City of Lompoc
Utilities Department
Wastewater Division

Sewer System Management Plan

Initial Approval: July 2009
First Revision: June 2014
Second Revision: September 2014
Third Revision: October 2022

Element 0: Introduction

This introductory section provides background information regarding the purpose and organization of the City of Lompoc (CITY) Sewer System Management Plan as well as an overview of the City's service area and sewer system.

0.1 ABBREVIATIONS / ACRONYMS / DEFINITIONS

BAT	Best Available Technology
BMP	Best Management Practice
CITY or City	City of Lompoc
CFR	Code of Federal Regulations
CIP	Capital Improvement Program or Capital Improvement Projects
CMMS	Computerized Maintenance Management Systems
ERP	Enforcement Response Plan
FSE(s)	Food Service Establishment(s)
FOG	Fats, Oils, and Grease
GPS	Global Positioning System
GWDR	General Waste Discharge Requirements also referred to as the Waste Discharge Requirements (WDR)
I/I or I & I	Inflow / Infiltration
LWCD	Lompoc Wastewater Collection Division
LRWRP	Lompoc Regional Wastewater Reclamation Plant
MRP	Monitoring and Reporting Program
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
Order	SWRCB Order No. 2006-0003-DWQ adopted May 2, 2006
PM	Preventive Maintenance
PMP	Preventive Maintenance Program
POTW	Publicly Owned Treatment Works
RWQCB	Regional Water Quality Control Board
SOP/SMP	Standard Operating Procedure or Standard Maintenance Procedure
SORP	Sewer Overflow Response Plan
SSO	Sanitary Sewer Overflow and any sewer spill or overflow of sewage
SSMP	Sewer System Management Plan
SWRCB	State Water Resources Control Board or State Board
WDR	Waste Discharge Requirements also referred to as the General Waste Discharge Requirements (GWDR)
WWTP	Wastewater Treatment Plant or Waste Water Treatment Plant
Collections	The process of managing the movement of sewage discharges from the point at which it leaves the user to where it enters the WWTP
Director	The City of Lompoc Public Utilities Director or designee
Enrollee(s)	Entities or designated representative(s) that own or operate a sanitary sewer system greater than one mile in length that collect and/or convey wastewater to a Public Owned Treatment Works
Pretreatment Program	The identification of Users to ascertain if on-site pretreatment measures are required
Satellite Member Agencies	The Vandenberg Village Community Service District and Vandenberg Air Force Base
User	Any non-residential person or entity contributing, causing, or permitting the contribution of wastewater to the sewer system

0.2 INTRODUCTION TO SEWER SYSTEM MANAGEMENT PLAN

On May 2, 2006, the State Water Resources Control Board (Water Board) adopted the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (GWDR) Order No. 2006-003-DQW (Order). Prior to the 2006 Water Board adoption of the Order, the City operated and maintained its sanitary sewer system under Waste Discharge Requirement Order No. 01-87 issued by the Central Coast Regional Water Quality Control Board (Regional Board) on May 18, 2001. The City was required to develop and implement an Infiltration/Inflow and Spill Prevention Program. This Regional Board Order was replaced by Order No. 2006-003-DQW. The 2006 order applies to a federal or state agency, municipality, county, district, and other public entity that discharges waste. Such entities are referred to as Enrollees in the Order. The City, as an entity which owns and operates a sanitary sewer system greater than one mile in length and which collects/conveys wastewater to a publicly owned treatment facility, is subject to the terms of the Order. The Order required the City to develop and implement a system-specific Sewer System Management Plan (SSMP). The SSMP requirements included addressing proper and efficient management as well as the requirements for a spill response plan and the reporting of all sewer system overflows.

Order No. 2006-003-DQW was amended July 30, 2013, by the State Water Resources Control Board through its Order No. WQ-2013-0058-EXEC.

The 2013 Order mandated a new Monitoring and Reporting Program for all SSMPs. The 2013 Order has been incorporated into the City's updated SSMP. The earlier Monitoring and Reporting Program defined two categories of reportable sanitary sewer overflows, whereas the current program expands the number of categories to three. The City already reports all sanitary sewer overflows that occur on the City's system, therefore, in practice, the current Monitoring and Reporting Program merely expands the classification by categories and clarifies reporting requirements for each category. The complete text of the 2013 Order is incorporated in the SSMP as Appendix 6-A.

0.3 ORGANIZATION OF SSMP

The SSMP is based on the mandatory elements specified in the Order. These elements are:

1. Goals
2. Organization
3. Legal Authority
4. Operation and Maintenance Program
5. Design and Performance Provisions
6. Overflow Emergency Response Plan
7. Fat, Oils and Grease (FOG) Control Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, Measurement, and Program Modifications
10. SSMP Program Audits
11. Communication Programs

Each of these elements is addressed in the remainder of this SSMP. Each element includes the requirements for that element as described in the Order as well as any appendices containing supporting information.

0.4 DEVELOPMENT AND IMPLEMENTATION OF SSMP

The City's Wastewater Division Collections Section began preparation of its initial SSMP in August of 2007. City staff prepared the SSMP to cover the sanitary sewer collection pipes and four lift stations the City owns and operates. In addition to the City's system, the City has two satellite member agencies who convey sewage to the treatment plant: Vandenberg Village Community Services District (VVCSD) and Vandenberg Air Force Base (VAFB). These agencies are incorporated into the SSMP as required. The City incorporated by reference many existing programs and documents to satisfy the requirements of the individual elements of the SSMP; other material was newly developed to meet the requirements.

The SSMP was first completed and submitted to the City's governing board, City Council, for approval at its July 21, 2009 public meeting. The SSMP was certified to the State Board upon approval.

The SSMP has not always been revised as needed or required. A more comprehensive revision was completed September 19, 2014, and was submitted to the City Council for approval at its October 7, 2014, public meeting. The revised SSMP was also certified to the State Board upon approval. The next updated SSMP was due to be completed and approved by the City Council by October, 2019. This has not taken place. This 2021 revised/reissued SSMP will bring about regulatory compliance.

0.5 OVERVIEW OF SEWER SYSTEM COVERED BY SSMP

The City of Lompoc is located in Santa Barbara County approximately 10 miles inland from the Pacific Ocean and 55 miles northwest of the City of Santa Barbara. It was incorporated in 1888. The total City sewer system is approximately 111 miles in length. The lengths of the various diameter piping sizes are detailed below in Table 1. In the next table (Table 2.), the lengths of sewer collection pipes are broken down by age. There are approximately 2,200 maintenance holes on the Collection System.

Table 1. Size Distribution of Sewer Pipes

Pipe Diameter (inches)	Length (feet)	Length (miles)	% of System by Length
4	1,280	0.24	0.2
6	2208,220	339.44	335.6
8	2240,110	445.47	441.0
10	30,455	5.77	55.2
12	18,770	3.55	33.2
15	27,145	5.14	44.6
18	43,285	8.20	7.4
21	9,075	1.72	11.5
27	6,115	1.16	1.0
30	585	0.11	00.1+
36	595	0.11	00.1+
48	110	0.02	00.0+
56	80	0.02	00.0+
TOTAL	585,825	110.95	100.0

Table 2. Age Distribution of Sewer Pipes

Pipe Age	Length (feet)	Length (miles)	% of System by Length
2000-present	1105,944	20.06	18
1960-1999	369,054	69.9	63
1916-1959	1110,827	21.00	19
TOTAL	585,825	110.95	100

There are four lift stations in the sewer collection system. The First lift station has two submersible 5-hp BJM shredder pumps with float control that convey sewage collected from the River Park under the Santa Ynez River to connect to the northeastern portion of the collection system. A second submersible pump lift station with 2 bubbler-controlled 6.2-hp Gorman-Rupp pumps lifts the sewage from the northern portion of the collection system to be pumped to maintenance hole 18-507 across the 'H' street bridge. A third submersible shredder pump lift station with float control at River Bend Park, 900 McLaughlin Road, pumps to maintenance hole 26-706 900 Canfield Ave. A fourth submersible shredder pump lift station with float control at Ken Adams Park pumps to maintenance hole 18-518, 2400 Hancock Road.

The first pump lift station includes a 100-kW Chevy 454 V-8 natural gas emergency engine/generator. The second, third and fourth lift stations have Honda 5 KW portable generators for backup power.

Sewer System Management Plan
Element 1

1.0 Goals

Requirement: The goal of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that occur.

Element 1.0: Goals

This SSMP element identifies goals the City of Lompoc Wastewater Division has set for the management, operation and maintenance of the sanitary sewer collection system including 24 hour emergency response to sewage spills and discusses the role of the SSMP in supporting these goals. These goals provide focus for Wastewater staff to continue high-quality work and to implement improvements in the management of the City's wastewater collection system. This section fulfills the Goals requirement of the State Water Resources Control Board (SWRCB) SSMP Element 1 requirements.

1.1 REGULATORY REQUIREMENTS FOR GOALS ELEMENT

The summarized requirements for the Goals element of the SSMP are as follows:

RWQCB NPDES Requirement:

Maintain a Pretreatment Program for National Pollutant Discharge Elimination System (NPDES) compliance. Restates requirements of the GWDR to create an SSMP to reduce and prevent Sanitary Sewer Overflow (SSO), mitigate any SSO that occur, and report SSO as required.

SWRCB General Waste Discharge Requirements (GWDR) Requirement:

Develop goals to manage, operate, and maintain all parts of its wastewater collection system in order to reduce and prevent SSO, as well as to mitigate any SSO that occur.

1.2 GOALS DISCUSSION

Providing safe, responsive, and reliable sewer service is a key component to fulfilling the Wastewater Division's mission statement:

We, the employees of the Wastewater Division of the Utilities Department of the City of Lompoc, will provide our customers, the citizens of Lompoc, Vandenberg Air Force Base and Vandenberg Village Community Services District, with safe, efficient, and reliable collection and treatment of the communities' wastewater. We will work to meet or exceed all regulations by operating our plant in a most efficient manner. We will accomplish this in a work environment that promotes teamwork and professionalism.

1.3 PLAN

In support of this mission the Wastewater Division has developed the following goals for the operation and maintenance of its sanitary sewer system. This document outlines responsibilities, provides scheduling frequencies for the Division work elements, and provides procedures and guidelines for maintenance and cleaning activities.

A. Perform all operations in a safe manner to avoid personal injury and property damage.
B. Prevent public health hazards.
C. Prevent damage to public and private property.
D. Train appropriate personnel to perform regular duties as well as to implement an Overflow Emergency Response Plan.
E. Prevent, reduce, and mitigate sanitary sewer overflows.
F. Minimize inconveniences by responsibly handling interruptions in service.
G. Protect the large investment in collection systems by maintaining adequate capacities and extending useful life of the infrastructure.
H. Use funds available for sewer operations in the most effective manner.
I. Convey wastewater to treatment facilities with a minimum of infiltration, inflow, and exfiltration.
J. Provide adequate capacity to convey peak flows.
K. Apply appropriate pretreatment practices to protect the sewer system and wastewater facilities.
L. Communicate with all parties interested and affected by the SSMP.

This SSMP supplements and supports the Division's existing sanitary sewer Operations and Maintenance Program and goals by providing high-level, consolidated guidelines and procedures for all aspects of the sewer system management. The SSMP contributes to the proper management of the collection system and assists the Division in minimizing the frequency and impacts of SSOs by identifying known problem locations and providing guidance for appropriate maintenance, capacity management, and possible emergency response.

1.4 SCHEDULE

1. Increase Preventive Maintenance on the collection system to decrease SSO.
    a. At a minimum, clean all sewer mainlines every 18 months.
    b. Continue with 1, 4, 6, 12 and 36-month preventive maintenance inspections to enhanced and regular mainline sewer areas.
    c. Conduct video condition assessment of each sewer mainline every ten years and continuously identify areas for repair.
    d. Conduct appropriate analysis/evaluation of SSO utilizing historical maintenance and activity data and records and provide recommendations to reduce future risks.

