

Attachment A

RESOLUTION NO. 25-038

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VICTORVILLE APPROVING AND ADOPTING THE CITY'S 2025 UPDATED SEWER SYSTEM MANAGEMENT PLAN (SSMP)

WHEREAS, the State of California Water Resources Control Board (the "SWRCB") adopted Order No. 2006-0003-DWQ (the "2006 Order") on May 2, 2006; and

WHEREAS, the 2006 Order requires all public agencies that own or operate a sanitary sewer system of one mile or greater in length that collects and/or conveys untreated or partially treated wastewater to a publicly owned treatment facility in the State of California to prepare and adopt a Sewer System Management Plan (SSMP) to facilitate the proper funding and management of the sewer system; and

WHEREAS, the City of Victorville (the "City") owns and operates a sanitary sewer collection system that includes a service area of approximately 74 square miles and approximately 437 miles of sewer lines connected to publicly owned wastewater treatment facilities; and

WHEREAS, the 2006 Order requires the City Council of the City the ("City Council") to adopt and certify the City's SSMP at a public meeting; and

WHEREAS, in accordance with the 2006 Order, the City prepared a SSMP which was adopted by the City Council by the passage of Resolution No. 09-060 on July 21, 2009 (as revised on October 20, 2009); and

WHEREAS, the Order further requires the SSMP to be updated and re-certified at least every five years, and when any significant updates to the SSMP are made; and

WHEREAS, on September 9, 2013, the 2006 Order was amended by SWRCB Order No. WQ 2013-0058-EXEC (the "Amendment"), which specified new Monitoring and Reporting Program requirements for all SSMPs; and

WHEREAS, to comply with the provisions of the 2006 Order and the Amendment, in 2016 the City's Engineering and Public Works staff amended, revised and updated the original 2009 SSMP; and

WHEREAS, City Council approved, adopted and re-certified an update to the SSMP on May 17, 2016; and

WHEREAS, on May 21, 2019, the City Council approved, adopted and re-certified an update to the SSMP in compliance with the 2006 Order and Amendment; and

WHEREAS, on December 6, 2022, the SWRCB adopted Order No. 2022-0103-DWQ (the “2022 Order”), which rescinded and replaced the 2006 Order and subsequent amendments, establishing updated regulatory requirements for sanitary sewer systems statewide; and

WHEREAS, the 2022 Order, effective June 5, 2023, includes revised SSMP components, new monitoring and reporting requirements, and emphasizes climate change preparedness, spill response coordination, and public transparency; and

WHEREAS, in compliance with the 2022 Order, the City has reviewed and updated its SSMP to reflect the current regulatory framework and ensure the continued safe, effective, and environmentally responsible management of its sanitary sewer collection system; and

WHEREAS, City Engineering and Public Works staff confirms that the 2025 updated SSMP attached to this Resolution as Exhibit A, is in compliance with the requirements of the 2022 Order and is now ready for adoption and re-certification by the City Council.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF VICTORVILLE DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. The foregoing Recitals are true and correct and are incorporated herein as findings by this reference.

SECTION 2. The 2025 updated Sewer System Management Plan (SSMP) set forth in the attached Exhibit A. is hereby approved, adopted and re-certified.

SECTION 3. The specifications and procedures contained in the 2025 updated SSMP attached hereto as Exhibit A shall apply to the City's existing sewer system and all future additions, changes or modifications thereto. Copies of the 2025 updated SSMP are to be maintained in the City offices of the City Clerk, the City Engineer, the Director of Public Works, and in the Public Works Department McArt Corporate Yard site, and made available for public review and use by Public Works staff and other City Departments and offices.

SECTION 4. The Public Works & Water Director or the City Engineer is hereby directed to take all further actions required under the 2022 Order to complete the submission of the re-certified 2025 updated SSMP to the State Water Resources Control Board.

SECTION 5. This Resolution shall take effect immediately upon adoption.

SECTION 6. The City Clerk shall certify to the passage and adoption of this Resolution; shall enter the same in the book of original Resolutions of the City; and shall make a minute of passage and adoption thereof in the records of the proceedings of the City Council, in the minutes of the meeting at which this Resolution is passed and adopted.

Exhibit A

City of Victorville

Sewer System Management Plan (SSMP)

2025 Update

Sanitary Sewer Collection System

Waste Discharge ID (WDID): # 6SSO11425



REVIEWED AND APPROVED BY:



PREPARED BY:



Doug Mathews, Director of Public Works & Water
Legally Responsible Official
City of Victorville

Sanitary Sewer Collection System
(includes Element Development Plans & Schedules)

Date Signed

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City of Victorville
Att: Doug Mathews, Director of Public Works & Water
Legally Responsible Official (LRO)
14343 Civic Drive
Victorville, CA, 92392

Dear Mr. Mathews:

We are pleased to present the new 2025 Sewer System Management Plan (SSMP) Update developed in partnership with City management. The 2025 Update meets and exceeds compliance with the Reissued WDR (State Water Board, Water Quality Order No. 2022-0103-DWQ, Attachment D-10 and Specifications 5.4). The 2025 SSMP has been completely revised to harmonize with industry standard guidelines and incorporates the latest SSMP Audit findings.

The 2025 SSMP is a declaration of what the City is doing to demonstrate full compliance with the Reissued WDR. Attachment A of the Reissued WDR (page A-4), states "A sewer system management plan is a living document which requires the Agency to Enrollee develops and implements to effectively manage its sanitary sewer system(s) in accordance with this General Order." This requires the City to periodically review and update the SSMP as necessary until its next required 6-year SSMP Update is completed.

We look forward to assisting the City wherever necessary to fully implementation its new 2025 SSMP Update.

Sincerely,

James Fischer, P.E.
Principal, Fischer Compliance LLC
Credentialed U.S. EPA NPDES Compliance Inspector



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Introduction

This Sewer System Management Plan (SSMP) or “Plan” has been prepared for the City of Victorville with technical assistance from Fischer Compliance LLC for meeting and exceeding compliance with the State Water Resources Control Board 2022 General Waste Discharge Requirements, Order WQ 2022-0103-DWQ for Sanitary Sewer Systems (referred to throughout this document as the WDR). The City provided all details, information and institutional insights for preparation of the SSMP. The document has been developed to meet the size, scale, and complexity, serving as a “living document” used as a tool for managing and operating the City’s sanitary sewer collection system. Additionally, the latest 2024 Sewer System Management Plan Guidance Manual published by the Bay Area Clean Water Agency (BACWA) was utilized as a model for development of the document to harmonize formatting/content and incorporate recommended suggested guidance wherever possible.

The City’s commitment to meeting or exceeding regulatory requirements, along with their proactive approach to operation and management of the collection system, has served them well, as evidenced by system performance relative to other agencies in the region and the state.

Figure 1 provides key City spill metrics, including data comparing the City’s spill record with state and regional system data. The City consistently performs better than both statewide and regional spill rate indices and net spill volumes for all categories of spills from its sanitary sewer collection system.



Collection System Spill Summary

Operational Indices: Victorville SD CS

Spill Rate Index (spills/100mi/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
Victorville SD CS	0.28	0.0	0.01	0.21	0.0	0.07	0.01
State Municipal(Public) Average	1.5	2.28	0.44	0.53	0.44	2.85	0.53
Region Municipal Average	0.42	2.63	0.12	0.32	0.03	1.8	0.5

Net Volume Spills Index (gallons/1000 Capita/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
Victorville SD CS	5693.43	0.0	2.81	101.31	0.0	0.55	0.0
State Municipal(Public) Average	1537.71	24.29	3236.39	240.21	1987.7	28.61	7.92
Region Municipal Average	1047.73	8.6	326.45	321.28	4.51	12.69	0.5

Introduction: Figure 1 (Collection System Operational Report – SWRCB Integrated Water Quality System (CIWQS))

SSMP Organization

This SSMP is organized into 11 core elements following Attachment D of the WDR, with inclusion of applicable Specifications requirements.

Each individual element in the SSMP includes the following technical contents.

Requirements – Provides the actual description of applicable requirements in the WDR.

Compliance – Describes the City’s approach to complying with the WDR requirements.

Effectiveness – As measured by Key Performance Indicators (KPIs.)

Implementation – Demonstrates how the City will ensure the Plan is being carried out as described.

Resilience – Demonstrates the resilience that is addressed in the SSMP and built-in to the City’s collection system and procedures.

Appendix Inclusions – List the items included in the Appendix for each SSMP Element, if any.

Abbreviations and Acronyms¹

Agency	City of Victorville
BMP	Best Management Practices
CCTV	Closed Circuit Television
CIP	Capital Improvement Program
CIPP	Cured in Place Pipe
CIWQS	California Integrated Water Quality System (State Water Board Online Spill Database)
CMMS	Computerized Maintenance Management System
CODE	Code Enforcement Department
DIR	Director of Public Works and Water
ENG	Engineering Department
EPA	US Environmental Protection Agency
FOG	Fats, Oils and Grease
FSE	Food Service Establishment
GCD	Grease Control Device
GIS	Geographic Information System
I & I	Inflow and Infiltration
LRO	Legally Responsible Official
PLCO	Property Line Clean Out
PW	Public Works Department
RWQCB	Regional Water Quality Control Board (Lahontan Region)
SCADA	Supervisory Control and Data Acquisition
SERP	Spill Emergency Response Plan
SOP	Standard Operating Procedure
SSMP	Sewer System Management Plan
Spill	Sanitary Sewer Overflow
WDR	Sanitary Sewer Systems General Wastewater Discharge Requirements Order issued by the State Water Board (Order No. 2022-0103-DWQ)
SWRCB	State Water Resources Control Board
WDID	Waste Discharge ID Number (CIWQS)

Introduction: Table 1 Abbreviations and Acronyms

¹ For a list of additional common acronyms for collection systems and related WDR terms, see the [WDR, Attachment A \(page 32\)](#)

1. Goal and Introduction

REQUIREMENTS

Att. D-1 (pg. D-2)

“The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the Enrollee’s sanitary sewer system(s), (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur.

The Plan must include a narrative Introduction section that discusses the following items (see below):”

1.1. Regulatory Context

WDR REQUIREMENTS

Att. D-1.1 (pg. D-2)

“The Plan Introduction section providing a general description of the local sewer system management program and discuss Plan implementation and updates”.

COMPLIANCE

The City is committed to fully implementing the WDR² which includes addressing all requirements by integrating a wide range of programs specifically designed for ensuring the integrity and efficiency of the City’s sanitary sewer collection system. Moreover, the City is dedicated to maintaining its collection system in a systematic manner by implementing various work programs, with a focus on critical areas, to prevent spills, allowing for a comprehensive approach to maintenance.

Work programs conducted under the City’s Preventative Maintenance, Rehabilitation and Replacement and Capitol Improvement and SSMP implementation Programs include CCTV inspections, pipe cleaning, manhole inspections, lift station maintenance, root control, sewer main lining, septic to sewer conversions, sewer structural capacity improvement, main and lateral pipe repair, securing manholes covers, Smart Manhole cover installation, inspection of connected FOG generating sources/source control and public outreach. Work programs are described in more detail in sections Specifications 5.19, Operation and Maintenance of this document.

By prioritizing proactive measures and taking a comprehensive approach, the City is well-equipped with a proven track record of effectively operating its sanitary sewer collection system with the highest levels of service, complying with the WDR, and reducing/eliminating sewage spills. The City implements any revisions to the City’s SSMP to comply with the most current requirements of the WDR.

