correct the problem.

Keep focused on the incident. Do not get involved with too much unnecessary small talk with the homeowner.

Don't find fault or lay blame on anyone.

Before you leave, make sure the homeowner has the name and contact information of the Wastewater Supervisor to call if he/she requires more detailed information.

The Wastewater Supervisor will follow up with a telephone call if requested to ensure everything is being handled as it should be.

## Methods for Estimating Spill Volume

A variety of approaches exist for estimating the volume of a sanitary sewer spill. This appendix documents the three methods that are most often employed. The person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available.

## ***Method 1: Eyeball Estimate***

The volume of small spills can be estimated using an “eyeball estimate”. To use this method, imagine the amount of water that would spill from a bucket or a barrel. A bucket contains five gallons and a barrel contains 50 gallons. If the spill is larger than 50 gallons, try to break the standing water into barrels and then multiply by 50 gallons. This method is useful for contained spills up to approximately 200 gallons.

## ***Method 2: Measured Volume***

The volume of most small spills that have been contained can be estimated using this method. The shape, dimensions, and the depth of the contained wastewater are needed. The shape and dimensions are used to calculate the area of the spills and the depth is used to calculate the volume.

Step 1 Sketch the shape of the contained sewage (see Figure A).

Step 2 Measure or pace off the dimensions.

Step 3 Measure the depth at several locations and select an average.

Step 4 Convert the dimensions, including depth, to feet.

Step 5 Calculate the area in square feet using the following formulas:

Rectangle: Area = length (feet) x width (feet)

Circle: Area = diameter (feet) x diameter (feet) x 0.785

Triangle: Area = base (feet) x height (feet) x 0.5

Step 6 Multiply the area (square feet) times the depth (in feet) to obtain the volume in cubic feet.

Step 7 Multiply the volume in cubic feet by 7.5 to convert it to gallons.

## ***Method 3: Duration and Flow Rate***

Calculating the volume of larger spills, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, separate estimates are made of the duration of the spill and the flow rate. The methods of estimating duration and flow rate are:

### ***Duration***

The duration is the elapsed time from the time the spill started to the time that the flow was restored.

**Start time:** The start time is sometimes difficult to establish. Here are a few approaches:

Local residents can be used to establish start time. Inquire as to their observations. Spills that occur in rights-of-way are usually observed and reported promptly. Spills that occur out of the public view can go on longer. Sometimes observations like odors or sounds (e.g. water running in a normally dry creek bed) can be used to estimate the start time.

Conditions at the spill site change over time. Initially there will be limited deposits of toilet paper and other sewage solids. After a few days to a week, the sewage solids form a light-colored residue. From a few weeks to a month, the sewage solids turn dark. The quantity of toilet paper and other materials of sewage origin increase over time. These observations can be used to estimate the start time in the absence of other information. Taking photographs to document the observations can be helpful if questions arise later in the process.

**End time:** The end time is usually much easier to establish. Field crews on-site observe the “blow down” that occurs when the blockage has been removed.

## **Flow Rate**

The flow rate is the average flow that left the sewer system during the time of the spill. Two common ways to estimate the flow rate are described below:

**1. Counting Connections:** Once the location of the spill is known, the number of upstream connections can be determined from the sewer maps. Multiply the number of connections by 200 to 250 gallons per day per connection or eight to ten gallons per hour per connection.

For example: 22 upstream connections x 9 gallons per hour per connection  
= 198 gallons per hour ÷ 60 minutes per hour  
= 3.3 gallons per minute

## **Spill Volume**

Once duration and flow rate have been estimated, the volume of the spill is the product of the duration in hours or days and the flow rate in gallons per hour or gallons per day.

For example:

Spill Start Time = 11:00

Spill End Time = 14:00

Spill Duration = 3 hours

3.3 gallons per minute x 3 hours x 60 minutes per hour = 594 gallons. Calculating the volume of larger spills, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, separate estimates are made of the duration of the spill and the flow rate.

# Appendix C

## Section IX - Measurement, and Program Modifications

### 1. Performance Measures

**Table 6**  
**Summary of Performance Measures**  
**Industrial Wastewater Collection System**

<b>Gravity Sewer, Pump Station, and Force Main SSOs by Calendar Year</b>	<b>Gravity Sewer SSOs</b>	<b>Pump Station SSOs</b>	<b>Force Main SSOs</b>	<b>Recovery</b>
<b>2011</b>	0	0	0	0
<b>2012</b>	0	0	0	0
<b>2013</b>	0	0	0	0
<b>2014</b>	0	0	0	0
<b>2015</b>	0	0	0	0
<b>2016</b>	0	0	0	0