2. Identify collection system blockages due to fats, oil and grease (FOG) and develop strategies to decrease backups.

3. Operate all lift stations at peak efficiency and perform weekly inspection and preventive maintenance.

4. Maintain records of the sanitary sewer system and respond to inquiries.

5. Conduct periodic safety meetings with Collections personnel with emphasis on traffic management while working in the public right of way.

Sewer System Management Plan
Element 2

2.0 Organization

- **Requirement:** The SSMP must identify:

a. The name of the agencies responsible or authorized representative.

b. The names and telephone numbers for management, administrative and maintenance positions for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organizational chart or similar document with a narrative explanation.

c. Also the chain of communication for reporting SSOs from receipt of a complaint or other information, including the person responsible for reporting SSOs to the state and Regional Board and other agencies if applicable, such as County Health Officer, County Environmental Health Agency, Regional Water Board and/or State Office of Emergency (OES).

Element 2.0: Organization

This SSMP element identifies organizational structure of the City of Lompoc Wastewater Division has set for the management, operation and maintenance of the sanitary sewer collection system and discusses the role of the SSMP in supporting the goals in Element. This section fulfills the Organizational Structure requirement of the SWRCB SSMP Element 2 requirements.

2.1 GOVERNANCE AND APPLICABLE STAFF

Lompoc City Council

A five member governing body voted into office by the citizens of Lompoc that sets policy and direction for the City.

Lompoc City Manager

Under policy direction of the City Council, plans, organizes, and administers the operations of the City departments including the Utilities Department; serves as the Chief executive officer of the City Council.

Utilities Director

Under administrative direction, plans, organizes, directs, and reviews the overall operation of the Utilities Department, which includes the Wastewater Division and its Collection system; serves as staff advisor to the City Manager on utility operations; communicates with various individuals, groups and organizations regarding City utilities services. The Director also is responsible for the Water, Electric, Solid Waste and Broadband service provided by the City.

Information Systems/GIS

The Information Systems Division; of management services, plans, assigns, designs and reviews the technology systems installed in the City. Information technology systems include local area networks, wide area networks, Geographic Information Systems (GIS), and oversight of equipment and computer programs utilized in the Utilities Department.

City Engineering (Public Works Department)

Provides engineering services, including design, contract administration and inspection of public works construction, including that for sewers, and related facilities for Collections.

Wastewater Superintendent

Under the Utilities Director's direction, plans, organizes, supervises, and directs activities of the Wastewater Division; responsible for managing the wastewater treatment facility and the wastewater collection system and is designated as the Legal Responsible Official for the SSMP. As well, as the Legal Responsible Official, the Wastewater Superintendent is the person responsible for reporting SSOs to other agencies as required.

Wastewater Collection Supervisor

Under direction of the Wastewater Superintendent, schedules, supervises, and participates in the construction, maintenance and repair of sewer mains, service laterals, lift stations, maintenance holes and equipment; implements SSMP. The Wastewater Collection Supervisor is also designated as the Legal Responsible Official for the SSMP. The Wastewater Collection Supervisor will document and report SSO's to the Wastewater Superintendent

Wastewater Senior/Collection Worker

Under supervision of the Wastewater Collection Supervisor, the Sr. Collection Worker and Collection Workers perform construction, repairs and maintenance of sewer mains, service laterals, lift stations, maintenance holes and equipment as well as provide 24 hour emergency response.

Laboratory Director/Chemist

Under direction of the Wastewater Superintendent, supervises the operation of and personnel at the wastewater plant laboratory and the Water Resources Protection Technician; interprets and implements Federal, State, and Local pretreatment regulations for wastewater discharges; and develops and provides periodic reports required by various agencies.

Water Resources Protection Technician

Under general supervision of the Laboratory Director, implements the pretreatment program of all wastewater discharges to ensure conformance to Federal, State, and Local regulations.

Other Department of Support

The Senior Environmental Coordinator performs a variety of technical and professional analytical work involving the completion of initial studies and preparation of environmental impact reports and negative declarations.

City Attorney

The City Attorney provides support and advice on an as needed basis on legal and regulatory matters relating to Wastewater Collections issues.

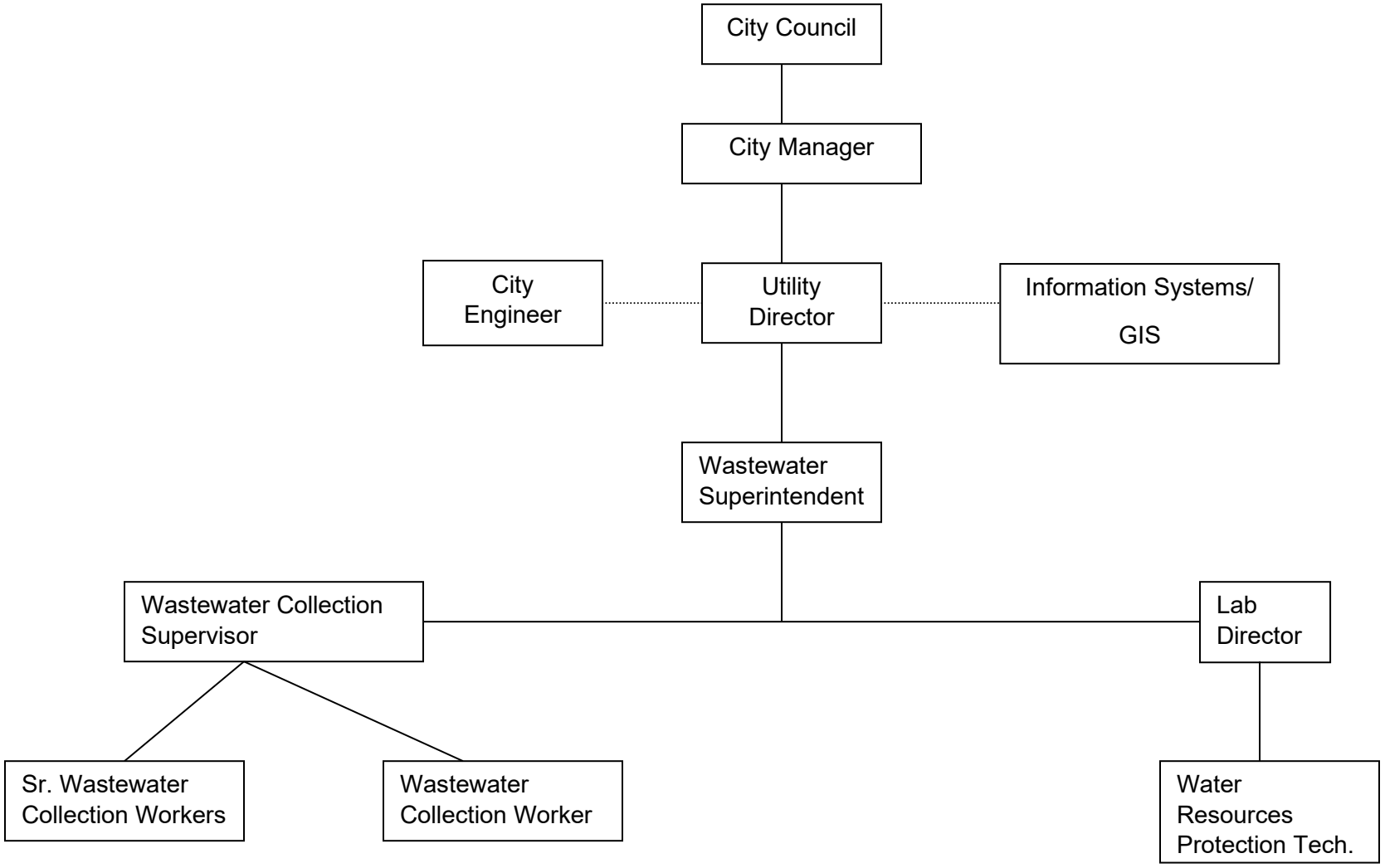
2.2 NAMES AND TELEPHONE NUMBERS (AS OF FEBRUARY 2021)

NAME	OFFICE	CELL
C.J. Berry, Utility Director	(805)875-8299	(805) 315-7107
Dong Hyun Chon, WW Superintendent	(805)875-8405	(805)345-7832
Dorin Marrs, WW Collection Supervisor	(805)875-8408	(805)315-7098
Todd Zarkovacski, Sr. WW Collection Worker	(805)875-8416	(805)315-7064
Abraham Carmona, WW Collection Worker	(805)875-8416	(805)315-2483
Mason Sagpang, WW Collection Worker	(805)875-8416	(805)315-7013

2.3 REPORTING RELATIONSHIPS:

See PARTIAL ORGANIZATION CHART on following page.

UTILITIES DEPARTMENT
PARTIAL ORGANIZATIONAL CHART



Sewer System Management Plan
Element 3

3.0 Legal Authority

- **Requirement:** Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures that it possesses the necessary legal authority to:

d. Prevent illicit discharges into its sanitary sewer system including infiltration and inflow from satellite wastewater collection systems, laterals, storm water, unauthorized debris, etc.

e. Require proper design and construction of sewers and connections.

f. Ensure access for maintenance, inspection and repairs to publicly owned portions of laterals.

g. Limit the discharge of FOG and other debris that may cause blockages.
e.g. Enforce violations of its sewer ordinances.

Element 3.0: Legal Authority

The City of Lompoc has a comprehensive Sewer Use Ordinance (SUO) identified as Chapter 13.16 of the City of Lompoc Municipal Code. The SUO is the document under which the City regulates wastewater discharges in accordance with state and federal laws. The Chapter consists of nine Articles and is available on the City of Lompoc Website.

3.1 SEWER USE ORDINANCE: GENERAL PROVISIONS

The overall objectives of the SUO, applicable abbreviations and definitions, and basic sewage connection/disconnection requirements are included in Article 1 of the SUO, General Provisions, Sections 13.16.010 through 13.16.150.

3.2 SEWER USE ORDIANANCE: WASTEWAER DISCHARGE PERMITS

Individual or general permits for use of the City's sewage system are required of most Users discharging or intending to discharge into the city sewage system. Prohibitions on discharge of certain pollutants, substances, and toxic materials are described in Article 2 of the SUO, Wastewater Discharge Permits, Sections 13.16.160 through 13.16.230.

3.3 SEWER USE ORDINANCE: DISCHARGE PROHIBITIONS AND LIMITATION

Illicit discharges into the sanitary sewer system (including Infiltration and Inflow from collection systems and laterals, storm water, unauthorized debris, etc.) receive constant attention. Legal authority to prevent and control illicit discharges is described specifically in Article 3 of the SUO, Discharge Prohibitions and Limitations, in Sections 13.16.240 through 13.16.340.

Wastewater collection systems of Satellite Member Agencies are included in these prohibitions by reference. The two Satellite Member Agencies that contribute flow to the Lompoc collection system are the Vandenberg Air Force Base (VAFB) and Vandenberg Village Community Services District (VVCSD). The City maintains service/contract agreements with each.

The point of connection for VAFB is at coordinates:

Latitude 34.66126023 – Longitude 120.4824822.

The point of connection for VVCSD is at coordinates:

Latitude 34.66121731 – Longitude 120.4840945.

Infiltration and Inflow

Infiltration is the seepage of ground water into the service connection through defective or cracked pipes, pipe joints and connections - Inflow is water discharged into the service connections from such sources as roof leaders, cellars, yard and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, surface runoff, street wash waters or drainage. Both are mitigated by inspections and maintenance.

Storm water cross connections to sanitary sewer

The City of Lompoc has no cross connections for storm water entry or combined sewers, so no mitigation is necessary.

Unauthorized debris

Video inspections are regularly scheduled to identify material (unauthorized debris) that could cause stoppages by getting hung up on roots or settling out in a sewer.

3.4 SEWER USE ORDINANCE: FACILITIES REQUIREMENTS (PRETREATMENT)

If the Director finds that it is necessary to eliminate, remove, or treat wastes at the User site, pretreatment measures may be required prior to User discharge into the City sewer system. Traps/interceptors that capture discharged materials such as oil, hair, grease, etc., will generally be required if such is the case. Surcharges may be imposed if discharges exceed permitted limits. Additional information is contained in Article 4 of the SUO, Facilities Requirements, Sections 13.16.350 through 13.16.390.