EFFECTIVENESS

N/A

IMPLEMENTATION PLAN/SCHEDULE

N/A

² State Water Resources Control Board, Statewide Waster Discharge requirements, General Order for Sanitary Sewer Systems

1.2. SSMP Update Schedule

WDR REQUIREMENTS

Att. D-1.2 (pg. D-3)

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

COMPLIANCE

The City utilizes the State Water Board’s online lookup tool for ensuring all required due dates for updating its SSMP and completing its required SSMP Audits (see chart below).

The City’s most recent SSMP audit was completed for the period May 2, 2021, through May 2, 2024.

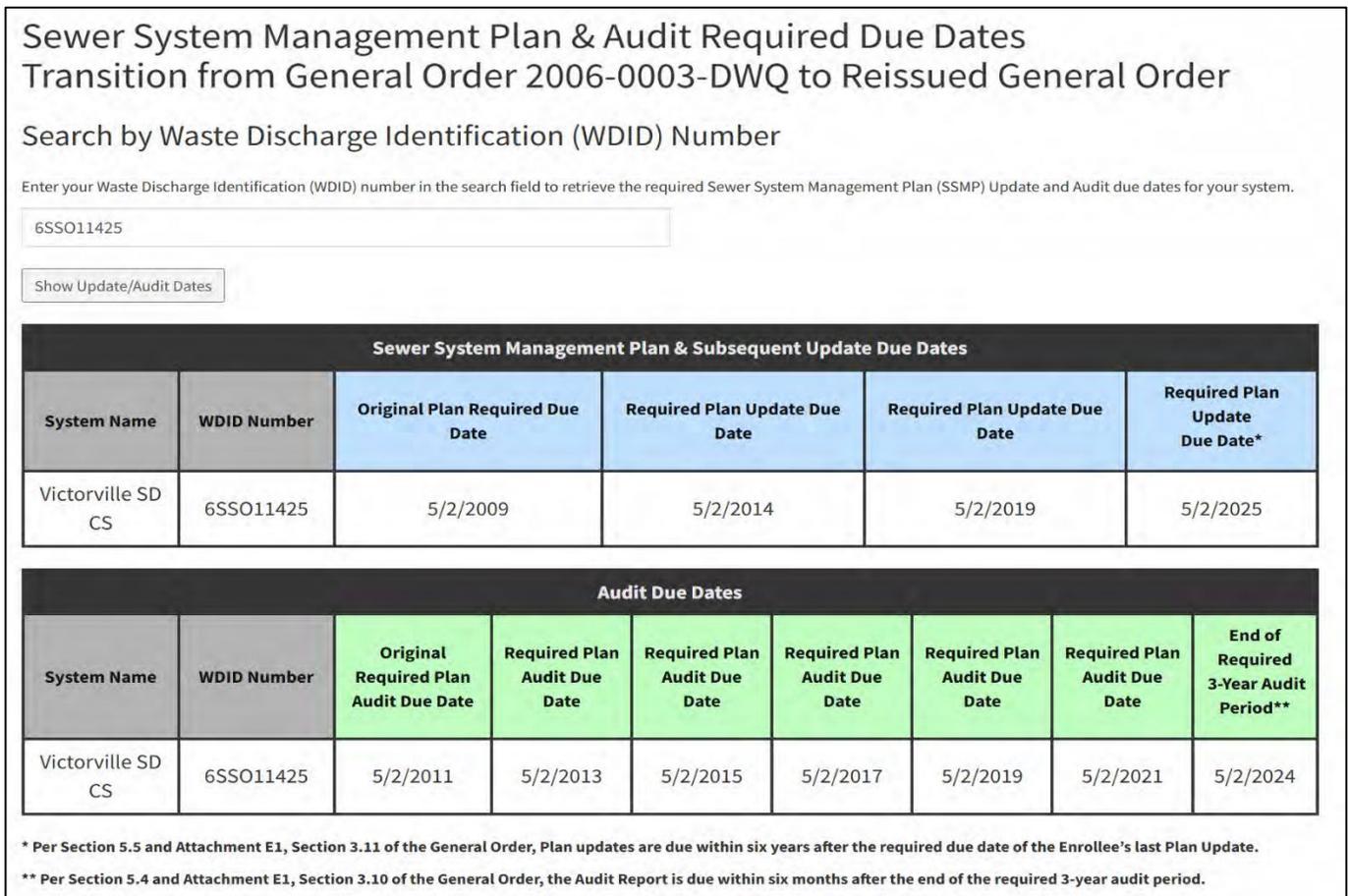


Figure 1-1– Sewer System Management Plan, Subsequent Update and Audit Due Dates

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

1. Are SSMP Audits and SSMP Updates being performed as scheduled?
2. Has the Sewer System Management Plan been approved by the governing board on schedule (every six years)?
3. Are specific internally established sewer program milestones being monitored?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
1.2.1	Prepare for next SSMP Audit	Begin 5/2/2027	X	X	X
1.2.2	Complete and Upload SSMP audit.	By 11/2/2027	X	X	
1.2.3	Incorporate Audit Findings, update Change Log and Update SSMP	5/2/2025		X	X
1.2.4	Board Approval and LRO Certification of SSMP	By 5/2/2025	X	X	

1.3. Sewer System Asset Overview

WDR REQUIREMENTS

Att. D-1.3 (pg. D-3)

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

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

COMPLIANCE

The City of Victorville is in southwestern San Bernardino County, California. The City is located within the Victor Valley which is a sub region of the Mojave Desert and is bordered by Apple Valley on the east, Hesperia on the south, and Adelanto on the west. Situated at an elevation of approximately 2,900 feet, Victorville experiences hot, dry summers and occasional snow in the winter. Temperatures range from below freezing up to 110°F in the summer. The City has a service area of approximately 74 square-miles and serves a population of 141,689. The City’s collection system consists of 454 miles of gravity sewer mains, 1.2 miles of sewer force mains, 31,286 sewer lateral connections totaling approximately 238 miles, ten (10) pump stations and one (1) siphon. The City does not have any stormwater diversion structures.

Approximately 80% of the wastewater discharged to the City’s sewer system is discharged to the VVWRA regional wastewater treatment plant and the remaining 20% is discharged to the City’s the City-owned Industrial WWTP.

The SEDARU CMMS has been used to access available sewer infrastructure and maintenance information in the office and in the field up to recently. This system is a powerful tool when used to quickly access critical information during an emergency spill response. SEDARU CMMS has been phased out, and the City will be transitioning to OpenGov during FY2025-26.

The City owns and maintains the lower laterals. The upper laterals are privately owned and maintained.

A significant number of parcels within the City are not connected to the City’s sewer system and utilize on-site septic systems. An estimated 1,757 parcels on septic systems are within 200-feet of the City’s sewer

system and, the City plans to connect these parcels to the City's sewer system by 2040 adding an estimated 2.56 mgd of wastewater flows to the City's sewer system.

Overall, the City has put itself in good position to maintain and improve its collection system and does not currently recognize and unique challenges. There is a planned conversion of City lots on septic systems to connect to the City's sewer system will add future flows to the City's sewer system.

The City has system maps that are kept up to date. System maps is addressed in more detail in Element 4.1 of this SSMP.

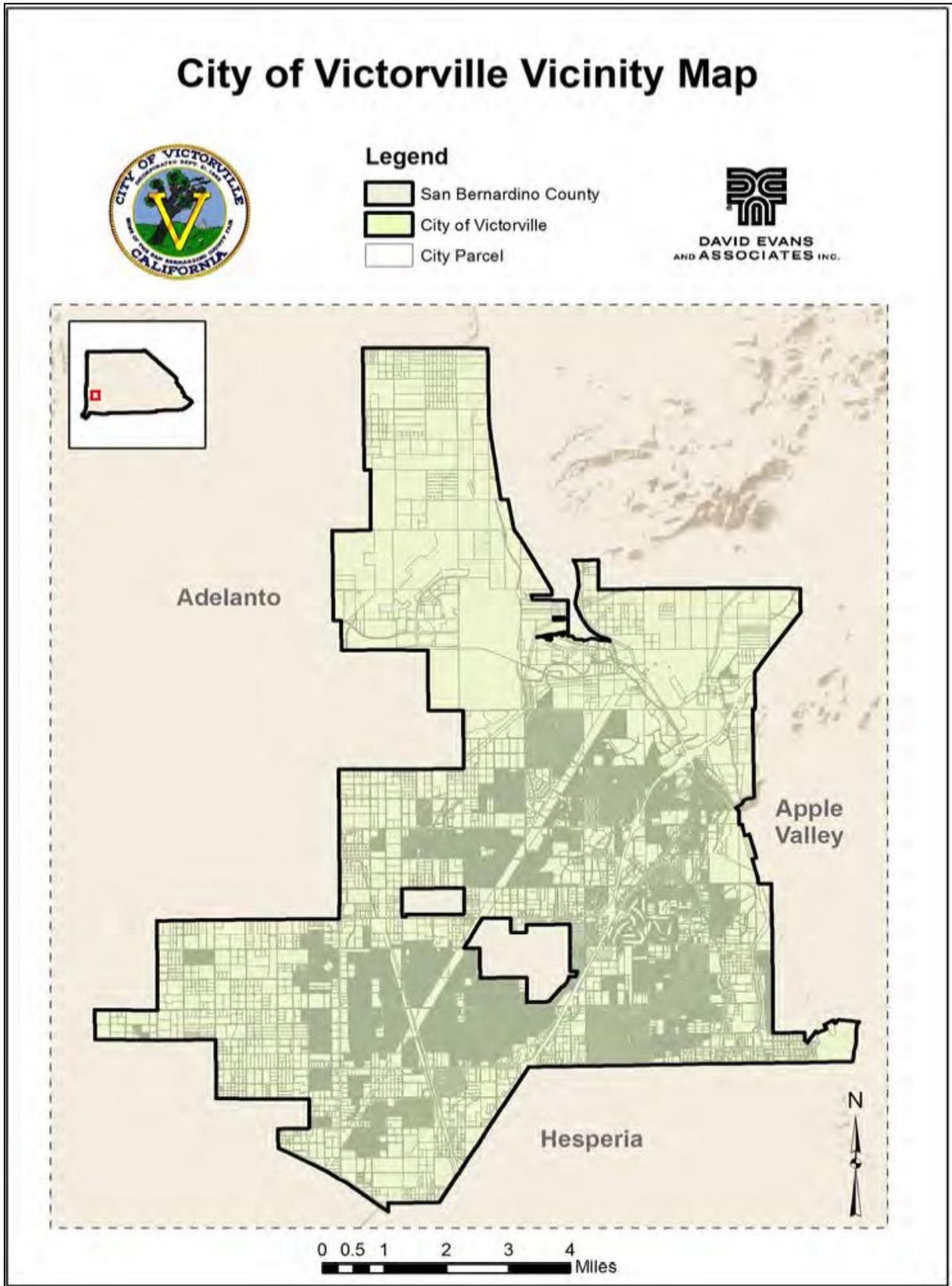


Figure 1-2 – Agency Vicinity Map and Service Area

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are asset statistics periodically reviewed and updated as necessary?
- Are omissions or errors addressed in a timely manner?
- Are system maps up to date?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
1.3.1	Review City-owned asset statistics and element description; update as necessary	At the beginning of the audit cycle and when significant changes have been made.		X	X
1.3.2	Update Maps	Within 30 Days of Correction Submittal of Completion of Development Project		X	

RESILIENCE

Resilience is addressed for Element 1 by:

- Adhering to an SOP for collecting and managing asset data.
- Redundancy: More than one member of staff is trained and able to retrieve and manage the data.
- Implementing a QA/QC process to help ensure information is accurate.
- Using Calendar Reminders to ensure compliance deadlines are met.