3.5 SEWER USE ORDINANCE: FEES AND CHARGES

The City can recover costs for various extra-ordinary services relating to pretreatment requirements. Fees may include reimbursements for activities such as operating the City's Pretreatment Program, issuing permits, inspections, etc. Changes may be incurred if actual discharges exceed permitted concentrations. Fees and charges can only be imposed if adopted by resolution or ordinance, however. The adoption of Wastewater Fees and Charges is presented in Article 5 of the SUO, Fees and Charges, Sections 13.16.410 through 13.16.420.

3.6 SEWER USE ORDINANCE: VIOLATION

Discharging wastewater which causes interferences, obstruction, or damage to the sewer system is a violation and the User is subject to responsibility for costs incurred as a result of such discharge. Actions and remedies related violations are contained in Article 6 of the SUO, Violation, Sections 13.16.430 through 13.16.470.

3.7 SEWER USE ORDINANCE: ENFORCEMENT

Enforcement by the city of Violations will generally be in accordance with the City's Enforcement Response Plan, the result of which can be disconnections. Consequences and liability for violations are contained in Article 7 of the SUO, Enforcement, Sections 13.16.480 through 13.16.500.

3.8 SEWER USE ORDINANCE: OTHERS JURISDICTIONS

Two other local jurisdictions convey their wastewater to the POTW for treatment and disposal. Interjurisdictional agreements contain the conditions under which the City is able to monitor constituents of sewage delivered. Further discussion can be found in Article 8 of the SUO, Other Jurisdictions, Section 13.16.510.

3.9 SEWER USE ORDINANCE: FATS, OILS, AND GREASE (FOG), CONTROL PROGRAM

Having a FOG Pretreatment Control Program to manage FOG discharges into the sewer system is necessary to reduce or eliminate blockages and overflows. This is generally accomplished by on site pretreatment devices such as grease traps/interceptors. Article 9 of the SUO, Fats, Oils, and Grease Control Program, Sections 13.16.520 through 1316.610 covers the City's authority to implement its program.

Proper design and construction of sewers and connections

All construction or alteration of any building sewer, sanitary sewer, public sewer, side sewer, or other facility requires approval by the City. This approval is accomplished by requiring an Encroachment Permit and/or Building Permit. The permits require that the work be done in accordance with City standards or as specifically approved by the Director of Public Works or his/her designee. Lompoc Municipal Code, Chapter 13.16 states it is the responsibility of private and public utilities connected to the City's wastewater system to ensure that wastewater discharge to the wastewater system is in strict compliance with all contractual agreements and all applicable laws, regulations, standards and limitations.

Access for maintenance, inspection, and repairs to publicly owned portions of laterals

Lompoc Municipal Code, Chapter 13.16 states all Users shall allow authorized representatives and agents of the City to enter the premises in order to carry out inspections, records examination, etc.

Sewer System Management Plan
Element 4

4.0 Operation Maintenance Program

- **Requirement:** The SSMP must include those elements listed below that are appropriate and applicable to the Enrollees system.

a. Collection System Map

Requirement: Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities showing all gravity line segments and maintenance holes, pumping facilities, pressure pipes, valves, applicable storm water pumping and piping facilities.

b. Operation and Maintenance

Requirement: Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas.

The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities such as work orders.

c. Rehabilitation and Replacement Plan

Requirement: Develop rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short term and long term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of maintenance holes, sewer pipes and system for ranking the conditions of the sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implement the short and long term plans plus schedule for developing the funds needed for the capital improvement plan.

d. Training

Requirement: Provide training on a regular basis for staff in sanitary sewer system operations, maintenance and required contractors to be appropriately trained.

e. Contingency Equipment and Replacement Inventories

Requirements: Provide equipment and replacement part inventories including identification of critical replacement parts.

Element 4 Operations and Maintenance Program

Wastewater Collections with the assistance of the City's Geographical Information Systems (GIS) strives to maintain accurate electronic records of the inventory of sewer assets as well as all work performed on those assets. This section describes the software programs utilized to maintain this information.

4.1 COLLECTION SYSTEM MAPS AND INFORMATION

Information Management

A computer-aided design (CAD) program, is used for construction design work and to print citywide underground utility map books. Map books are sets of over 50 Grids that display parcels and streets along with sewer and storm assets. Each sewer maintenance vehicle carries citywide underground map books. Maps are referenced for maintenance activities as well as for determining how storm drains can be blocked in the event of a sewage spill. **Appendix 4-A shows one sample page from the underground map book.**

CAD Sewer Layer Structure

Sanitary sewer collection system information is maintained in a Master CAD sewer file (Sewer.dwg). This drawing file contains the following layers:

SS-MANHOLES: point features identifying the location of sewer manholes, abandoned manholes, cleanouts, wet-wells, valves and plugs

SS-MAINLINES: line features identifying the location of sewer gravity mainlines, force mains.

SS-LATERALS: line features representing sewer service laterals.

SS-PUMP LIFT STATIONS: polygon features identifying the location of sewer pumping station buildings

In CAD, information pertaining to sewer features (such as manhole number, rim and invert elevations, mainline size and length) is displayed as text annotation layers. CAD feature layers (non-text layers) are exported into an ArcSDE Geodatabase (geodatabase) as GIS feature classes. In GIS, these features have the CAD text information stored as data in layers attribute tables along with other pertinent data.

GIS Computer Mapping Program

GIS is a computer mapping system that links graphic features on a map to databases of related information. The City has converted all of its sanitary sewer assets into a GIS system. While CAD is used primarily for design work, GIS is utilized for storage/retrieval of asset information. **Appendix 4-B was created using GIS software.**

ArcSDE Sewer Layer (Feature Class) Structure

The City is in the process of acquiring a new GIS software package, ArcGIS which allows for mobile data entry from field locations. Currently sanitary sewer collection system information is maintained in an ArcSDE Geodatabase that contains the following sewer GIS layers and attributes data:

SS-MANHOLES: point features identifying the location of sewer manholes, clean-outs, wet-wells, valves and plugs [data fields: ObjectID, Shape, CAD Handle #, Layer, LegacyID, OldID, Location, Neighborhood, FacilityID, Condition, Condition Date, Warranty Date, Cleaning Area, Notes, Rim Elevation, Channel Elevation, Interior Drop, Access Diameter, MH Location, Install Date, Latitude, Longitude].

SS-MAINLINES: line features identifying the location of sewer gravity mainlines, force mains, and force mains [data fields: ObjectID, Shape, CAD Handle #, Layer, LegacyID, Length, FacilityID, Location, Condition, Condition Date, Warranty Date, Cleaning Area, Diameter, Material, Install Date, SSML Location].

SS-LATERALS: line features representing sewer service lines - not an exact representation of the location of the lateral in the filed – but a line providing linkage between the parcels, with ownership information, and the receiving sewer mainline [data fields: ObjectID, Shape, CAD Handle #, Layer, LegacyID, Length, FacilityID, Location, Condition, Condition Date, Warranty Date, Cleaning Area, Material, APN, Street #, Street Name, Zip code, Year Structure Built, Install Date, ROW vs. Easement, Cleanout Type, Tap Type, Tap Location].

SS-PUMP LIFT STATIONS: polygon features identifying the location of sewer pumping station buildings, as well as data regarding pumps and maintenance information [data fields: ObjectID, Shape, CAD Handle #, Layer, Pump station Name, Wet well CAD Handle#, Station Type, LegacyID, Location, FacilityID, Condition, Condition Date, Warranty Date, Pipe Inlet Diameters, Discharge/Force main Diameter, Pump Capacity, Total Dynamic Head, Date Station Built, Pump #1 #2 & Information, Pump #1 #2 & Install Date, Pump #1 #2 & Rebuild Date, Pump #1 #2 & Model #, Pump #1 #2 & Serial #]

SS-BASINS: polygon layer for the City's 6 major sewer basins

SS-SUBBASINS: polygon layer outlining small sub-sections within each sewer basin

SS-CLEANINGAREAS: polygons further dissecting sub-basins. Cleaning areas identify how the collection system operates and flow is carried from peripheral lines to major trunk lines for maintenance crews to effectively clean pipe networks. Polygons are snapped to the outside boundaries of parcels served at each small network to identify property owners within each cleaning area.

Admins (Alpha)

The City utilizes Admins (Alpha) computerized maintenance management program for planning and scheduling preventative maintenance work and for tracking maintenance history on sewer assets. This application provides access to information pertinent to each asset (pipe diameter, length, material, etc.) as well as to maintenance activities (work orders).

The primary functions of Alpha are:

- Maintain service request and maintenance history for each collection system asset

- Produce and regularly update the maintenance schedule based on feedback from the operators
- Generate reports that support data analysis and decision making

- Indicate line segments or structures that may be candidates for replacement or rehabilitation under the capital improvement program

The program functions with the proper maintenance of key fields throughout GIS Layers.

Map Update and Maintenance Procedures

Keeping the sewer collection system maps up to date is an ongoing effort with all modifications coordinated through the appropriate department. The following routine actions are part of the program.

Field personnel note any discrepancies or errors on field maps. These notes are submitted to the Collection Supervisor and GIS Manager for verification and map updates. The master underground utilities CAD map is modified and updated underground utilities map book pages are distributed. CAD updates are transferred to the GIS system, attribute information is updated and associated maps (Sewer Cleaning District Maps, etc.) are reprinted reflecting new information.

In-house CAD drawings for all capital improvement and system rehabilitation projects are sent to the Collection Supervisor as part of project closeout. The master underground utilities CAD map is modified and updated underground utilities map book pages are distributed. GIS Manager transfers the CAD updates into the GIS system and updates GIS layer attribute information. Associated maps are re-printed reflecting new information and capital improvement details are entered in the system.

Developers submit “as-built” drawings of final sewer system construction to the City Engineer. These drawings are submitted to the GIS Manager for map updates. The master underground utilities CAD map is modified and updated underground utilities map book pages are distributed. CAD updates are transferred to the GIS system, attribute information is updated and associated maps are re-printed reflecting new information. Improvement details are entered in the system.

CAD Standards

To ensure that all plan information, whether generated within the GIS Department or by consultants, can be seamlessly incorporated into maps, staff developed a set of CAD standards. The standards condition CAD work to be performed utilizing a copy of the CAD project file “legend.dwg.” This drawing file and associated plot style table files contain standardized map layer attributes, legend, and title blocks for submitting project plans & profiles.

The GIS Manager performs the edits to the master CAD underground utility map files when changes occur. This procedure facilitate the proper transition of edits into the GIS sewer layer files.

4.2 PREVENTATIVE OPERATIONS AND MAINTENANCE OVERVIEW

The Wastewater Collection Section of the Wastewater Division employs several maintenance approaches for the sewer collection system. Citywide mainline cleanings, ongoing preventative maintenance of target areas, use of CCTV inspections of mainlines, along with coordination with Pretreatment efforts and activities to minimize FOG entering the collection system all support the goals and objectives of Wastewater Collections. Wastewater Collections is responsible for these collection system management goals:

1. Proper maintenance, operations and management of all parts of the wastewater collection system.

2. Provision of adequate capacity in the collection system to convey peak flows.

3. Minimize the frequency of sanitary sewer overflows (SSOs).

4. Mitigate the impact of SSOs.

Objectives of Wastewater Collection preventive maintenance program include:

1. Perform preventive maintenance on the collection system to eliminate preventable SSOs.

    a. Clean all sewer mainlines within the identified required maintenance period.

    b. Continue with 1,4,6,12 and 36 month preventative maintenance hydro cleaning has identified sewer mainline target areas.

    c. Conduct a video condition assessment of each sewer mainline as required and continuously identify areas requiring enhanced maintenance.

    d. Refer mainlines with repeat non-scheduled maintenance to Wastewater Collection Supervisor for evaluation.

    e. Conduct appropriate analysis/evaluation of SSOs within the city's collection system utilizing historical maintenance and activity data and records and provide recommendations to reduce future risk.

2. Identify collection system blockages due to fats, oil and grease (FOG) and develop strategies to minimize backups.

3. Operate all lift stations at peak efficiency and perform preventative maintenance on equipment at all sanitary sewer lift stations.

4. Maintain records of the sanitary sewer system and respond to inquiries.

5. Assist with the development of a capital improvement program directed at maintaining the current sewer assets, improving system reliability and providing adequate future capacity.

Table 4.2.A Equipment dedicated to Sewer Collection System

Quantity	Equipment	Purpose
2	Generator	Backup power for pump stations
1	CCTV Truck	Transport Mainline CCTV Camera
1	CCTV Mainline Camera	Repair and Preventive Maintenance
2	F-350 Trucks	Emergency Response & Daily Activities
1	Tractor 4X4	All Purpose
1	Air Compressor	Emergencies
1	Trailer Pump	Emergencies
2	Combo Vactors	PM & Emergencies to Collection System

Table 4.2.B Personnel for the maintenance of the Sewer Collection System

FTE	Title	Duties
1.0	WW Collection Supervisor	Oversee Sewer Operations, Maintenance Programs, Pump Crew, Repair Crew and Emergency Response; Documentation/Record Keeping
2.0	Sr. WW Collection Worker	Preventive Maintenance, Pump Station, Inspection, CCTV and related duties
1.0	WW Collection Worker	Preventive Maintenance, Pump Station, Inspection, CCTV and related duties

4.3 CITYWIDE SEWER CLEANING

One goal of the Wastewater Collections is to clean each and every sewer mainline within an identified required time period. A maintenance program was developed to send crews out for mainline cleaning in the most effective way, to track these efforts and document the problems found in the system.

The Wastewater Collection section divided the collection system into six major sewer basins as shown in **Appendix 4-C**, then further divided into Sub basins/cleaning areas, **(Appendix 4-D)**, that identify how pipe networks converge into trunk lines and flow is carried to the Wastewater Treatment Plant.

Cleaning areas are logical boundaries identifying small areas of the collection system that can be cleaned within a few days. The maps also follow flow so that crews can clean outlying pipes and work down as mainlines converge into trunk lines. These Basins, Sub basins and cleaning areas boundaries were created in a GIS program and are currently GIS layers.

Individual cleaning area maps, **(Appendix 4-E)**, are utilized to manage crew activities and ensure proper and thorough mainline cleaning.

A target cleaning frequency for each collection system sub-basin can be found in **Appendix 4-F.**

Preventative Maintenance Cleaning Of Enhanced Areas

The Wastewater Collections has an enhanced preventative maintenance (PM) program for identified problem areas on the collection system.
A list of target areas by frequency of cleaning is found in **Appendix 4-G**, Sewer Preventative Maintenance Cleaning of Enhanced Maintenance Areas.

Sewer Mainline Cleanings

Sewer mainline cleaning schedules were developed over the years through historical knowledge and data of repeat blockages as well as historical knowledge and experience of staff. The Wastewater Collection crew meet routinely, to discuss the effectiveness of certain types of cleanings, discuss whether the frequency of cleaning is appropriate at each location and identify if other problem areas have surfaced that should be added to the PM list. Crews are able to evaluate the effectiveness of PM cleaning and increase or decrease the length of time between cleanings based on field knowledge and experience as well as with the assistance of (CCTV) inspections.

After CCTV, it is determined if rehabilitation or replacement of a line may be necessary, or may present an opportunity to remove it from the PM list. At this point, the Collection Section will evaluate findings and handle the rehabilitation or replacement if necessary.

Cleaning Procedure

Wastewater Collection staff are trained on proper line-cleaning procedures. Various cleaning methods are used to ensure thorough cleaning of sewer mainlines, including hydro jet. The appropriate cleaning tools are regularly reviewed.

Collection System Performance

Objectives of preventative maintenance activities include the prevention of in sewer mainline blockages and SSOs. Performance indicators are useful in assessing the effectiveness of these activities, by keeping up-to-date historical logs, **(see Appendix 4-H).**

4.4 ASSESMENT, REHABILITATION AND REPLACEMENT PLAN

Condition Assessment and Inspection

Wastewater Collection has a goal of conducting a video condition assessment of each sewer mainline as required. Preventive Maintenance was selected to provide sufficient information to trend the condition of the lines and schedule repairs prior to failure.

The CCTV inspection is performed by Wastewater Collections. At a minimum, information from the CCTV inspection is to be documented and is utilized in prioritizing mainline repair projects. To provide consistency in data collection, review of pipe conditions and better understanding of the collection system, the Wastewater Collections staff implemented a program for CCTV inspections using a standardized National Association of Sewer Service Companies (NASSCO) rating system. Staff conducting and/or evaluating the ratings have completed Pipeline Assessment and

Certification Program (PACP) training. The CCTV inspection identifies lines that need more frequent follow-up inspection period.

In addition to the programmed area for condition assessment, the following locations are added to the annual CCTV program:

- Lines with more than three service requests within the past year;
- Lines under roadway scheduled for rehabilitation;
- Lines identified by field personnel as problem locations.

These added lines are re-inspected as needed regardless of the date of a previous CCTV inspection to ensure there is up-to-date information on problem lines. Ongoing collaboration between Wastewater Collection and GIS staff ensure CCTV projects identify an inclusive list of pipes and rehabilitation efforts are suitably prioritized.

Prioritization of Repair and Rehabilitation

The City dedicates a significant portion of the Wastewater Collection annual budget for rehabilitation and repair. This funding is in addition to any major line replacement or pump lift station upgrades. Funding has been established to make prioritized line repairs identified in the annual CCTV condition assessment of the collection system. This program prioritizes the repair of structural defects to ensure the system can consistently provide service and also prioritizes repair of defects such as protruding taps and roots that cause backups and SSOs.

Two-Year Rehabilitation and Replacement Program

The City has a two-year business plan (Budget) that includes a Capital Improvement Program (CIP). Individual CIP projects run independently and therefore can begin before and continue beyond the budget cycle. The two Year CIP will only identify funds being newly allocated to existing projects. The city wide sanitary sewer rehabilitation program receives funds annually from sewer use fees. The funds are used for spot-repair, slip-lining or full-line replacement

Managing the annual capital investment in sanitary sewer rehabilitation, inflow/infiltration improvements and capacity upgrades require a long-term conceptual planning document. This planning document is officially budgeted approved by the City Council. It identifies probable long-term financial needs and identifies future projects. This CIP projection is used to develop sewer rates and plan for the issuance of revenues necessary to finance the projected Capital Improvement Program. This CIP identifies an ongoing commitment of funds for inflow and infiltration reduction in addition to significant funding identified for the sewer system.

Critical Replacement Parts

Certain critical replacement parts are maintained in inventory so that acquisition delays can be avoided and emergencies effectively dealt with. Those parts and equipment relating to collections that have been identified as critical for planned and unplanned maintenance include:

- A second vactor/flusher truck
- Large diameter pipe replacement sections and fittings
- A bypass portable diesel fueled pump capable of serving the longest runs between access points

4.5 PUMP LIFT STATION MAINTENANCE

The Wastewater Collection staff is in charge of the operations and maintenance of the four sewage-pumping lift stations. Of the four pump lift stations, Uplands and River Park lift stations are dual pump lift stations. River Bend Park and Ken Adams Park are single pump lift stations. Wet well operations are set to limit pump starts and stops. Power outages occur infrequently and average about three a year. The Uplands stationary gen-set is exercised weekly and the River Park, River Bend Park and Ken Adams Park portable gen-set is exercised monthly.

Pump stations are thoroughly inspected weekly as part of the sewer maintenance pump station preventative maintenance program. Work activities are developed and prioritized based on these inspections and completed prior to the next inspection.

Table 4.5 Preventative maintenance inspections cover the following:

LUBRICATION	INSPECTION	LEAK CHECKS	EXERCISE	HOUSEKEEPING
Valves	Sump Pumps	Fuel/Oil Lines	Motors	Clean Interior
Locks & Padlocks	Backflow	Valves	Valves	Clean Exterior
Latches & Hinges	Controls/Alarms	Seals		Debris Pick-up
	Wet Well	Lubricants		Lights
	Exhaust Systems	Air Systems		

The Wastewater Collections utilizes an Auto Dialer and Inspection system to monitor pump run-times. Alarms sent to the Wastewater Collections include high wet well level and power failure.

4.6 SEWER MAINTENANCE STAFF TRAINING

Collection staff is required to complete various types of training as listed below. Collection staff must hold the appropriate CWEA Certifications.

Table 4.6 Wastewater Collection Staff Training List

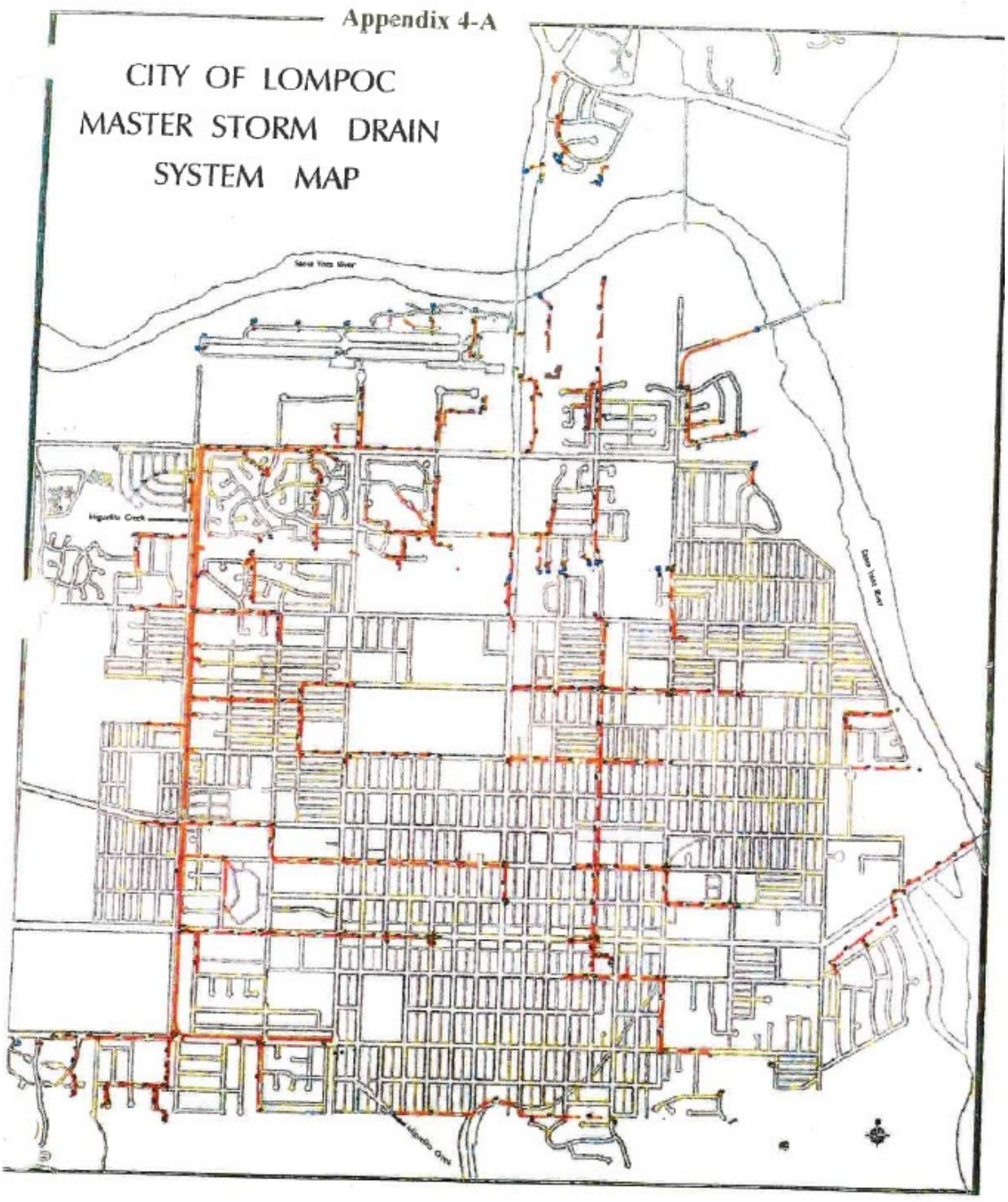
CORE	EQUIPMENT	OPERATIONS
Customer Service	Combo Vactor/Flusher	Confined Spaces
Sexual Harassment	Chainsaw	Gas/Air Monitors
Cultural Diversity	Forklift	Shoring
Commercial Drivers License	Tractor With attachments	Traffic Control
CWEA Certifications	Mower	USA Locating
	CCTV	SSO Prevention
	Dump Truck	NIMS
		NASSCO PACP (as required)