APPENDIX 1 INCLUSIONS:

- None

Specifications 5.2 – SSMP Development and Implementation

WDR REQUIREMENTS

Spec. 5.2 (pg. 18)

“To facilitate adequate local funding and management of its sanitary sewer system(s), the Agency shall develop and implement an updated Sewer System Management Plan. The scale and complexity of the Sewer System Management Plan, and specific elements of the SSMP, must match the size, scale, and complexity of the Enrollee’s sanitary sewer system(s). The Sewer System Management Plan must address, at minimum, the required Plan elements in Attachment D (Sewer System Management Plan – Required Elements) of this General Order. To be effective, the Sewer System Management Plan must include procedures for the management, operation, and maintenance of the sanitary sewer system(s). The procedures must: (1) incorporate the prioritization of system repairs and maintenance to proactively prevent spills, and (2) address the implementation of current standard industry practices through available equipment, technologies, and strategies.”

COMPLIANCE

The City's current Sewer System Management Plan (SSMP) has been updated to meet the requirements of Order WQ 2022-0103-DWQ and addresses the required Elements. The SSMP addresses management, operations, and maintenance procedures specific to the City’s collection system. The City maintains a proactive O&M program to operate its system and identify defects, which are then prioritized for repair, replacement, rehabilitation, or placed on modified maintenance schedules. (See Elements 4 and 8 and Specifications 5.19 of this SSMP for more detail.)

The City keeps up with current industry standards, technology, and best practices by reviewing industry periodicals, networking and attending industry conferences and workshops including Tri-State and CWEA sponsored events.

Specifications 5.7 – Allocation of Resources

WDR REQUIREMENTS

Spec. 5.7 (pg. 22)

“The Agency shall comply with the following requirements:

- *Establish and maintain a means to manage all necessary revenues and expenditures related to the sanitary sewer system; and*
- *Allocate the necessary resources to its sewer system management program for: (a) compliance with this General Order, (b) full implementation of its updated SSMP, (c) system operation, maintenance, and repair, and (d) spill responses.”*

COMPLIANCE

The City maintains various revenue sources to maintain financial stability, meet its operational needs and manage all necessary expenditures for its sewer system operation. The Sewer Service Charge is collected from customers and is used for the operation and maintenance of the sewer system, as well as for the City’s share of operation and maintenance of the Victor Valley Wastewater Reclamation Authority (VWRA) Regional Wastewater Facility. Sewer Connection Fees are used for (future) upsizing of pipes and to extend pipes to areas not yet served.

The City is adequately staffed owns and operates the necessary equipment to operate the collection system.

Provisions 6.1 - Enforcement Provisions

WDR REQUIREMENTS

Provisions 6.1 (pg. 27)

“The following enforcement provisions are based on existing federal and state regulations, laws and policies, including the federal Clean Water Act, the state Water Code and the State Water Board Enforcement Policy.”

COMPLIANCE

The City is aware of the consequences for noncompliance including associated penalties for violations. The City maintains a proactive stance with full implementation of its SSMP.

Noncompliance with requirements of this General Order or discharging sewage without enrolling in this General Order constitutes a violation of the Water Code and a potential violation of the Clean Water Act and is grounds for an enforcement action by the State Water Board or the applicable Regional Water Board. Failure to comply with the notification, monitoring, inspection, entry, reporting, and recordkeeping requirements may subject the Enrollee to administrative civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. Discharging waste not in compliance with the requirements of this General Order or the Clean Water Act may subject the Enrollee to administrative civil liabilities up to \$10,000 a day per violation and additional liability up to \$10 per gallon of discharge not cleaned up after the first 1,000 gallons of discharge; up to \$5,000 a day per violation pursuant to Water Code section 13350 or up to \$20 per gallon of waste discharged; or referral to the Attorney General for judicial civil enforcement.

Provisions 6.3 Sewer System Management Plan Availability

WDR REQUIREMENTS

Provisions 6.3

“The Enrollee’s updated Sewer System Management Plan must be maintained for public inspection at the Enrollee’s offices and facilities and must be available to the public through CIWQS and/or on the Enrollee’s website, in accordance with section 3.8 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.”

COMPLIANCE

The City’s SSMP is maintained on its website and also available for viewing at the City offices, by appointment. The adopted SSMP is also be made readily available to the Regional Water Quality Control Board (Region No. 6B) representatives upon request and to the operators of any collection system or treatment facility downstream of the City’s sanitary sewer system.

2. Organization

WDR REQUIREMENTS

Att. D-2 (pg. D-3)

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

- *The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order.*
- *The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan Elements.*
- *Organizational lines of authority.*
- *Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county health officer, county environmental health agency, and State Office of emergency Services.)*

COMPLIANCE

This section describes the organization of the Sanitary Sewer Division for the management, operation, and maintenance of the City’s sanitary sewer collection system. It identifies the City’s designated Legally Responsible Officials and City staff responsible for implementing the WDR and SSMP.

The City’s Legally Responsible Officials (LRO) are included in Table 2-1 below. All meet the requirements set forth in Specifications 5.1.

City Sanitary Sewer Division – Legally Responsible Officials			
Position	Name	Phone Number	Email
Director of Public Works & Water	Doug Mathews	760-243-6332	dmathews@victorvilleca.gov
City Engineer	Fredy A. Bonilla	760-955-5170	fbonilla@victorvilleca.gov

Table 2-1 – Designated Legally Responsible Officials

IMPLEMENTATION RESPONSIBILITIES

Sewer System Management Plan Elements	Responsible Position
1. SSMP Plan, Goal and Introduction	Director of Public Works & Water /City Engineer
1.1. Regulatory Context	Director of Public Works & Water /City Engineer
1.2. SSMP Update Schedule	Director of Public Works & Water /City Engineer
1.3. Sewer System Asset Overview	Director of Public Works & Water /City Engineer
2. Organization	Director of Public Works & Water /City Engineer
3. Legal Authority	Director of Public Works & Water /City Engineer
4. Operations and Maintenance Program	Director of Public Works & Water /City Engineer
4.1. Updated maps of Sanitary Sewer System	Director of Public Works & Water /City Engineer
4.2. Preventive Operation & Maintenance	Director of Public Works & Water /City Engineer
4.3. Training	Director of Public Works & Water /City Engineer
4.4. Equipment Inventory	Director of Public Works & Water /City Engineer
5. Design/Performance	Director of Public Works & Water /City Engineer
5.1. Updated Design Criteria & Construction Standards	Director of Public Works & Water /City Engineer
5.2. Procedures and Standards	Director of Public Works & Water /City Engineer
6. Spill Emergency Response Plan	Director of Public Works & Water /City Engineer
7. Sewer Pipe Blockage Program	Director of Public Works & Water /City Engineer
8. System Eval, Capacity Assurance, Capital Imp.	Director of Public Works & Water /City Engineer
8.1. System Evaluation and Condition Assessment	Director of Public Works & Water /City Engineer
8.2. Capacity Assessment and Design Criteria	Director of Public Works & Water /City Engineer
8.3. Prioritization of Corrective Action	Director of Public Works & Water /City Engineer
8.4. Capital Improvement Plan	Director of Public Works & Water /City Engineer
9. Monitoring, Measurement & Program Modifications	Director of Public Works & Water /City Engineer
10. Internal Audits	Director of Public Works & Water /City Engineer
11. Communication Program	Director of Public Works & Water /City Engineer

Table 2-2 – Implementation Responsibilities

2.1. Organizational Lines of Authority

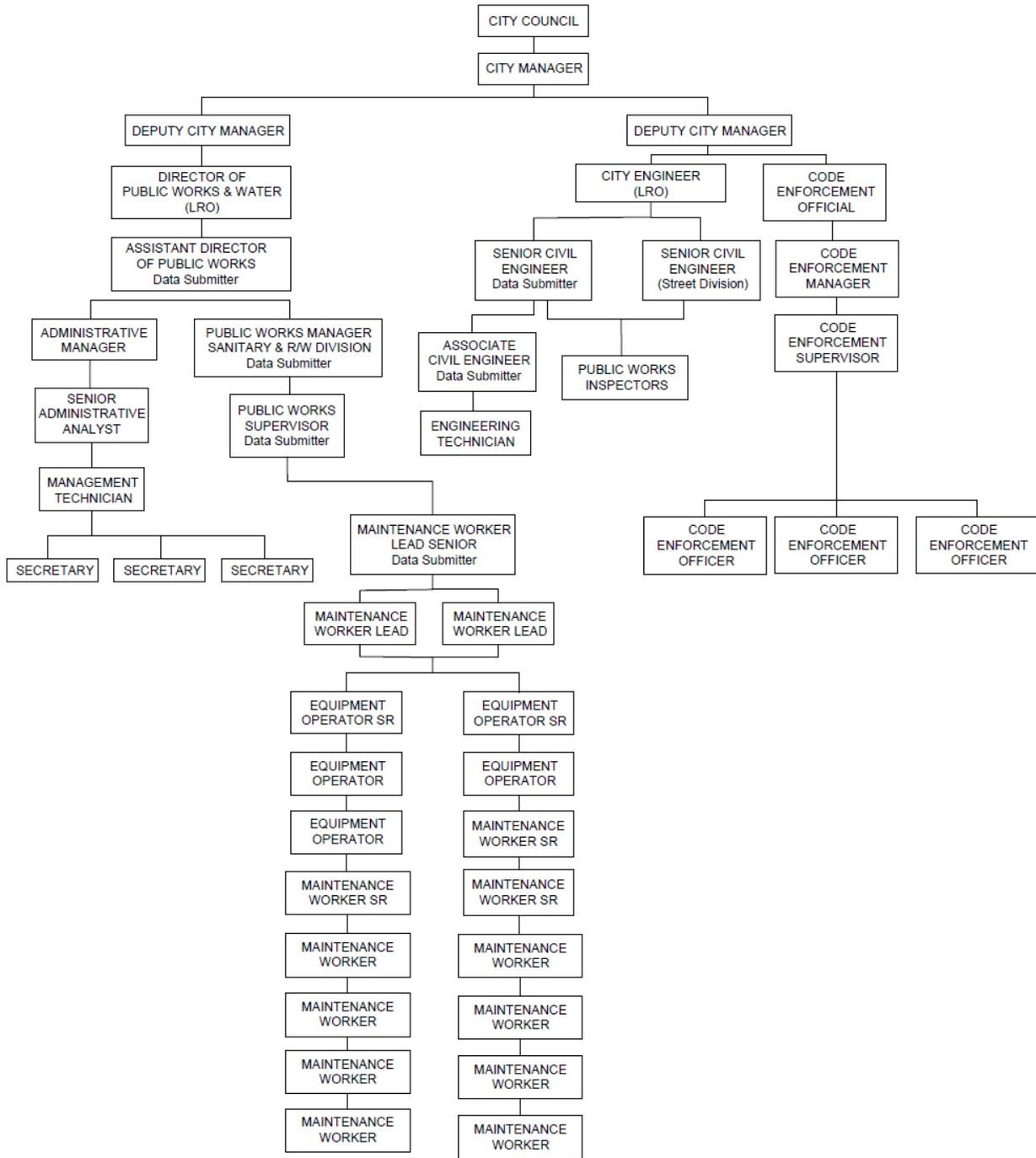


Figure 2-1 – Organizational Lines of Authority Chart

2.2. Organizational Staffing Responsibilities

A description of responsibilities or roles of each position related to City sewer system management and SSMP implementation are as follows:

<p>City Council</p>	<p>Establishes policies, reviews and accepts formal plans, sets overall City direction, authorizes funds for projects/plans/programs, general overview of upper management (Mayor, City Manager, and City Attorney), conducts public meetings, and hearings, approves SSMP.</p>
<p>City Manager</p>	<p>Responsible for the day-to-day management and operation of the City under the direction of the City Council. Specifically, the City Manager establishes procedures, plans strategy, leads staff, allocates resources defined in the City budget, delegates responsibility, authorizes outside contractor to perform services.</p>
<p>Director of Public Works/Water</p>	<p>Works under the broad policy guidance and direction of the Assistant City Manager. Works to improve efficiency and effectiveness of operations and maintenance. Oversees the development of department plans and programs, budgets, and capital purchases. Implements policy and evaluates work accomplished. Prepares and controls department budget. Oversees and coordinates City Rights of Way issues and sewer and drainage maintenance and repair operations. Currently, Director of Public Works is also Co-LRO for the City.</p>
<p>City Engineer</p>	<p>Acts as project manager on public works projects, including sewer collection system projects. Supervises the review of private project development plans for compliance with codes, regulations, and standards, adequacy of applications for permits, and compliance with approved plans. Prepares plans, specifications, and preliminary cost estimates. Coordinates and confers with maintenance department on sanitary sewer system issues. Confers with contractors, consultants, and the public on engineering and construction matters. Prepares reports on sewer and other public works projects. Manages the activities of the Public Works Inspector. Currently, City Engineer is also Co-LRO for the City.</p>
<p>Senior Civil Engineer</p>	<p>Reports to the City Engineer and acts on his behalf as project manager on public works projects, including sewer collection system projects. Reviews and recommends private project development plans for compliance with codes, regulations, and standards, adequacy of applications for permits, and compliance with approved plans. Prepares plans, specifications, and preliminary costs estimates. Coordinates and confers with maintenance department on sanitary sewer system issues. Confers with contractors, consultants, and the public on engineering and construction matters. Prepares and reviews reports on sewer and other public works projects. Manages the activities of the Public Works Inspectors. The Associate Civil Engineer is a Data Submitter for the City.</p>

<p>Associate Engineer, Assistant Engineer I & II</p>	<p>Reports to the Senior Civil Engineer. Acts as project manager on public works projects, including sewer collection system projects. Reviews and recommends private project development plans for compliance with codes, regulations, and standards, adequacy of applications for permits, and compliance with approved plans. Prepares plans, specifications, and preliminary cost estimates. Coordinates and confers with maintenance department on sanitary sewer system issues. Confers with contractors, consultant, and the public on engineering and construction matters. Prepares reports on sewer and other public works projects. The Associate Engineer and Assistant Engineer I & II is a Data Submitter for the City.</p>
<p>Public Works Inspector</p>	<p>Reports to the Senior Civil Engineer. Acts as the field inspector for public works projects, including sewer collection system projects. Inspects private project development plans for compliance with codes, regulations, and standards, and compliance with approved plans. Coordinates and confers with maintenance department on sanitary sewer system issues. Confers with contractors, consultants, and the public on engineering and construction matters.</p>
<p>Public Works Manager</p>	<p>California Integrated Water Quality System (CIWQS) Data Submitter. Works under the broad policy guidance and direction of the Director of Public Works. Manages budgets, prioritizes projects, and ensures Public Works personnel have the proper tools and equipment to perform their duties safely. Communicates with various City personnel to ensure the maintenance and repair of City public works infrastructure is properly maintained; including sewer and drainage collection systems. Reviews plans and specifications for sewer and other projects, and makes recommendations regarding maintenance, construction, and operations aspects. Controls budget expenditures within the Maintenance Division. Confers with contractors, engineers, and members of the general public on construction, maintenance and repair issue and procedures. Responds to SSO events.</p>
<p>Administrative Analyst</p>	<p>Works under the direction of the Director of Public Works. Analyzes City policies, procedures and programs; provides administrative support through research, analysis, report writing and recommendations; drafts and recommends administrative policies and procedures. Works closely with Public Information Officer (PIO) and IT Department to communicate on a regular basis with the public on the development, implementation, and performance of various Public Works projects and programs.</p>
<p>Public Works Station 2 Dispatcher</p>	<p>Prioritizes and personally communicates (orally and/or electronically) <i>all reports of "water" leaks and/or flowing from manholes, cleanouts, laterals, catch basins, vaults, etc.</i> to the Public Works Supervisor, Maintenance Leads, Maintenance crew members and/or Manager.</p>

<p>PW Supervisor, Sanitary Division</p>	<p>CIWQS Data Submitter. Supervises Public Works Sanitary Division and Rights of Way maintenance workers. Meets with the general public to resolve Service Request issues. Investigates complaints to ensure City maintenance obligations are properly serviced. Plans and schedules work assignments. Trains Sanitary Division maintenance workers.</p> <p>Inspects and evaluates completed projects for proper completion, and ensures that proper documentation of daily activities is accurate.</p> <p>Occasionally assists with the inspection, cleaning and repair of city sewer and drainage collection systems. Oversees USA ticket markings are properly serviced. Maintains records of projects assigned and completed, supplies and equipment used, and costs incurred. Estimates needed equipment and equipment maintenance. Assists with annual budget preparations. Responds to SSO events.</p>
<p>Maintenance Lead Senior</p>	<p>CIWQS Data Submitter. Assists the supervisor with crew assignments. Performs Service Request investigations, communicates findings to customers, coordinates with contractors, vendors, and provides maintenance and repair project oversight. Supervises and personally assists in the inspection, cleaning and repair of sewer mains and lines and the location and rising of manholes covers to grade. Researches and attains estimates for equipment purchases and rentals, supplies and personal protective equipment. Ensures safe practices and policies are followed. Lays out and schedules work for crew. Trains crew members in specific tasks, as needed, including sewer collection system preventive maintenance and SSO response. Verifies work of assigned crew members and checks for accuracy of documented daily activity reports. Assists with evaluating vehicle and equipment specifications. Responds to SSO events.</p>
<p>Maintenance Lead</p>	<p>Works closely with the Maintenance Lead Senior. Plans, schedules, and trains maintenance crews with sewer, drainage, and Rights of Way activities. Responds to and researches customer service request concerns. Checks work of assigned crew members and verifies accuracy of documented Daily Activity Reports. Responds to SSO events.</p>
<p>Equipment Operator Senior</p>	<p>Operates construction and maintenance equipment such as backhoes, front-end loaders, skip loaders, graders, dozer, street sweepers, etc. Performs related maintenance and repair activities on City Rights of Way and sewer and easements as required. Acts as lead of a construction and street maintenance crew when needed. May participate with the Public Works Emergency Standby Board. Responds to SSO events.</p>
<p>Equipment Operator</p>	<p>Operates combination cleaning trucks, CCTV pipeline inspection equipment, dump and water trucks. Assists the Equipment Operator Senior with performing maintenance and repairs on the City's Rights of Way, and sewer and drainage collection systems. May participate with the Public Works Emergency Standby Board.</p> <p>Responds to SSO events.</p>

<p>Maintenance Worker Senior</p>	<p>May work as a crew leader of a field maintenance crew. Cleans, unplugs, and repairs City sewer and drainage collection systems. Locates and raises manholes. Operates power and hand tools, dump and water tank trucks, including hydraulic sewer combination cleaning trucks and sewer rodding, and assists with the CCTV pipeline/manhole inspection equipment. May train crew members on sewer collection system maintenance requirements. May participate with the Public Works Emergency Standby Board. Responds to SSO events.</p>
<p>Maintenance Worker</p>	<p>Performs sewer and drainage maintenance and repairs on the City's sewer and drainage collections systems. Operates pick-up trucks, hand and power tools. Provides traffic control for work zones when needed. Researches and marks for Underground Service Alert tickets. Responds to SSO events.</p>

Table 2-2 – Organizational Staffing Responsibilities

2.3. Chain of Communication for Reporting Spills

The chain of communication for reporting spills is depicted in Figure 2-2 below. Once City staff or the fire or police departments receive a complaint or report regarding a potential spill event during working hours, PW Dispatch (Station II) will immediately notify the City Sanitary Sewer Division staff to respond to the spill event. During non-business hours the PW Dispatch (Station II) forwards calls to on-call personnel. Alarms from pump stations are forwarded to key personnel, including on-call personnel.

Upon notification of the potential spill event, the City Sanitary Sewer Division staff will respond to the location and immediately implement the Spill Emergency Response Plan (SERP). The SERP provides guidance for response measures necessary to resolve the problem and minimize impacts to public health and environment.

After the spill response has been completed, response staff submits spill documentation to designated management supervisory personnel who review and verify the data, and confirms calculations and estimations made. The information is reported to the CIWQS database and then reviewed and certified by the LRO.

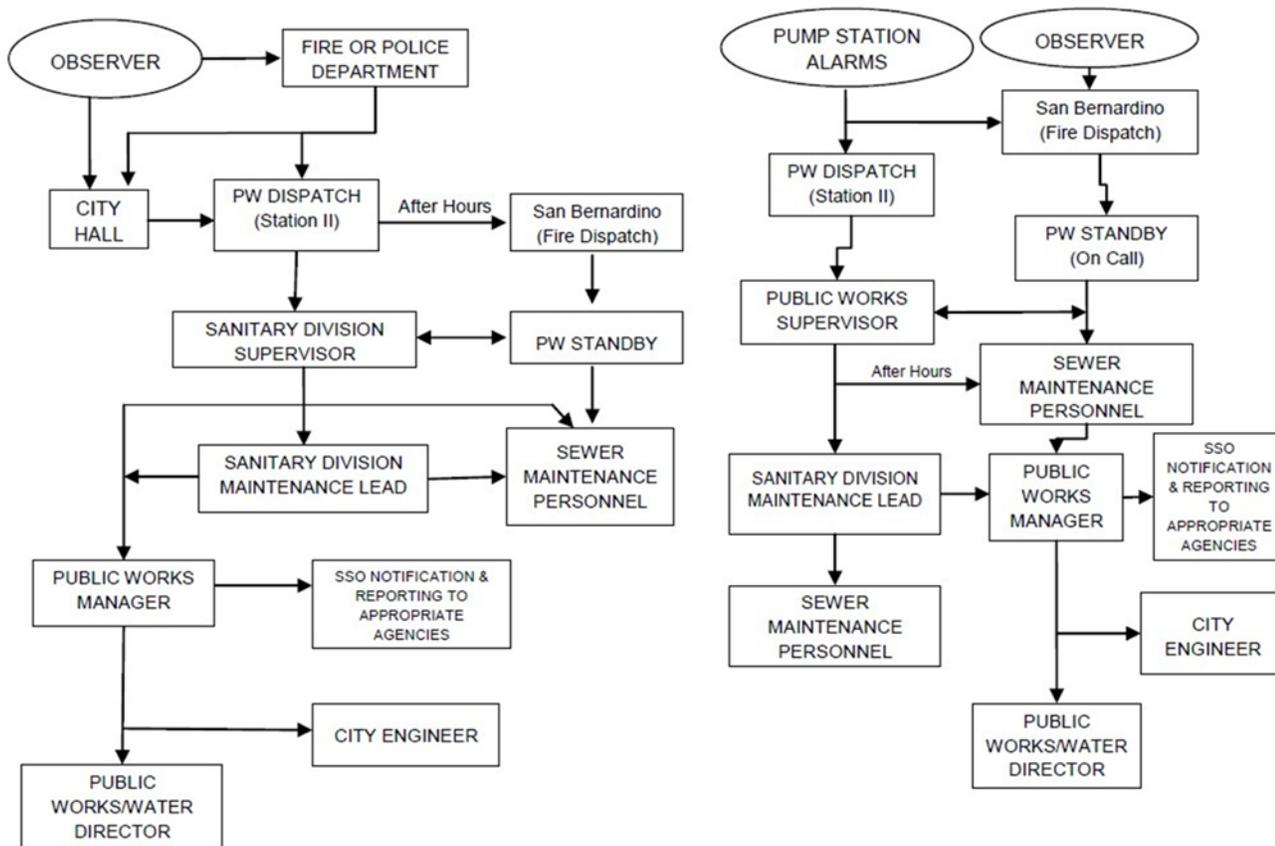


Figure 2-2 – Chain of Communication for Reporting Spills

SPILL INCIDENT COMMAND

In the event that command personnel are absent, the specific order of command is as follows:

- City Manager
 Director of Public Works and Water/City Engineer
 Assistant Director of Public Works
 PW Manager Sanitary Division
 PW Supervisor Sanitary Division
 PW Senior Lead Worker Sanitary Division
 PW Lead Worker Sanitary Division

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have there been any changes requiring updates to the Organizational Chart?
- Have there been instances when a service call for a spill was not properly routed to response personnel?
- Were all spill response activities documented and forwarded to the LRO?
- Have there been any changes in assigned responsibilities for implementing the Sewer System Management Plan?
- Is there a process in place to ensure all contact information remains up to date?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
2.1	Review names, contact information and position responsibilities. Update, as necessary.	Semi-Annually	X	X	X
2.2	Review Chain of Communication outcomes for all spill responses	Each Spill Event	X		X
2.3	Review Organizational Chart for any changes. Update as necessary.	Semi-Annually	X	X	X

RESILIENCE

Resilience is addressed for Element 2 by:

- Ensuring that more than one person is capable and responsible for specific duties for Sewer System Management Plan implementation, e.g., back-up personnel.
- Designation of more than one LRO to help ensure full and continuous coverage of duties.
- Testing the phone notification system to ensure calls are received and routed to appropriate personnel.

APPENDIX 2 INCLUSIONS:

- None

3. Legal Authority

WDR REQUIREMENTS

Att. D-3 (pg. D-4)

“The Plan must include copies or an electronic link to the Enrollee’s current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

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

COMPLIANCE

The above items are addressed in order below:

Pursuant to the California Government Code, Sections 37100 and 54350, the City Council, as the local legislative body, may by ordinances and resolutions make and enforce all rules and regulations necessary for the administration of the City’s O&M plan. Such actions include, but are not limited to, the design, construction, cleaning, repair, reconstruction, rehabilitation, replacement, operation, maintenance, discharges into, blockage of, access to, and violation enforcement pertaining to the sanitary sewers within the City’s System. The legal authorities for the specific areas stipulated in the WDR are discussed below.

Victorville Municipal Code (VMC), Section [16-5.06.020](#) adopted the California Plumbing Code, edition 2022, as the Plumbing Code of the City of Victorville.

- Authority to Prevent Illicit Discharges into City’s Wastewater Collection System

Victorville Municipal Code (VMC), [Section 10](#), regulates the disposal of sanitary sewage, including fats, oil, and grease (FOG), into the City’s sanitary sewer system to protect the proper functioning of the collection system as well as the treatment plant. VMC, [Section 17](#) regulates inflow and infiltration of flood waters to and from the City’s sanitary sewer system.

VMC Sections 10 and 17 include, but are not limited to the following key provisions:

VMC, Section 10-02.640 and 10-02.650: General Sewer discharge prohibitions and notification requirements, provides language to prohibit illicit discharge of general waste such as garbage, fish,

fruit or vegetable waste, dead animals and all that sort of things; and liquid waste of any kind containing chemicals, greases, oils, fats and tars; and storm water to the City Sewer System.

VMC, Section 10.03.210-270 provides language to prohibit illicit discharge of variety types of FOG (fats, oils and grease) to the public Sewer System.

VMC, Section 10-08.020–(1): Prohibited discharge standards, provides language to prohibit illicit discharge of chemicals, flammables, corrosive substances, medical wastes, sludge and all that sort of things to the public sewer system of the City.

VMC, Section 17.64.020 - Public utility and sanitary sewer service stipulates minimizing or eliminating infiltration of flood waters into the systems and discharges from the systems into flood waters.

- The City's pre-planned collaboration and coordination with storm drain agencies

The City owns and operates the municipal separate storm sewer system (MS4) within its sanitary sewer service areas and routinely coordinates between departments to ensure collaboration and coordination for both routine operations, maintenance, and emergencies. City staff has access to storm drain maps via phones and tablets. There are some County and Cal-Trans storm drain facilities within the City's service area and the City has historically had full access to these facilities. As a matter of practice, these storm drain owners are notified of any sewage discharge into their facilities and the actions by City staff. .

Require that sewer system components and connections be properly designed and constructed.

VMC, Section 10 regulates Design and Construction of Public Sewers, establishes the standards and criteria to which sewers are to be constructed and connected to the City's wastewater collection system.

VMC, Section 10 includes, but is not limited to the following key provisions:

VMC, Section 10.02.480 – Sanitary sewer system design standards, requires all sanitary sewer system facilities and infrastructures to be designed according to the latest edition of the City of Victorville Standard Specifications for Public Improvements, adopted by the City.

VMC, Section 10.02.110-135, provides language to require all buildings situated within the city and abutting on any street in which there is now located, or may in the future be located, a public sewer which will serve the building, is required at his/her expense to connect the building directly with the proper public sewer in accordance with the provisions stated in VMC.

Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the City.

Property owners own and are responsible for the entire lateral reach on private property pursuant to City Ordinance 10.02.060, however, VMC, Section 10 does provide the legal authority to ensure access by the City to the City's wastewater collection system for maintenance, inspection, or repairs.

In addition, the following City access rights are provided for in the VMC:

- VMC, Section 10.02.080 - Right of entry of inspectors, secure the right of city inspectors to access any parts of any premises connected with the city sewer system for the purpose of checking facilities.
- VMC, Section 10.02.170 – Compliance inspection; access required; acceptance of permit conditions, grants the city engineer to enter any facilities that are part of or equipped w/ the city sewer system if for maintenance or inspection purposes.
- a. VMC, Section 10.03.110 – Right of entry; inspection and sampling conditions, provides language to ensure access for purposes of sampling and inspecting wastewater discharge, devices, and manifest related to the FOG permit.

Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures.

There are several sections in VMC entitled "Enforcement" which define the authority to both issue notifications to correct, as well as enforce provisions of the City Code. Enforcement ordinances were last revised and approved by City Council March 7, 2018 (Title 10 and Title 16. 10.02.170 General Sewer; 10.03.300 FOG)

VMC Section 10, Article VIII: Violations and Penalties; Appeals; and Sections 10.03.290-350 ensure authority for assessing fines for misdemeanors or infractions including FOG and other non-FOG related illicit discharges to the public sewer system.

Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

VMC, Section 10.02.540 establishes requirements for establishing sewer easements for new construction. VMC, Section 10.02.070 and 10.02.240 define requirements for obtaining encroachment permits for property owners and other agencies working in existing City rights-of-way.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

1. Are the City ordinances and standards adequate for fulfilling the Sewer System Management Plan legal requirements?
2. Does the City have a process in place for periodic review and evaluation of ordinances?
3. Have there been instances when the code or ordinance did not address a need or circumstance?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
3.1	Review Ordinance to confirm all documents provide necessary required legal authority.	Once per 6-year SSMP Update Cycle	X	X	
3.2	Confer with storm drain owners to ensure current practices and contact information are up to date.	Annually		X	X
3.3	Monitor and Document occasions when ordinance(s) failed to address issues as intended.	Continuously	X	X	X

RESILIENCE

Resilience is addressed for Element 3 by:

- Keeping abreast of industry trends and local ordinances that may affect operations.

APPENDIX 3 INCLUSIONS:

- None

4. Operation and Maintenance Program

The Plan must include the items listed below that are appropriate and applicable to the Enrollee’s system.

4.1. Updated Map of Sewer System

WDR REQUIREMENTS

Att. D-4 (pg. D-4)

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

COMPLIANCE

The City utilizes a GIS system to map of its wastewater collection system and continuously updates its GIS map with all current sewer and stormwater information. The City uses the GIS and CMMS database systems to maintain sewer system asset maps that include gravity mains, maintenance holes, pump stations, siphons, and other collection system features.

Errors or omissions discovered by field staff are documented and submitted to designated supervisory or management personal for review prior to being forwarded to the GIS group for corrections and updates. Upon acceptance of newly installed facilities, record drawings are forwarded to the GIS group for inclusion into the mapping system.

The City maintains hardcopies of up-to-date sewer maps and atlases for its sewer and stormwater system.

Upon request, the City will provide State and Regional Water Board staff a link to system maps.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Were all map updates completed in a timely manner?
- Are all staff trained in the procedure for providing map update information?
- Are newly installed sewer assets incorporated into the system maps?
- Are there terrain features or assets that should be incorporated in future map updates (e.g. exposed pipe, siphons, ARVs, surface water, etc).

IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
4.1.1	Review map update procedures with all affected staff.	Annually		X	X
4.1.2	Review/ensure all newly installed facilities have been updated and included in the system maps	Annually		X	X

4.2. Preventive Operation and Maintenance Activities

WDR REQUIREMENTS

Att. D-4 (pgs. D-4/D-5)

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors. The scheduling system must include:

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

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

COMPLIANCE

The purpose of a work order system is to program and track all required inspection and maintenance activities within the collection system to help proactively prevent blockages/operational problems or spills. The City utilizes the SEDARU CMMS system to maintain a complete, accurate, and up-to-date inventory of sewer system assets, prioritize and schedule operation and maintenance activities. The City will be transitioning to OpenGov CMMS. It is anticipated this transition will be completed in FY 2025-26.

The SEDARU system is currently being phased out and transitioned to OpenGov CMMS, which will be utilized to schedule CCTV inspection and maintenance activities and maintain historical data for all maintenance activities. The City's scheduling system allows staff to put certain activities on a preventive schedule, which creates work orders on a prescribed interval. Work orders for other activities are generated by supervisory personnel on an as-needed basis.

This allows for prioritizing and planning routine activities such as CCTV inspections, pipe cleaning and pump station maintenance activities. In addition, the SEDARU system is used to plan and schedule higher-frequency inspection and maintenance activities. Emergency and other reactive activities are documented in the systems as well.

This system provides a basis for critical analysis and data-driven planning and decision-making today and into the future.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Is the City's maintenance, operations, engineering work orders periodically audited for accuracy and completeness?
- Does the city monitor "open," "overdue," or "not yet completed" work orders to ensure completion of tasks?
- Are inspection and maintenance activities reducing the number and volume of spills?
- Is maintenance work being completed as scheduled?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
4.2.1	Monitor "Past Due" work orders to ensure critical work is being completed	Quarterly		X	X
4.2.2	Review scheduled PMs to ensure the prescribed schedule remains appropriate.	Annually		X	X

4.3. Training

WDR REQUIREMENTS

Att. D-4 (pg. D-5)

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

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

COMPLIANCE

The City's training program covers several areas involving or associated with wastewater collection systems and serves to develop and maintain highly qualified, knowledgeable, and capable staff. This training is provided through a variety of modes (self-study, seminars, conferences, in-house on-the-job training, etc.) and begins from the first day on the job and continues regularly thereafter. Sanitary Division personnel receive training both in-house and through CWEA. Records of staff training are maintained by the City and summarized in the City's SSMP Audit reports.