LIFT STATIONS	EMERGENCY	MEDICAL TRAINING
Electrical Training	Hazmat	Blood Borne Pathogen
Pump Repairs/Troubleshooting	Emergency Response Plan	First Aid Training
		CPR and AED

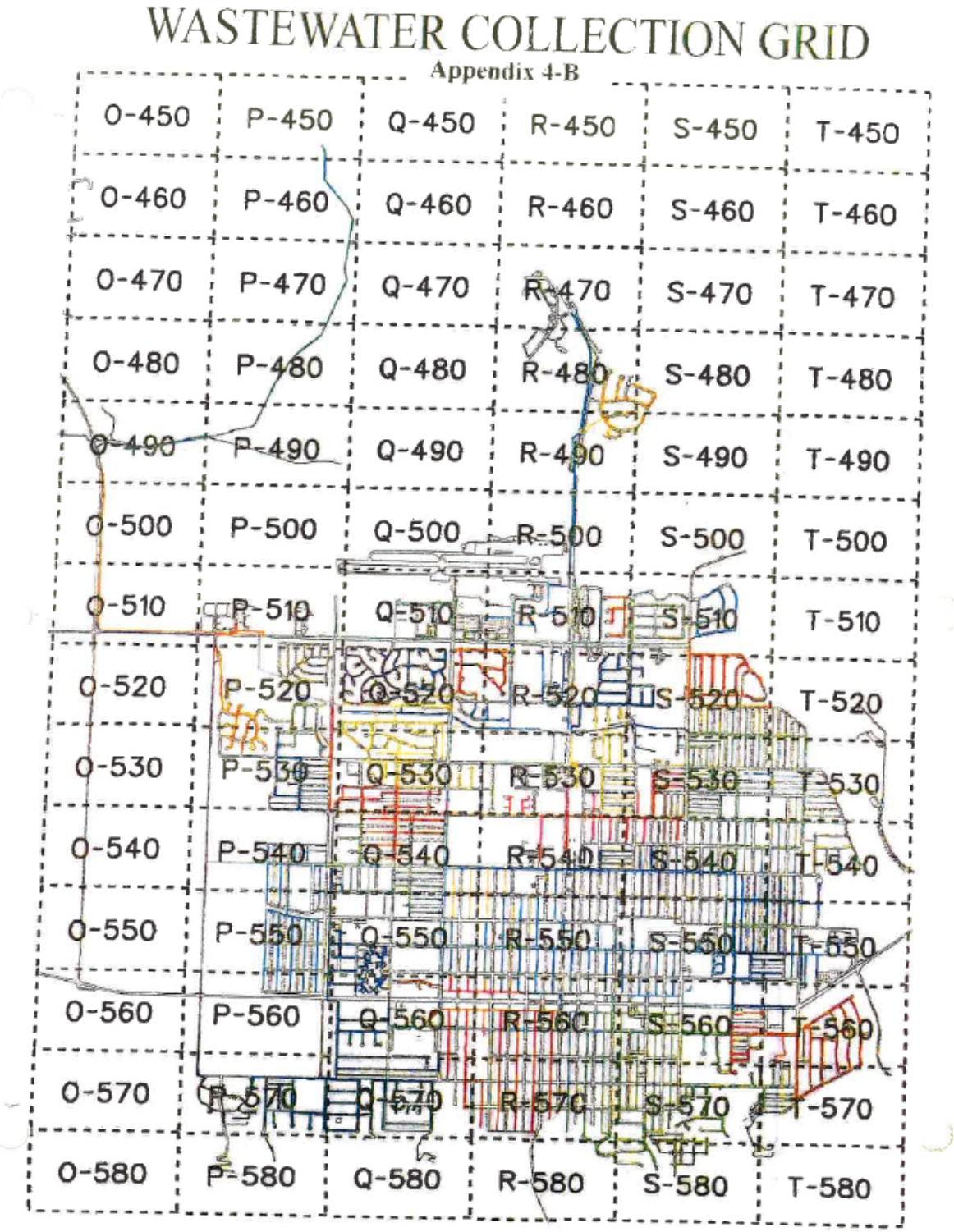
ELEMENT 4 APPENDICES

Appendix 4-A	Master Storm Drainage System Map
Appendix 4-B	Wastewater Collection System Grid
Appendix 4-C	Basins
Appendix 4-D	Sub basins/Cleaning Areas
Appendix 4-E	Cleaning Area Map (example)
Appendix 4-F	Frequency of Basin Cleanings (example)
Appendix 4-G	Enhanced Maintenance Areas
Appendix 4-H	Historical Log (example)

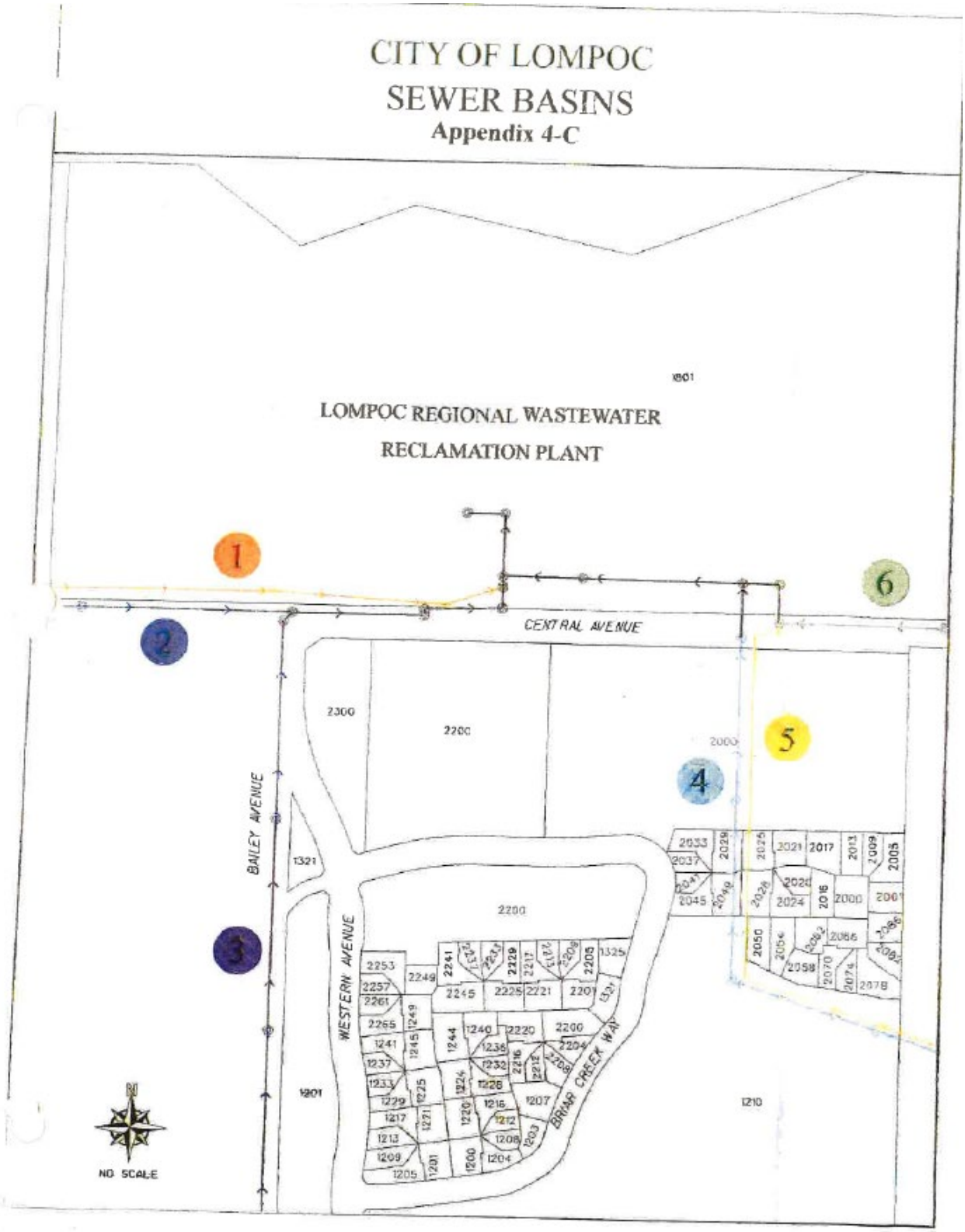
Appendix 4-A Master Storm Drainage System Map



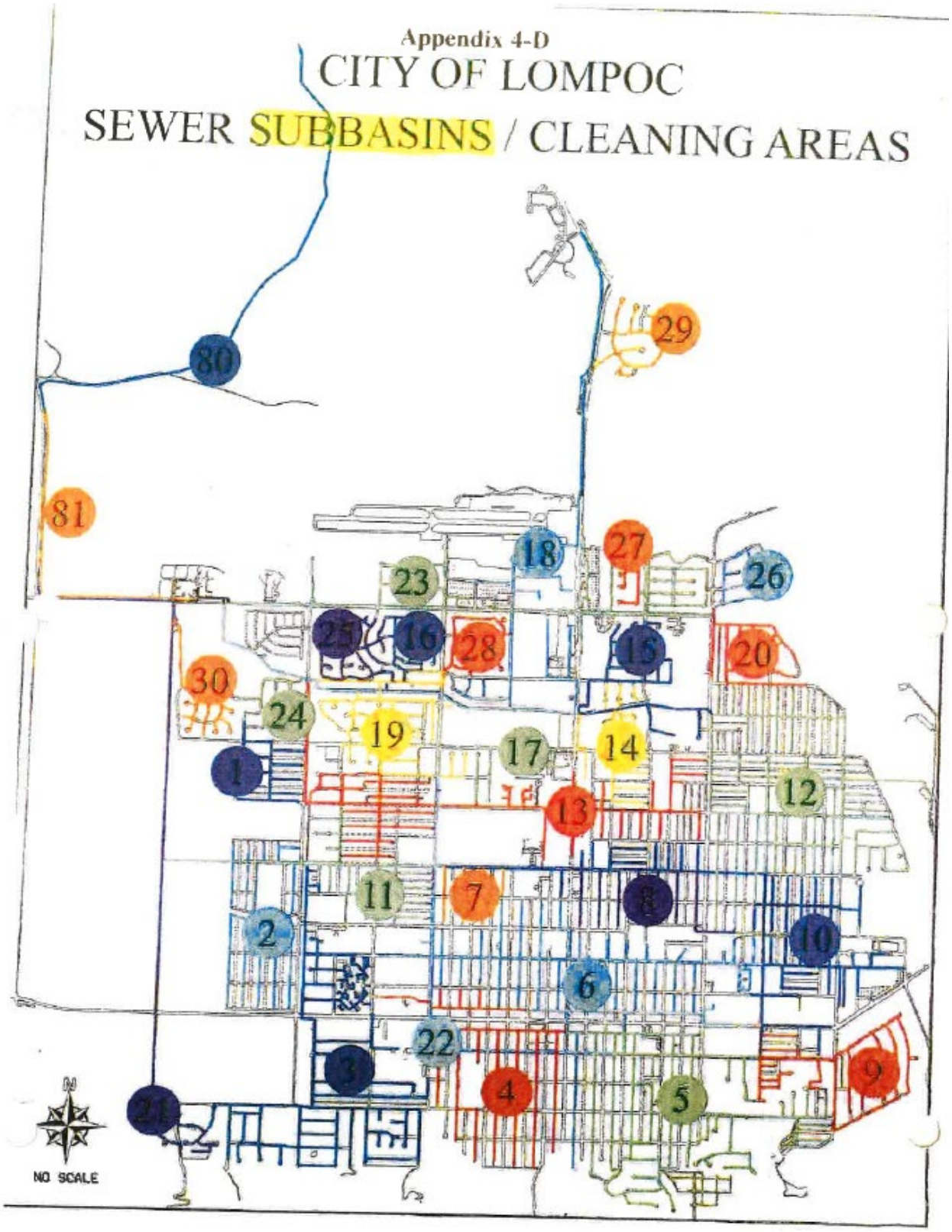
Appendix 4-B Wastewater Collection System Grid