Staff involved in responding to customer service calls, including sewage spills, will receive annual training on the City's Spill Emergency Response Plan. This training is part classroom and part hands-on exercises and drills for responding to spill events and includes containment, restoring flow, spill volume estimation, spill volume recovered estimation, and spill start time estimation, clean up and completing the spill event data collection forms for entry into CIWQS.

Staff designated as Data Submitters are trained on the City's, WDR compliant procedures for reporting spills from receipt of call to draft report submittals and certification.

For CIP, contractors' staff training requirements are spelled out in the contract documents. The City has developed spill response procedures that Contract Service personnel who perform work for the City are required to:

- Immediately notify the City of any sewage spill they encounter.
- Make attempts to contain the spill
- Cordon off the area to keep the public safe
- Remain onsite until City staff arrives and relieves them.

This language is included in service agreements and discussed during pre-job meetings.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has all training been completed as scheduled?
- Have records of training and attendance been documented and maintained?
- Have all staff demonstrated ability and knowledge after each training event?
- Have contractors received, at a minimum, direction for reporting and responding to spills.

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
4.3.1	Review training documentation to ensure all staff have received required training	Quarterly			X
4.3.2	Review agreements with contractors and/or Pre-Job meeting minutes to ensure contract personnel have received instruction for responding to sewage spills	Each Contract		X	X

4.4. Equipment Inventory

WDR REQUIREMENTS

Att. D-4 (pg. D-5)

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

COMPLIANCE

The City maintains a variety of vehicles and equipment for both routine inspection, maintenance and contingency or emergency operations. The City maintains a small inventory of spare parts and has identified critical spare parts, such as various repair couplings and pipe sections to perform emergency repairs on the gravity system and float controls for pump stations. The City has redundancy built into their pump stations and can bypass each station utilizing portable pumps and the stations force main. This contingency reduces the need to maintain a large inventory of spare parts and items.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have inventory lists been audited as scheduled?
- Have any inventory deficiencies or omissions been discovered and rectified?
- Has the city experienced any equipment failure that inhibited a spill response?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
4.4.1	Audit inventory lists to ensure stock is adequate	Annually			X
4.4.2	Check with vendors to ensure critical parts lead times are as expected.	Annually		X	X
4.2.3	Ensure contracts with emergency support services are current	Annually		X	X

RESILIENCE

Resilience is addressed for Element 4 by:

- Developing an SOP for updating maps when errors are discovered.
- Developing and using forms (paper or electronic) for data collection to help ensure all pertinent information is consistently collected.
- Periodically evaluating inspection cycle intervals to help ensure they are optimized.
- Requiring staff to demonstrate ability and/or knowledge for all training activities.
- Monitoring equipment and critical spare parts usage for and trends.
- Performing periodic audits of the Vehicle and Equipment Inventory List.

APPENDIX 4 INCLUSIONS:

- 4.1. Vehicles and Equipment List



**CITY OF VICTORVILLE
VEHICLE LISTING
FACILITY: 00001**

Page 1 of 2
Date: 4/29/2025 11:19 AM

Vehicle	Year	Make	Model	License Plate	VIN Number
00195	2010	TITAN	8900XLT SPRAYER	00195	GCHAT1570423
00224	1995	CAT	GENERATOR	00224	4PM00224
02207	2022	NPS	5500ECO GENSET	02207	55D2202207
02599	2000	INGERSOLL	341 AIR TAMPER	02599	SLM02599
03767	2006	MULTIQUIP	QP3TH TRSH PUMP	03727	3727
10343	2022	MIKASA	MVC-82VHW	10343	J10343
10893	2006	DODGE	RAM 2500	1310893	3D7KR28D46G189621
10989	2017	TROYBILT	020678-00 WASHR	10989	1023710989
12474	2016	BOBCAT	3400 UTILITY	12474	4XAB3FKAXG8012474
15653	2009	AUTOCAR	WX64	1315653	5VCD6LE79H209207
17410	2018	STIHL	FS70R LINE TRIM	17410	514217410
19271	2025	FORD	EXPLORER RWD	1719271	1FMUK7DH0SGA59768
20391	2017	FORD	E-450 CAM VAN	1520391	1FDXE4FS2HDC62408
23296	2017	FORD	F-350	1523296	1FT8X3B67HEB92825
23567	1964	ZIEMAN TRL		1223567	2120781
24195	2017	FORD 4WD	F-450 UTILITY	1524195	1FD9W4HY2HED59495
25677	1990	BIG TEX TRL	TRAILER	E325677	16VDB1022L1E39788
26928	2018	JOHN DEERE	410L	26928	1T0410LXEJF326928
35620	2018	TOWMASTER TRL	T40 TRAILER	1535620	4KNBF3525JL162085
36023	2022	RAM 4X4	2500 UTILITY	1636023	3C7WR5HJ1NG213815
37004	2020	HONDA	EU2200I GEN	37004	EAMT-2337004
41918	1991	WACKER PT6		SE441918	PT6LT675801021
45859	2015	HIWAY SAFETY	ARROWBOARD	SE645859	1M9BA0914FC570666
50200	2023	RING-O-MATIC	FT150 VAC TRLR	1650200	1R9F61113PP303051
52260	2023	MULTIQUIP	CEMENT MIXER	52260	F02452260
52542	2002	HYDRO	HOSE REEL	1152542	HCT02604590000112
62342	2018	STHIL	BR350 BLOWER	62342	513662342
69608	2003	CHEVY	C2500HD	1169608	1GBHC24143E274046
70315	2020	KENWORTH T880	VACTOR 2115	1570315	1NKZL70X6LJ404714
70885	2024	GENERAC	MDG25IF4 GEN	70885	3014570885
71021	2017	FREIGHTLINER	VACTOR 2110	1471021	1FVAG3DX4HHHW1580
71875	2022	RAM	2500 UTL 4X4	1671875	3C6UR5HJ6NG384619
71876	2022	RAM	2500 UTL 4X4	1671876	3C6UR5HJ7NG384614
77143	2018	STIHL	FS70R LINE TRIM	77143	512677143
82001	2020	CHEVROLET	3500 SRW 4WD	1582001	1GC4YSEY2LF199767
82002	2020	CHEVROLET	2500 4WD	1582002	1GC4YLE73LF184840
82010	2020	CHEVROLET	2500 4WD	1582010	1GC5YLE77LF206830
82043	2020	CHEVROLET	TRAVERSE	1582043	1GNEVGKWLJ196956
86376	2008	GOODWIN	TRASH PUMP	1286376	16MPF08148D051458
89716	2017	SULLAIR	185DPQ COMPR	689716	201610120052



**CITY OF VICTORVILLE
VEHICLE LISTING
FACILITY: 00001**

Vehicle	Year	Make	Model	License Plate	VIN Number
92056	2004	FORD	F-350	1192056	1FDWW36S74EC20856
94520	2024	PETERBILT	PB548 10YD DUMP	1694520	2NP8LJ0X0SM705439
D7180	2025	FREIGHTLINER	VACTOR 2115	D7180	3ALHG3FE4SDWD7180
V6976	1987	TRAILER	EXTEC DOLLY	V6976	EXTEC

Specifications 5.19 - Operations and Maintenance

WDR REQUIREMENTS

Spec. 5.19 (pg. 27)

To prevent discharges to the environment, the Enrollee shall maintain in good working order, and operate as designed, any facility or treatment and control system designed to contain sewage and convey it to a treatment plant.

COMPLIANCE

The City has a very effective preventive maintenance program that maintains the integrity of the sewer system and ensures continuous and safe conveyance of wastewater, resulting in a reduced frequency, number, and volume of sanitary sewer overflows (SSOs). The City's preventive maintenance program has evolved into a very proactive program that is designed to locate, identify, and address problems that may exist in the collection system prior to the occurrence of a failure in the system. The City has been addressing the sewer system improvement based upon the criticality of the deficiencies detected.

Maintenance and inspection programs are briefly described below:

Sewer Main Maintenance

The cleaning of the City's sewer mains constitutes the largest maintenance activity in the City. Clean crews progress in a systematic manner, cleaning the system from the top down, utilizing two to three crews at any given time. Through the cleaning and CCTV efforts, the City has identified (currently 104) potential problematic pipe segments that are cleaned on prescribed, high-frequency schedules, one-month, and six-month intervals.)

Gravity Main Condition Assessment

The City in 2016-2017 performed a CCTV inspection of the entire sewer system establishing a CIP list for the needed projects. The last of these projects is scheduled for completion in 2025. Additionally, the City has contracted for follow up CCTV inspections for the next of areas of concern and will anticipate compiling a new CIP list for projects as needed. Currently the CCTV inspection program goal was to perform a CCTV inspection on the sewer system every 5 years. The City is now implementing an efficient targeted approach by using a CCTV inspection frequency schedule based on many factors but not limited to age, type of pipe, and size of mainline. Fiscal year 2026-27 is the anticipated start date for the targeted CCTV inspection program.

Lateral Maintenance

Currently laterals are maintained on an as-needed basis. The City utilizes a camera lateral launch system that where laterals are inspected from the mainline pipe. The City has identified problem laterals and maintains these accordingly. The City maintains a budget to replace problem pipes and install property line cleanouts, as many as 40 per year.

Manhole Inspections

Manholes inspections are performed by CCTV crews during the course of gravity main using MACP defect coding. Problems found are typically rectified in a short period or put on a preventive maintenance schedule for actions such as root foaming.

Root Control

The City has identified portions of the sewer system subject to root intrusion. The City uses contracted services for chemical root control application. This is performed on an annual basis.

Pump Station Inspections & Maintenance

Pump stations are inspected twice each week. Routine maintenance is performed as prescribed and reactive maintenance, as needed.

Sewer Rehabilitation and Repair

The City completed CCTV inspection of the entire City sewer system in 2017. The City identified and rated defects in the sewer system based on severity and has incorporated the resulting data into determination of sewer system segments requiring repair or rehabilitation. The City continues to identify and prioritize areas of their system requiring repair or rehabilitation through routine CCTV inspection and maintenance activities and any segments identified as causing or likely to cause spills due to existing sewer conditions.

The City addresses identified sewer repair and rehabilitation by developing and implementing improvement projects to address the issues identified. The Public Works Department has also completed the following sewer system improvements and related efforts to ensure it remains in optimal working condition:

- Inspected approximately 129.29 miles of sewer using CCTV.
- Cleaned more than 576 miles of sewer line, as a part of preventive maintenance program
- Increased its sewer rates.
- Has conducted extensive outreach efforts, including a booth at a public fair.
- Secured 40 manhole covers to prevent unauthorized entries and vandalism.

5. Design and Performance Provisions

5.1. Updated Design Criteria/Construction Standards/Specifications

WDR REQUIREMENTS

Att. D-1.1 (pg. D-5)

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

COMPLIANCE

Design and Construction Standards

The City of Victorville has established Standards and Specifications for public works improvements. This helps to ensure its wastewater collection systems facilities are properly designed and constructed. The City requires sanitary sewers and appurtenances to be installed in accordance with City Standard and Specifications, including drawings for all Public Works Improvements.

For each design project, the City of Victorville develops Contract Documents that are specifically tailored for that facility. For sewer projects, the City relies upon the Standard Specifications for Public Works construction (Greenbook) and the American Public Works Association Standards.

To further assure that wastewater collection facilities are properly designed and constructed, design of all project drawings, by both in-house Engineering staff and outside engineering consultants, follow an established review procedure. Licensed engineers oversee and/or perform all facility design. Project drawings are checked and reviewed by licensed engineers prior to approval for construction.