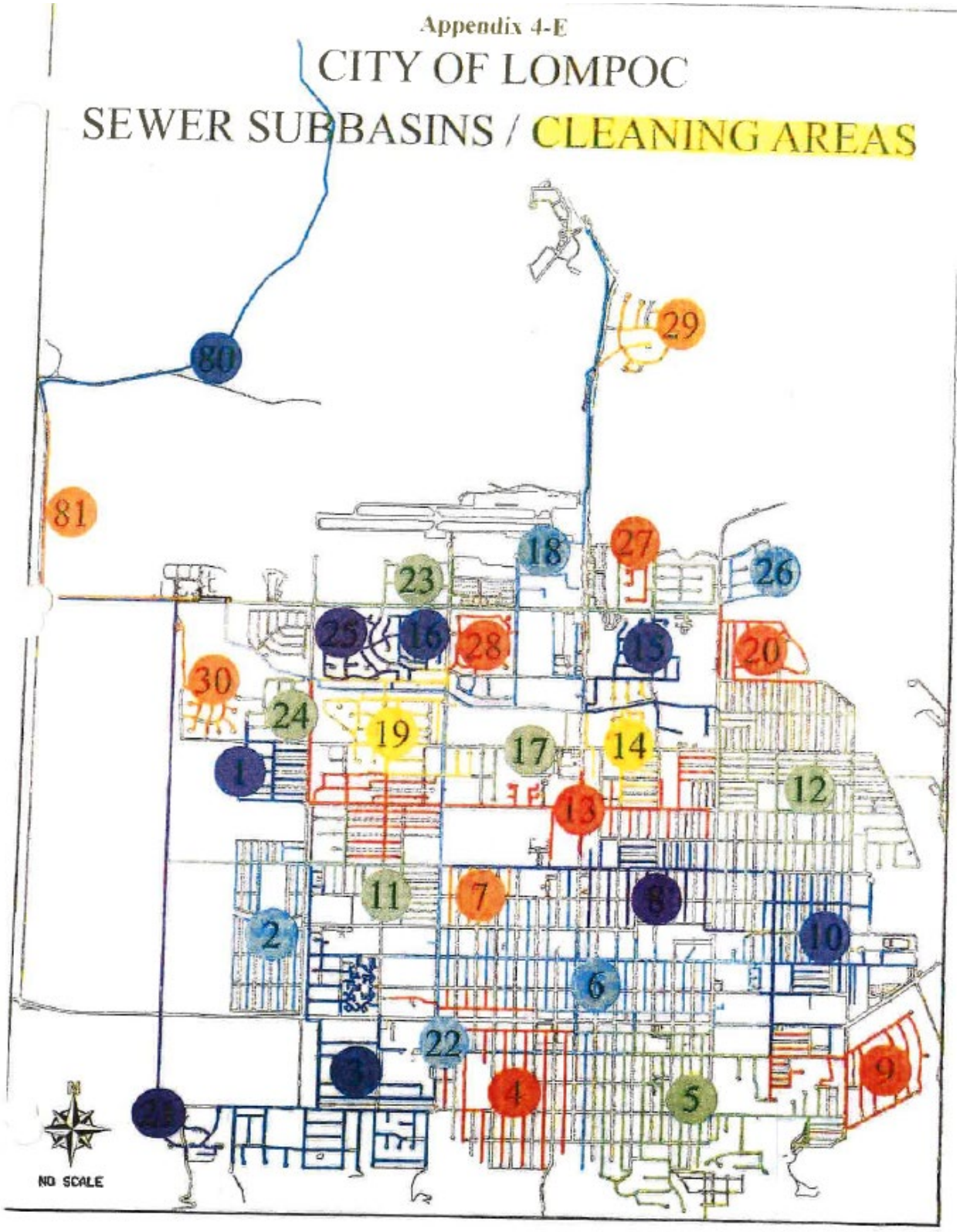
Appendix 4-C Basins



Appendix 4-D Sub basins/Cleaning Areas



Appendix 4-E Cleaning Area Map (example)



Appendix 4-F Frequency of Basin Cleanings (example)

APPENDIX 4-F

FREQUENCY OF BASIN CLEANINGS

[SEGMENT] 4/2/86

SEWER LINE SEGMENT

Tabs: 2=MAINT 3=MANHOLE 4=TVCODES 5=INSPECTION 8=STXREF 9=MENU

MANHOLE INFORMATION

MANHOLE	TYP	RIM ELEV	INV ELEV	DEPTH	ADDRESS	LOC
DOWNSTREAM [01-107]	S	.00	.00'	11.50'	1550 WEST LEMON & NORTH AVE.	A
UPSTREAM.. [01-109]	M	.00	.00'	10.08'	N.X ST.BETWEEN W.N.AVE.& LEMON	S

LINE SEGMENT INFORMATION

PIPE TYPE.....	C	INSTALLATION DATE.....	
LINE LENGTH.(ft).....	335	SLOPE:	.000 %
LINE DIAMETER.(in).....	8	VIDEO TAPE REF #.....	001
INSPECTION FREQUENCY.(yrs)	10	CLEANING FREQUENCY.(mo)..	12
LAST INSPECTION DATE.....	11-JAN-10	LAST CLEANING DATE.....	04-JUN-14
SPECIAL INSTRUCTIONS.....			

Appendix 4-G Enhanced Maintenance Areas

APPENDIX 4-G

ENHANCED MAINTENANCE AREAS

EVERY 4 MONTHS

JANUARY	MAY	SEPTEMBER
DN-STREAM		UP-STREAM
01-109		01-108
19-010		19-011
03-012		03-013
03-013		03-014
22-008		22-009
10-027		10-107
12-309		12-308
12-310		12-309
12-311	RUN WATER AT RV	DUMP STATION

EVERY 6 MONTHS

JUNE		DECEMBER
DN-STREAM		UP-STREAM
09-103		09-108
06-007	USE SNAKE	06-068
06-050		06-049
13-224		13-226
13-226		13-300
13-227		13-229
13-229		13-228
13-010		01-107
23-006		23-008
23-007		23-009
24-118		24-117
18-102		18-101
18-103		18-102
18-104		18-103

Appendix 4-H Historical Log (example)

APPENDIX 4-H

HISTORICAL LOG (EXAMPLE)

DATE: 16-SEP-14 CITY OF LOMPOC PAGE: 339
TIME: 09:20:04 SEWER MAINTENANCE HISTORY LISTING REPORT: MNT_HSTRY.REP

JOB#	DPG-MH/ TYP CD	UPG-MH/ FLUSH	SCHED DAT/ CMPLT DAT	MAINTENANCE PROBLEMS/
4,935	03-533	03-541	13-APR-90	
	RC	2	02-APR-90	VERY GREASY. USED BUZZ BOMB NOZZEL.
2,892	03-533	03-541	17-MAR-89	
	RC	1	28-FEB-89	GREASY
-30,95	03-533	03-541	29-AUG-14	
	RC	1	02-JUL-14	
32,249	03-534	03-535	23-JUN-11	
	RC	1	23-MAY-11	removed 1 bucket grit
30,141	03-534	03-535	23-JUL-09	
	RC	1	02-JUL-09	
28,013	03-534	03-535	01-FEB-08	
	RC	1	10-MAR-08	
26,081	03-534	03-535	30-AUG-06	
	RC	1	09-AUG-06	
23,779	03-534	03-535	26-APR-04	
	RC	1	24-MAR-04	

Sewer System Management Plan
Element 5

5.0 Design and Performance Provisions

Requirement: The SSMP must identify design, construction standards and specifications for the installation of new sanitary sewer systems, pump stations, other appurtenance, rehabilitation and repair of existing sanitary sewer systems.

a. Standards for Installation, Rehabilitation and Repair

Requirement: The SSMP must identify the procedures and standards for inspecting and testing the installation of new sewers, pumps, other appurtenance, rehabilitation and repair projects.

Element 5.0: Design and Performance Provisions

5.1 STANDARDS FOR INSTALLATION, REHABILITATION, AND REPAIR

The City of Lompoc has adopted Standard Specifications for Public Works Construction, the "Green Book" and city standards as our standard specifications for public works construction. **Construction details are shown on Appendices 5-A, 5-B, 5-C, and 5-D.**

Improvement Plans

Improvement plans shall be on 24" x 36" standard plan sheets. Drawings and specifications including "as builts" prepared by contractors for city project to become the property of the City and shall have the standard City title block located in the bottom right hand corner. Layout sheets shall be on plan and 3-line profiles. Approval signature shall be City Engineer/Public Works Director.

Sanitary Sewer Standards

1. Design criteria (PVC SDR 35)
    a. Coefficient of friction "n" = 0.013
    b. Minimum velocity = 2 feet per second
    c. Maximum velocity = 10 feet per second

Land Use	Peak Design Flow Factor
Single family	0.0065 cfs/acre
Multi family	0.0115 cfs/acre
Commercial	0.0065 cfs/acre
Light industrial	0.0080 cfs/acre
Heavy industrial	0.0100 cfs/acre
Other	determined individually

Design shall include the full peak flow for the contributory area

2. Desired Slopes of Collector Lines

Size	Slope (min)
8"	0.44%
10"	0.33%
12"	0.26%
15"	0.19%
18"	0.12%
21"	0.10%
24"	0.08%
27"	0.068%

3. Lateral Sizing
    a. Laterals serving single family residence – 4"
    b. Laterals serving multi family residence – 4" to 6"
    c. Minimum cover at property line – 3 feet
    d. Cleanout required downstream of building

4. Preferred Minimum Sizing for Sanitary Sewer Mains
    a. Residential areas – 8”
    b. Commercial and industrial areas – 8”

5. Easements – minimum 10 feet wide

6. Normal location in alley/street

7. Maintenance Hole spacing – 500 feet apart

8. Minimum cover over main – 4 feet

9. Maintenance Holes to be concentric

10. Minimum clearance of 1’ shall be maintained between the sewer and crossing pipes

11. Allow 0.2 foot drop around a 90 degree bend in manhole

12. Change direction or size only at a manhole

13. Minimum radius 300’ with approval by City Engineer

14. Flushing starters are required on all dead-end lines – whether in a cul-de-sac or at a dead-end street except where terminated at a maintenance hole. Flushing starters shall be located as necessary from a maintenance hole. Lines shall be constructed through the development to upstream properties shall include capacity for the upstream area.

15. Avoid drop manholes

5.2 STANDARDS FOR INSPECTION & TESTING OF NEW, REHABILITATED, AND REPAIRED FACILITIES

Inspection and Testing are located in the City Standards.

5.3 DESIGN AND PERFORMANCE STANDARDS GOALS:

Update Design and Performance Standards as needed. (For example, the switch to PVC SDR35 pipe material from vitrified clay pipe is reflected in this SSMP revision.)

ELEMENT 5 APPENDICES

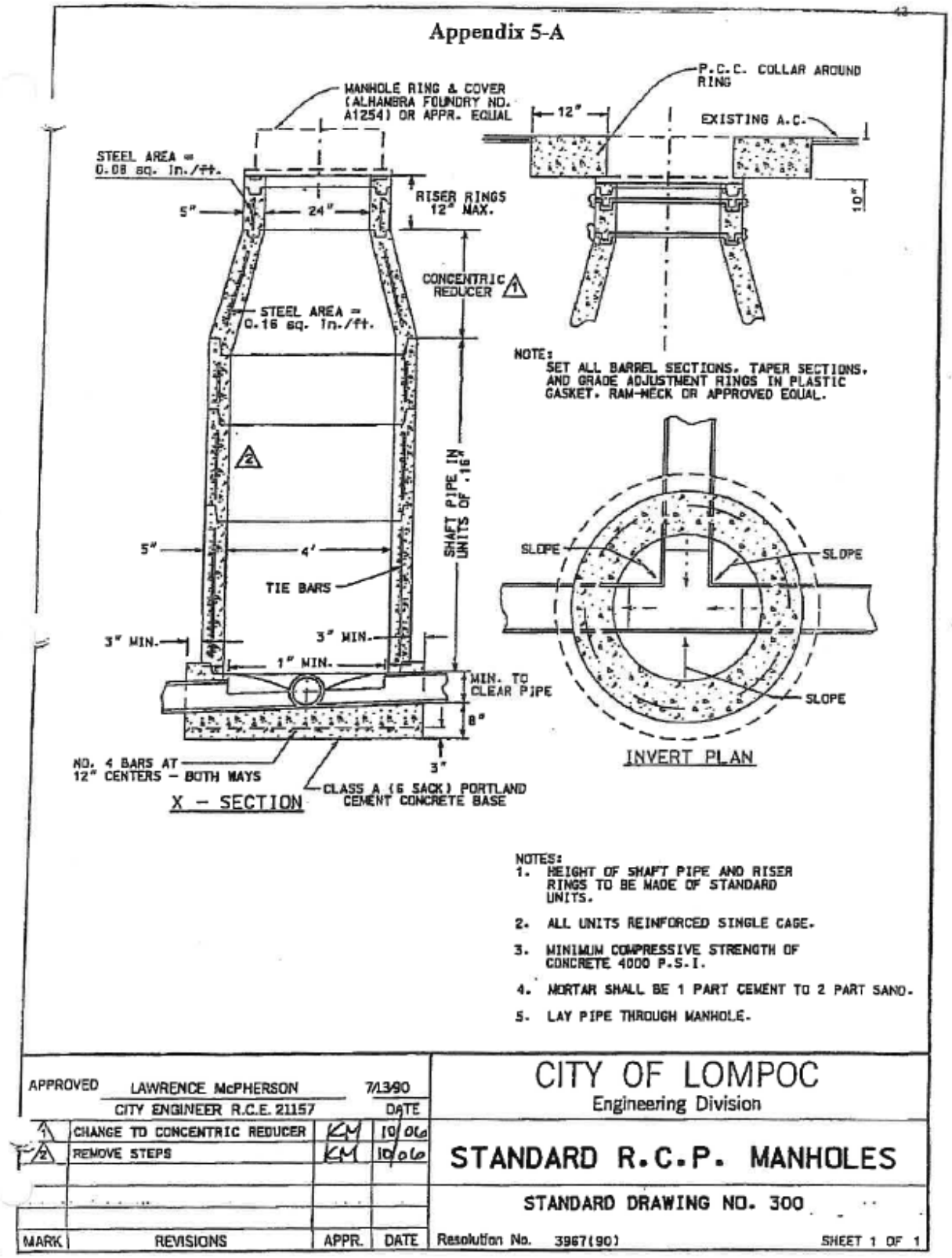
Appendix 5-A Standard Ring. Cover. Pipe. (R.C.P.) Maintenance Holes

Appendix 5-B Standard Sewer Details Lateral for Deep Sewers

Appendix 5-C Standard Sewer Lateral

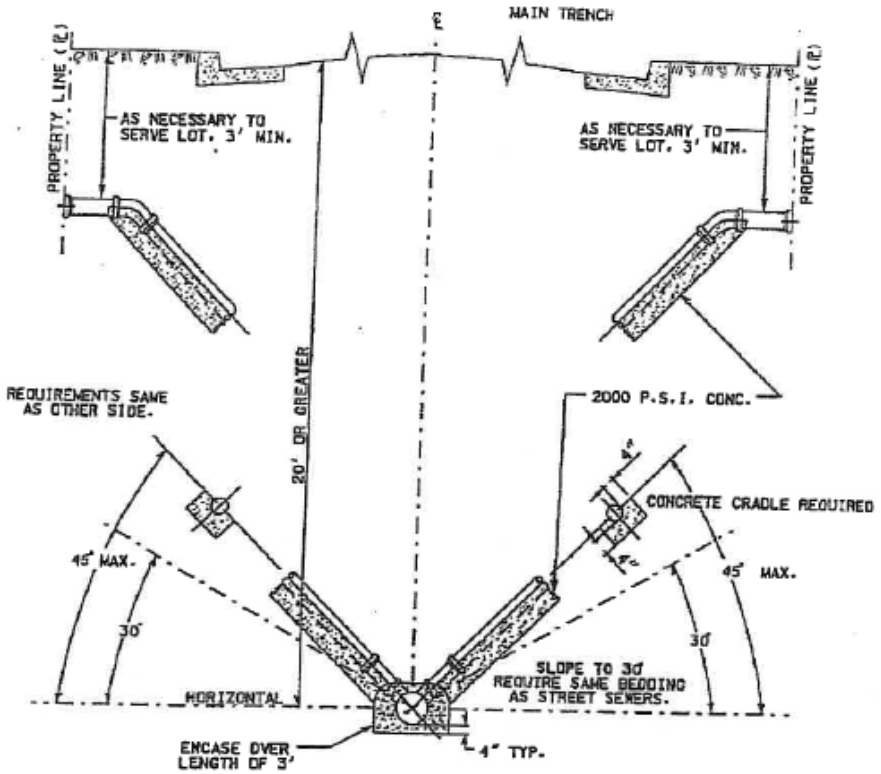
Appendix 5-D Shallow Manholes

Appendix 5-A Standard Ring. Cover. Pipe. (R.C.P.) Maintenance Holes



Appendix 5-B Standard Sewer Details Lateral for Deep Sewers

Appendix 5-B



ELEVATION

NOTES:

1. 4" FOR FAMILY DWELLING.
2. 6" FOR MULTIPLE DWELLINGS.
3. CLEAR WATERMAINS PER STD. DWG. 413.
4. SEE STANDARD DRAWING FOR ALTERNATE DESIGN.
5. ALL WORK TO CONFORM TO STANDARD SPECIFICATIONS.
6. NO SERVICE TOPS.

APPROVED JIM DIXON			7/3/84
CITY ENGINEER R.C.E. 24658			DATE
1 NO SERVICE TOP LATERALS	KH		10/06
MARK REVISIONS		APPR.	DATE

CITY OF LOMPOC
Engineering Division

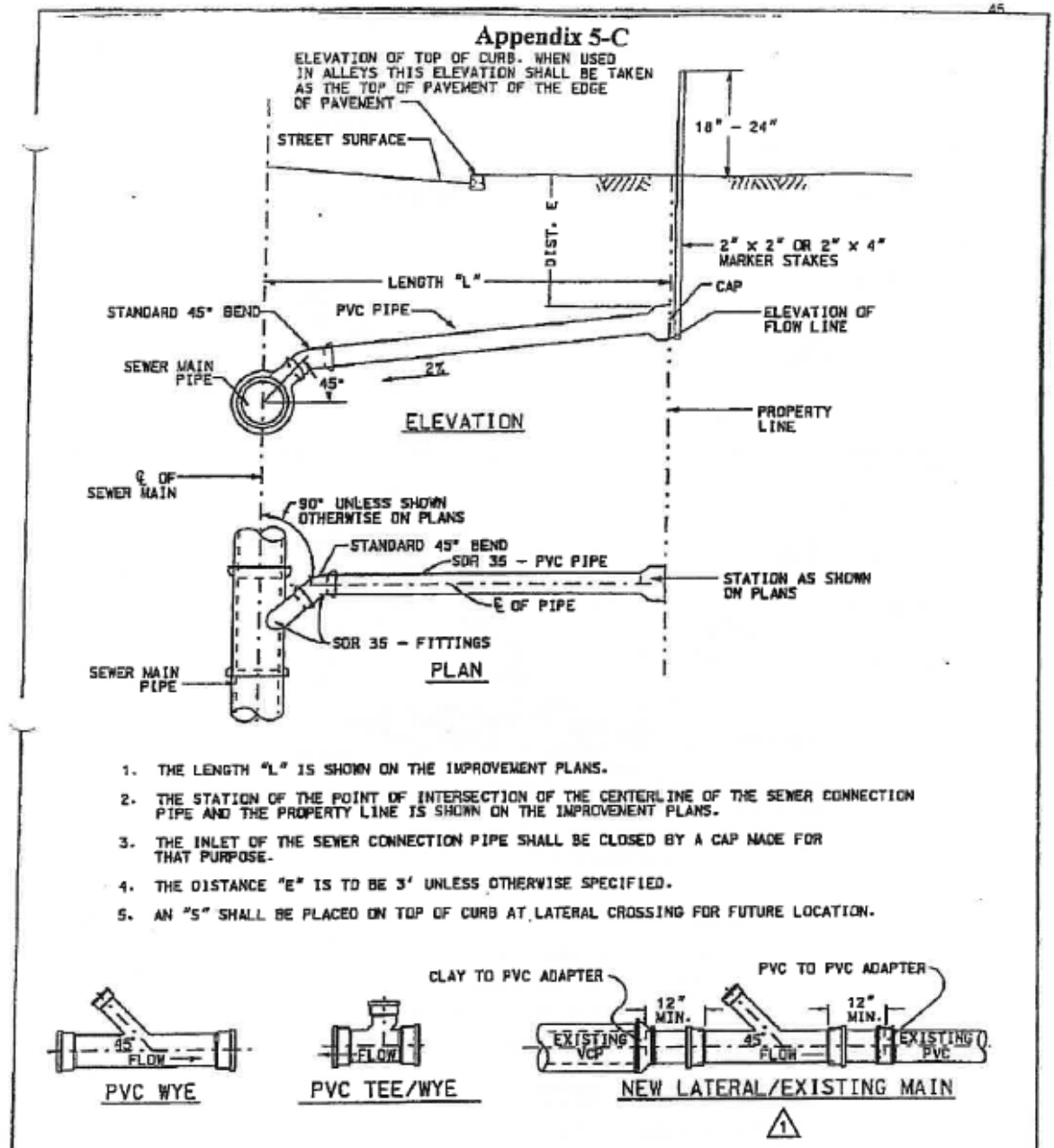
STANDARD SEWER DETAILS
LATERAL FOR DEEP SEWERS

STANDARD DRAWING NO. 302

Resolution No. 3366(84)

SHEET 1 OF 1

Appendix 5-C Standard Sewer Lateral



1. THE LENGTH "L" IS SHOWN ON THE IMPROVEMENT PLANS.
2. THE STATION OF THE POINT OF INTERSECTION OF THE CENTERLINE OF THE SEWER CONNECTION PIPE AND THE PROPERTY LINE IS SHOWN ON THE IMPROVEMENT PLANS.
3. THE INLET OF THE SEWER CONNECTION PIPE SHALL BE CLOSED BY A CAP MADE FOR THAT PURPOSE.
4. THE DISTANCE "E" IS TO BE 3' UNLESS OTHERWISE SPECIFIED.
5. AN "S" SHALL BE PLACED ON TOP OF CURB AT LATERAL CROSSING FOR FUTURE LOCATION.