Staff holds Standards meetings quarterly to review City design and construction standards to help ensure they are up to date and in line with industry standards and best practices. Updates are made when deemed appropriate.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Is plan checking QA/QC processes helping to ensure adherence to the standards?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
5.1.1	Ensure all project plans are approved in accordance with the City’s Standard Specifications and Details.	Each Project		X	
5.1.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	2025		X	

5.2. Procedures and Standards

WDR REQUIREMENTS

Att. D-1.1 (pg. D-5)

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

COMPLIANCE

Inspection and Testing of all new sewer pipelines and repaired or rehabilitated facilities are inspected in accordance with American Public Works Association Standards and City Standards. This includes, but is not limited to, CCTV inspection, pressure testing, vacuum testing of maintenance holes, and backfill compaction testing.

Enforcement of these standards, through design review, construction inspection, and materials testing provides assurance and confidence that the City’s collection system, and the private systems connected to it, will function as designed and will effectively transport the collected wastewater stream throughout its long service life.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Were any design or installation deficiencies found during warranty inspections?
- Are deviations from standard procedures and/or specs, testing, etc., justified and documented?
- Does the City stay abreast of industry design standards and technical advances in the industry?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
5.2.1	Verify inspection procedures are adequate and consistent with current standards of practice	2017 (10-year cycle)		X	X
5.2.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	2017 (10-year cycle)		X	

RESILIENCE

Resilience is addressed for Element 5 by:

- Staying abreast of industry trends and standards.
- Performing warranty inspections of newly installed or repaired assets to evaluate design and installation practices.
- Evaluating as-built changes for trends and areas for design and performance improvements.

APPENDIX 5 INCLUSIONS:

- None

6. Spill Emergency Response Plan

WDR REQUIREMENTS

Att. D-1.1 (pg. D-6)

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

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

COMPLIANCE

The City's Spill Emergency Response Plan (SERP) is a stand-alone document that contains all the key elements necessary for an appropriate Spill response: notification, emergency incident response, volume and spill start time estimations, reporting, and impact mitigation. The current plan, prepared by DKF Solutions Group LLC, meets the requirements of the State Water Resources Control Board's reissued Waste Discharge Requirements (Order WQ-2022-0103-DWQ), which became effective on June 5, 2023. Initial training has been provided to affected staff and refresher training is conducted annually

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have staff spill response efforts helped to prevent the discharge of sewage to surface waters?
- Do post-spill assessments indicate staff are following the procedures outlined in the SERP?
- Is SERP training effective and trainees demonstrating adequate knowledge and abilities?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
6.1	Perform SERP training including practice drills.	Annually			X
6.2	Review Post Spill Assessments to ensure adherence and to indemnify any trends that should be addressed	Annually			X

RESILIENCE

Resilience is addressed for Element 6 by:

- Multiple staff are trained to respond to spill events
- Post-spill assessments are conducted to evaluate staff adherence to the SERP and to identify areas for improvement.
- Data collection forms direct staff to collect all the required data to be submitted to CIWQS and are designed as a guide to a proper spill event response.
- The City employees several different spill volume estimation methods to account for different circumstances.

APPENDIX 6 INCLUSIONS:

- None

7. Sewer Pipe Blockage Program

WDR REQUIREMENTS

Att. D-7 (pg. D-7)

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

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

COMPLIANCE

The City implements blockage control via the public education and outreach programs to educate sewer system users on what items can and can not be properly discharged to the system and by implementation of a FOG Control Program which incorporates design, permitting, and inspection activities focused on food service establishments and other producers of FOG in the City's sewer service area.

- a. The City's process for educating the public about pipe blocking substances and best practices to prevent sewer disruptions is accomplished through such things as attending community events (such as, Fall Festival, National Night Out, Concerts in the Park) and distributing information about kitchen best practices and what not to flush. In addition, mailers are sent quarterly that address these same issues. The City puts forth this message on their website.
- b. All items retrieved from the sewer system during maintenance activities such as hydro-cleaning gravity lines, are disposed of at the VVRA Treatment Plant. Debris tanks are emptied daily or as needed.
- c. The legal authority to prohibit illicit discharges (e.g. FOG) into the sewer system is discussed in Victorville Municipal Code, [Section 10](#), specifically in section 10.03.210 to 10.03.270.
- d. The requirement that grease producing facilities install grease removal devices, Chapter 10 of the Plumbing Code provides the Building Official (or other Authorized Authority) with legal authority to require installation of interceptors (clarifiers) where waste flow conditions

necessitate the proper handling of the liquid waste stream flow to protect the sewer system and the public (commonly at food service establishments, processing facilities, industrial facilities, etc., that generate grease, oil, grit, acids, alkaline or flammable wastes). This authority would apply at any facility that generates FOG in an amount that will damage or otherwise increase the maintenance costs of the wastewater collection system. In addition, VMC, Section 10.03.050 – FOG permit required, requires food establishments engaged in preparing food for consumption by the public discharging grease or wastewater which might contain grease, into a private or public sewer shall obtain a permit to discharge from the Building Official. This section further requires the food establishment grease interceptor/trap permit to be subjected to all provisions and all other regulations, user charges, and fees which may be established by resolution of the City Council.

- e. Victorville Municipal Code Section 10.03.110 and 10.03.120, provides the City legal authority to inspect and enforce the local FOG ordinances.
- f. The City has identified portions of the collection system that are subject higher quantities of grease. These line segments are included in the City’s Hot Spot program. Furthermore, segments of the collection system with persistent FOG problems are referred to the Public Works and Engineering Departments for additional evaluation and corrective actions.
- b. The City has implemented a targeted program to address FOG dischargers. The City’s source control program plan has been developed and includes field visits by the City’s Code Enforcement inspectors to document and issue citations to FSE’s that do not have grease interceptors or who fail to comply with City Codes

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have there been any blockages/spills from any identified problem area?
- Is the city receiving feedback on public outreach efforts?
- Is the debris and other sewage solids collected during cleaning activities being disposed of appropriately?
- Have there been spills due to excessive fats, oil, grease, roots, or non-dispersible wipes discovered in the sewer system during the audit period?
- Are there repeat offenders among FSEs?
- Are enforcement trends decreasing?
- Are Source Control and Collection staff included in the plan check process?

IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Responsible Party		
			PW	Eng	CODE
7.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually			X
7.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually	X		X

RESILIENCE

Resilience is addressed for Element 7 by:

- Inspection of select assets directly downstream of grease producing businesses to ensure source control is effective.
- Residential FOG outreach and education program.
- Performance of regular assessments of system assets to monitor performance.
- QA/QA process for evaluating pipe cleaning effectiveness.
- Daily disposal of pipe blocking materials retrieved during maintenance activities.

APPENDIX 7 INCLUSIONS:

- None

8. System Evaluation, Capacity Assurance, Capital Improvements

WDR REQUIREMENTS

Att. D-8 (pgs. D-7/D-8)

The Plan must include procedures and activities for:

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

8.1. System Evaluation and Condition Assessment

WDR REQUIREMENTS

Att. D-8 (pgs. D-7/D-8)

The City SSMP must include procedures to:

- *Evaluate the sanitary sewer system assets utilizing the best practices and technologies available.*
- *Identify and justify the amount (percentage) of its system for its condition to be assessed each year.*
- *Prioritize the condition assessment of system areas that:*
 - *Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies.*
 - *Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas.*
 - *Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List.*
- *Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods.*
- *Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State.*
- *Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and*
- *Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: (a) sea level rise, (b) flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; (c) wildfires; and (4) increased power disruptions.*

COMPLIANCE

The above requirements are addressed in order below:

- c. The assessment of the City's collection system includes pipelines, maintenance holes, and pump stations. It is of key importance to regularly perform condition assessments to initially establish a condition baseline, to monitor condition changes over time and to maintain a proactive approach to system maintenance. The condition rating of assets used to develop the City's work plans, including prioritization and timelines for completion. The City utilizes CCTV inspection technology to assess pipe conditions and performs visual inspections of maintenance holes, using MACP defect coding and

SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

systematic visual inspections pump stations. All activities are documented in the SEDARU CMMS for evaluation and analysis.

- d. The City historically attempted to perform condition assessment on its gravity main system on a 5-year cycle. Due to available resources, this has proven to be a challenging endeavor and has not produced the intended results. The City completed used contracted services and completed CCTV inspection of its entire system between 2016 and 2017. As a result, the City has completed all identified high priority repair work. The system has been performing well since, as evidenced by a spill rate of less than two spills per 100 miles of pipe. Moving forward, the City is in the process of developing a focused and practical approach by developing a condition assessment process that utilizes risk factors to determine appropriate inspection cycles on a pipe-by-pipe basis. The City anticipates the implementation of this procedure by July of 2025.
- e. The City's service area is primarily desert. Because of this the environmental consequence of a spill would (generally) be the same throughout the service area.
- f. In addition to CCTV inspections of gravity mains and visual inspections of maintenance holes and pump stations, the City performs monthly "Line Riding" procedure where staff drive the alignment of pipes in more remote areas looking for sink holes, evidence spills or construction work on or about the pipe, missing or displaced manhole lids and evidence of vandalism.
- g. The City is not aware of any exfiltration from the collection system. The City continuously monitors any evidence of such an occurrence.
- h. The City documents all operation and maintenance activities in the OpenGov CMMS.
- i. Generally, the City's service area is not susceptible to climate change impacts. The City has identified one pipeline that could be impacted by erosion and it is being addressed in the current Capital Improvement Plan.
- j. Santa Fe Wash Sewer Relocation Project: Relocate approximately 1-mile of 15" sewer main away from a major drainage channel.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has the City maintained its schedule for and is data being reviewed in a timely manner?
 - CCTV Gravity Mains
 - Laterals
 - Maintenance holes
 - Pump Stations
- Are inspection efforts discovering deficiencies in a timely manner?
- Are maintenance and inspection activities being properly documented?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			PW	Eng	CODE
8.1.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually	X	X	X
8.1.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually	X	X	
8.1.3	Hold meeting to discuss any issues that may result from climate changes	Annually		X	

8.2. Capacity Assessment and Design Criteria

WDR REQUIREMENTS

Att. D-8 (pgs. D-7/D-8)

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

- *Dry-weather peak flow conditions that cause or contributes to spill events;*
- *The appropriate design storm(s) or wet weather events that causes or contributes to spill events.*
- *The capacity of key system components; and*
- *Identify the major sources that contribute to the peak flows associated with sewer spills.*

The capacity assessment must consider:

- *Data from existing system condition assessments, system inspections, system audits, spill history, and other available information.*
- *Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions.*
- *Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change.*
- *Increases of erosive forces in canyons and streams near underground and above-ground system components due to larger and/or higher-intensity storm events;*
- *Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and*
- *Necessary redundancy in pumping and storage capacities.*

COMPLIANCE

In 2016, the City contracted David Evans & Associates (DEA) to develop and complete a system-wide hydraulic model of the City's sewer system for existing and future sewage flow conditions in the City. The modelling effort utilized data on existing sewer system assets and their condition.

Based on this effort, the City identified sewer system improvement projects to be completed over a ten (10) year period from 2017-2026. The analysis is detailed in the City's [2016 Sewer System Master Plan](#)

The City ensures that its collection system is properly designed and any new or rehabilitation work conforms to design capacity standards.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Number of capacity-related spills or surcharge condition during the audit period?
- Has the system responded to rain events as indicated by the hydraulic model?
- Has there been any changes to zoning designations (residential, commercial, industrial)?

IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
8.2.1	Monitor/Evaluate significant rain events to see if they exceed the design storm in the hydraulic model.	Each significant rain event		X	X
8.2.2	Identify and monitor flood-prone areas susceptible to erosion from rain events	After each significant rain event		X	X
8.2.3	Monitor flows in each basin and update the hydraulic model	Per Engineering Department schedule		X	

8.3. Prioritization of Corrective Action

WDR REQUIREMENTS

[Att. D-8 \(pgs. D-7/D-8\)](#)

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

COMPLIANCE

The City has evaluated the hydraulic capacities of the City’s sewer system, through the [2016 Sewer System Master Plan](#), under existing flow conditions and projected future flow conditions through Year 2040. The City utilizes this assessment to identify and prioritize sewer system improvements to address existing capacity issues and build capacity for future growth through the year 2040.

The City completed CCTV inspection of the entire City sewer system in 2017. The City identified and rated defects in the sewer system based on severity and has incorporated the resulting data into determination of future sewer system improvement projects and identification of areas that require higher frequency cleaning and inspection.

The City utilizes the capacity and condition assessments to prioritize sewer system maintenance and capital improvements with areas at highest risk of discharge to waters of the State in case of blockage or failure prioritized for higher frequency maintenance, corrective repairs, and capacity improvement.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has the City adhered to its system evaluation/condition assessment schedule?
- Has the City adhered to its prioritization/corrective procedures for sewer repair and capacity improvement projects?
- Have projects been completed before deficiencies caused failures?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
8.3.1	Utilize all available data for prioritizing corrective actions considering severity and consequences of potential spills.	Each CIP Update		X	X
8.3.2	Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities.	Continuously			X

8.4. Capital Improvement Plan

WDR REQUIREMENTS

Att. D-8 (pgs. D-7/D-8)

The capital improvement plan must include the following items:

- *Project schedules include completion dates for all portions of the capital improvement program.*
- *Internal and external project funding sources for each project; and*
- *Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.*

COMPLIANCE

The City's current Capital Improvement Plan is described in chapter 6 of the [2016 Sewer System Master Plan](#). Three capacity improvement projects comprised of 44 sewer segments consisting of 11,320 linear feet (2.1 miles) of replacement sewers needing upsizing to replace existing sewers along the same alignments in order to alleviate the identified capacity deficiencies. These projects were identified based on modelling of the existing flow conditions; however, they were sized for 2040 flow conditions.

Approximately 35,000 linear feet (6.6 miles) of City sewers were videotaped using closed circuit television (CCTV), which is approximately 1.6% of the total length of the City's collection system (412 miles). Among the sewers that were condition surveyed by CCTV, a total of 6,453 lineal feet (1.2 miles) of sewer segments had significant defects that warrant replacement of the sewers. Lining rehabilitation is recommended for the remaining 9,562 lineal feet (1.8 miles).

Completed Projects since 2019

- **Sewer Main Lining 2022 Project** – The City of Victorville cleaned and rehabilitated 21,605 linear feet of 8-inch structurally deficient sanitary sewer pipes using cured-in-place-pipe (CIPP) liners and re-established 411 lateral connections using Top hat lateral repair liners.
- **Sewer Main Lining 2023 Project** - The City of Victorville cleaned and rehabilitated 15,991 linear feet of 8-inch, 5311 linear feet of 10-inch and 2520 linear feet of 12-inch structurally deficient sanitary sewer pipes using cured-in-place-pipe (CIPP) liners. 467 lateral connections were re-established using Top hat lateral repair liners.
- **Old Town Septic to Sewer Conversion Project** – The City awarded a construction contract to Kerns Inc., to install sewer lift station on Willow Street to connect three residences in low-income area to Victorville's municipal sewer system to prevent potential environmental degradation of ground water caused by leak from old or failed onsite septic system. Estimated construction completion date is the end of August 2024.
- **Structural Capacity Improvement Project – C1:** The City upsized 2,992 linear feet of 10-inch sewer pipes to 15-inch SDR-26 PVC Pipes and replaced nine manholes. Construction was completed in 2022.
- **Structural Capacity Improvement Project – C2 & C3:** The City has completed 100% of the plans, specifications and estimates. Currently in the process of acquiring permanent and temporary construction easement from San Bernardino County Flood Control Division. The construction is expected to start and be completed in FY 2024-2025.

Operations and engineering staff are in continual contact and regularly communicate and coordinate efforts related to system repair and rehabilitation projects.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has the City’s capital improvement plan schedule been adhered to?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			DIR	ENG	PW
8.4.1	Hold regular coordination meetings, with all parties, to help keep the projects on track and resolve issues that may arise in a timely manner.	Annually		X	
8.4.2	For schedules that are not kept, justify and document the reason	Each Delayed Project		X	

RESILIENCE

Resilience is addressed for Element 8 by:

- Is there an annual review of the Capital Improvement Plan by all appropriate individuals including both Engineering and Operations?

APPENDIX 8 INCLUSIONS

- None

9. Monitoring, Measurement, and Program Modifications

WDR REQUIREMENTS

Att. D-9 (pg. D-9)

The Agency SSMP must include an Adaptive Management section that addresses Plan implementation effectiveness and the steps for necessary Plan improvement, including:

- *Maintaining relevant information, including audit findings, to establish and prioritize appropriate SSMP activities.*
- *Monitoring the implementation and measuring the effectiveness of each element.*
- *Assessing the success of the preventive operation and maintenance activities.*
- *Updating SSMP procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and*
- *Identifying and illustrating spill trends, including spill frequency, locations, and estimated volumes.*

COMPLIANCE

The above requirements are addressed in order below:

- a. The City maintains accurate and relevant inspection and maintenance records for the collection system operations and maintenance. Much of the documentation today is maintained electronically, which allows for ease of access and analysis. This helps City staff to make sound decisions and prioritize activities when dealing with the routine and the unexpected.
- b. Monitoring of the City's SSMP focuses on each element in terms of its implementation and effectiveness. Monitoring the implementation of SSMP elements would achieve the following goals:
 - Stated objectives of each element are valid and achievable.
 - Tasks cited in each element leads to reaching these objectives.
 - Tasks are being implemented.
 - Responsibility for implementation is identified.

By establishing specific performance indicators for each element, an assessment can be made to determine the degree of success achieved. The SSMP has been designed to include key performance indicators (KPIs) for each element, which are used to measure effectiveness.

- c. The City Assesses the success of maintenance and operation activities by ensuing activities are being performed as expected, monitoring actual outcomes compared to intended outcomes, as well as monitoring spill trends.
- d. The City is committed to continuous improvement and monitors and evaluates performance of work programs and SSMP elements to ensure intended outcomes are achieved while looking for areas for improvement. Although the SWRCB requires that the SSMP be updated every six years, the SSMP should be considered as a dynamic document and may require updating on a more frequent basis. Routine changes to administrative information, notwithstanding, minor changes will be required to address improvements identified through the SSMP Audit or through modifications required as conditions change.
- e. The City monitors spill trends, at a minimum every three (3) years during required audits, utilizing the CMMS database, inspection records and CIWQS data. These resources are helpful in planning and

MONITORING, MEASURING, AND PROGRAM MODIFICATION

programming work, and adjusting as needed, enabling the City to be adaptive and capitalize on lessons learned.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are SSMP Elements being periodically evaluated for effectiveness?
- Are work activities and spill events being documented?
- Has a plan and schedule been established to address audit findings/deficiencies from the last audit?
- Is Trend Analysis being performed on spill causes?
- Have work programs been assessed and updated as necessary?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
9.1	Assess work programs to ensure outcomes are as intended	Annually		X	X
9.2	Ensure updates to work programs and the SSMP based on assessments.	As Needed		X	X
9.3	Monitor and evaluate spill trends. Document efforts.	Annually		X	X

RESILIENCE

Resilience is addressed for Element 9 by:

- Development of key performance indicators to measure effectiveness of the Sewer System Management Plan.
- Performing periodic reviews of the Sewer System Management Plan to help ensure the plan is being properly implemented.
- Developing and adhering to a timeline to correct deficiencies found during the audit process.
- Periodically evaluating work programs to help ensure effectiveness.

APPENDIX 9 INCLUSIONS:

- None

10. Internal Audits

WDR REQUIREMENTS

Att. D-10 (pg. D-10)

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

COMPLIANCE

The SSMP audit reports will include an evaluation to determine if compliance with each SSMP element has been met. The objective of the audit is to evaluate compliance, implementation and effectiveness of the SSMP. Specifically, for SSMP Audits, the City will:

- Evaluate the implementation and effectiveness of the Enrollee’s Sewer System Management Plan in preventing spills;
- Evaluate their compliance with the WDR;
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and
- Identify necessary modifications to the City’s SSMP to correct deficiencies.

Implementation is evaluated by determining if the City is executing the SSMP as stated.

Effectiveness is evaluated by using key performance indicators, which have been developed specifically for each element.

An additional evaluation is performed to comply with Specifications 5.6 addressing resilience. Resilience indicators have been developed for each element, and they serve to demonstrate how resilience is built into the SSMP and inspection, maintenance and spill response activities.

Any deficiencies discovered through the audit process are noted and a plan and schedule to implement corrective measures are established and described in the final audit report.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have audits been performed as required?
- Have the audits assessed compliance, implementation, and effectiveness?
- Have deficiencies been identified?
- Has a plan and schedule to rectify the deficiencies been established?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			DIR	ENG	PW
10.1	Schedule audits in advance of due dates to ensure adequate time to complete. City has 6 months to complete the audit from the end of the audit period.	Begin end of audit period		X	X
10.2	Ensure a plan and schedule is developed to address deficiencies.	Once the Audit is completed		X	X

RESILIENCE

Resilience is addressed for Element 10 by:

- Periodically evaluate key performance indicators during the audit period to assess effectiveness and make corrections, if necessary, prior to the audit.
- Evaluate previous audit to ensure deficiencies have been rectified.
- Calendar the audit due dates and complete the audit on time.

APPENDIX 10 INCLUSIONS:

- None

11. Communication Program

WDR REQUIREMENTS

Att. D-11 (pg. D-10)

The Plan must include procedures for the Enrollee to communicate with:

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

COMPLIANCE

- a. When the City experiences a spill, it is standard procedure to secure the affected area and keep the public away. This is done using signage barricades, cones and caution tape. Should the City experience a spill that may require closure of public areas, signs are immediately placed indicating the issue and providing contact information. Staff will remain on site to provide an additional safety factor until appropriate authorities respond and direct otherwise. In all cases, the City follows the advice of higher authorities, such as the local environmental health department and other regulatory authorities.

The SSMP is required to be updated every six years. The governing council is required to approve each update. The Council approval of the SSMP is an agenda item and will be advertised to the public in advance of the meeting. Opportunities for public comment are provided at that time.

- b. The City does not currently have satellite systems.

EFFECTIVENESS

The City utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Does the City place all Sewer System Management Plan action items on the agenda for regular council/board meetings?
- Does the City have signage, or other means, readily available to notify the public of environmental or public risk factors related to a sewage spill?
- Does the City perform outreach to residential customers?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	PW
11.1	Ensure the Board of Directors approves the SSMP per schedule	Every 6 years		X	X
11.2	Ensure the SSMP is posted on the City Website and the link functions properly.	Annually		X	X
11.3	Ensure Sewage Spill Warning signs are readily available to communicate with the public when necessary	Annually			X

RESILIENCE

Resilience is addressed for Element 11 by:

- Use the Sewer System Management Plan as a tool to communicate to the public how the City is managing the system.
- Maintain a consistent presence in the service area by attending community events or issuing periodic newsletters or other communications to the public.
- Make it clear and easy for the public to contact the City.

APPENDIX 11 INCLUSIONS

- None