APPROVED	LAWRENCE McPHERSON		7/13/90
	CITY ENGINEER R.C.E. 21157		DATE
1	DELETE SHEET 1 - VCP PIPE	KM	10/06
1	DELETE SADDLE OPTION	KM	10/06
MARK	REVISIONS	APPR.	DATE

CITY OF LOMPOC
Engineering Division

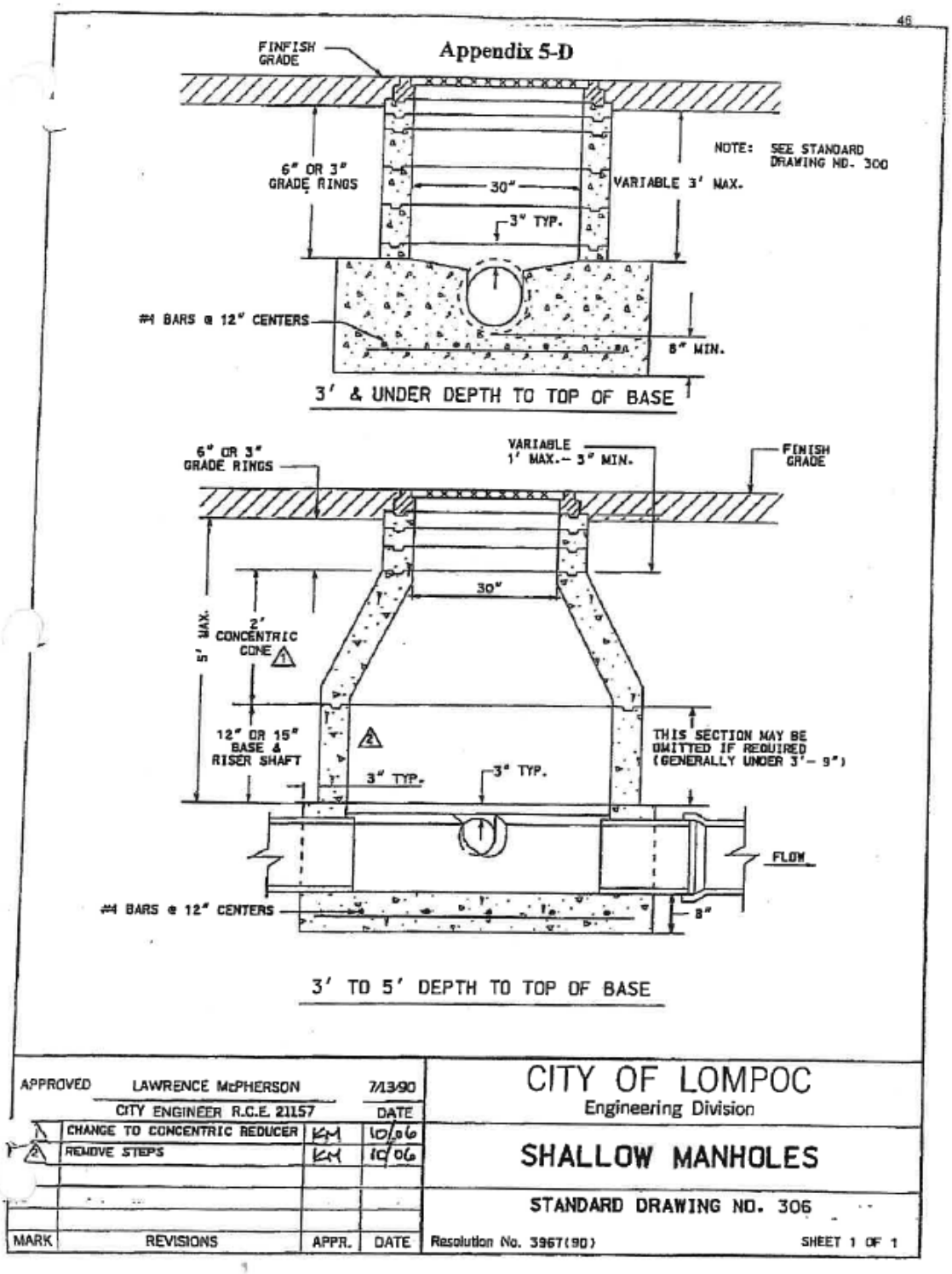
STANDARD SEWER LATERAL

STANDARD DRAWING NO. 305

Resolution No. 3967(90)

SHEET 2 OF 2

Appendix 5-D Shallow Manholes



Sewer System Management Plan
Element 6

6.0 Overflow Emergency Response Plan

Requirement: Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum this plan must include the following:

a. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner.

b. A program to ensure an appropriate response to all overflows.

c. Procedures to ensure prompt notification to appropriate regulatory agencies, health agencies, Regional Water Board, Water suppliers and etc. of all SSOs that potentially affect public health or reach water of the state in accordance with the MRP. All SSOs shall be reported in accordance with this MRP. The California Water Code, other state law, Regional Water Board WDR or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification.

d. Procedures to ensure that staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained.

e. Procedures to address emergency operations such as traffic/crowd control and other necessary response activities.

f. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated wastewater to water of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

Element 6.0: Overflow Emergency Response Plan

This SSMP element serves as the Sewer Overflow Response Plan (SORP) for the City of Lompoc Wastewater Division. It establishes actions related to responding to sanitary sewer overflows, and discusses the role of the SORP in supporting the goals in Element 1.0.

6.1 AUTHORITY

This Sewer Overflow Response Plan (SORP) is prepared pursuant to overflow emergency response plan element 6.1 of WDR 2006-0003-DWQ, as amended in State Water Resources Control Board Order No. WQ 2013-0058-EXEC **(Appendix 6-A)**, adopted August 6, 2013, to facilitate proper incident reporting procedures.

6.2 GENERAL

The Sewer Overflow Response Plan (SORP) is designed to ensure every report of a sewage overflow incident is immediately dispatched to the appropriate Wastewater Collection personnel for confirmation. Quick response will minimize the effects of the overflow with respect to impacts on public health, water quality of surface waters and customer service. The SORP further includes provisions to ensure safety pursuant to the directions provided by the State Department of Environmental Conservation and that notification and reporting is made to the State Water Resources Control Board and Santa Barbara County Environmental Health, when applicable. For purposes of the SORP, "confirmed sewage spill" is also sometimes referred to as "sewer overflow," "overflow," or "SSO." This plan continues to be updated periodically to accommodate State amendments to monitoring and reporting programs.

Objectives

The primary objectives of the SORP are to protect public health and the environment, satisfy regulatory agencies and waste discharge permit conditions (which address procedures for managing sewer overflows), and minimize risk of enforcement actions against the City of Lompoc, the sewer system owner.

Additional objectives of the SORP are as follows:

- Protect collection Wastewater Treatment Plant personnel;
- Protect the collection system, wastewater treatment facilities, and all appurtenances;
- Protect private and public property beyond the collection and treatment facilities;
- Protect water ways.

Organization Elements of SORP

The key elements of the SORP are addressed individually as follows:

Section 6.3 – Overflow Response Procedure

Section 6.4 – Public Advisory Procedure

Section 6.5 – Regulatory Agency Notification Plan

Section 6.6 – Outreach, Training, and Education

Section 6.7 – Maintenance of SORP

6.3 OVERFLOW RESPONSE PROCEDURE

The Overflow Response Procedure (**Appendix 6-D)** presents a strategy for the Wastewater Collection personnel to mobilize labor, materials, tools and equipment to correct or repair any condition, which may cause or contribute to an un-permitted discharge. The plan considers a wide range of potential system failures that could create an overflow to surface waters, land or buildings. **Appendix 6-F lists measures taken to minimize or avoid SSOs.**

Receipt of Information Regarding a SSO

An overflow may be detected by anyone, not just employees. The City of Lompoc Wastewater Collections has a responsibility to act based on received phone calls or reports of possible sewage overflow from the Wastewater Collection System, and/or private service lateral spilling off of private property to public property or easement, and to provide immediate response to investigate and/or correct reported sewer overflow.

Generally, telephone calls from the public reporting possible sewer overflows are initially received at one of the public offices identified in **Appendix 6-E.**

1. The dispatcher obtains relevant information available regarding the possible overflow which may include:

    a. Time and date call was received;

    b. Specific location;

    c. Description of problem;

    d. Time possible overflow was noticed by the caller;

    e. Caller's name and phone number;

    f. Observations of the caller; and

    g. Other relevant information that will enable the Wastewater Collection personnel to quickly locate, assess and stop the overflow.

    The dispatcher notifies the Wastewater Collection Section, and may record initial information in a Sewage Overflow Report **(Ref. Appendix 6-B)** or Complaint Log for convenience in preparing a report.

2. The Wastewater Collection Supervisor or designee directs Wastewater Collections personnel to confirm the possible overflow. Until verified, the report of a possible spill will not be referred to as a "sewer overflow."
   The Wastewater Collection Supervisor completes the Sanitary Sewer Overflow Report as required in the current Monitoring and Reporting Program (MRP).

Dispatch of Wastewater Collections Personnel to Site of Sewer Overflow

Failure of any element within the wastewater collection system that threatens to cause or causes a SSO must trigger an immediate response to isolate and correct the problem. Personnel and equipment must be available to respond to any SSO locations. A summary of the Sewer Overflow Response Tracking Protocol is included in **Appendix 6-D.**

1. Dispatching Wastewater Collection Personnel

   When Wastewater Collection personnel receive notification of a potential sewer overflow the Wastewater Collection Section sends personnel with appropriate resources required.

2. Personnel Instructions

   a. Dispatch collection personnel by telephone or radio. Assign appropriate personnel, materials, supplies and equipment needed.

   b. The dispatcher must verify that the entire message has been received and acknowledged by the collection personnel who were dispatched. All personnel being dispatched to the site of an SSO need to proceed immediately to the site of the overflow. Report any delays or conflicts in assignments immediately for resolution.

   c. If the Wastewater Collection Supervisor or designee has not received findings from the field crew within a reasonable period of time, the Wastewater Collection Supervisor contacts the response personnel to determine the status of the investigation.

3. Additional Resources

   The Wastewater Collection Supervisor or designee receives and conveys to appropriate parties requests for additional personnel, material, supplies, and equipment for personnel working at the site of the sewer overflow.

4. Preliminary Assessment of Damage to Private and Public Property

   The Wastewater Collection personnel shall use reasonable discretion in their actions with private and public property owners. Wastewater collection must be aware that the City of Lompoc could face increased liability for any further damages inflicted to private property during such assistance. The Wastewater personnel shall take

appropriate still photographs and/or video footage; if possible, of the sewer overflow impacted area that document the nature and extent of impacts.

5. Field Supervision and Inspection

   a. The Wastewater Collection Supervisor or designee visits the site of the sewer overflow to ensure the provisions and objectives of the SORP and other directives are met.

   b. The Wastewater Department Superintendent or designee is responsible for verbally notifying State Water Resources Control Board and the City of Lompoc Environmental Coordinator responsible for health as per the MRP.

6. Coordination with Hazardous Material Response

   a. Upon arrival at the scene of a sewer overflow, should a suspicious substance (e.g., oil sheen, foamy residue) be found on the ground surface, or should a suspicious odor (e.g. gasoline) not common to the sewer system be detected, the Wastewater Collection crew shall immediately contact the Wastewater Collection Supervisor or designee for guidance before taking further action.

   b. Should the Wastewater Collection Supervisor or designee determine the need to alert the Hazardous Materials Response Team, personnel will wait for the Hazardous Materials Response Team response.

   c. Upon arrival of the Hazardous Materials Response Team, the Wastewater Collection personnel shall take direction from the lead authority of that team. Only when that authority determines it is safe and appropriate for Wastewater Collection personnel to proceed shall containment, clean-up activities and correction under the SORP re-commence.

Overflow Containment, Correction, and Clean-Up

This section describes specific actions to be performed by the Wastewater Collection personnel during an SSO.

The objectives of these actions are:

- To protect public health, environment and property from sewage overflows and restore surrounding area as soon as possible;

- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles or use of natural topography (e.g., hills, berms);

- To promptly notify the regulatory agency with preliminary overflow information and potential impacts;

- To collect and properly dispose of spilled sewage and clean contaminated areas.

- To contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface waters; and

- To minimize the City of Lompoc exposure to any regulatory agency penalties and fines.

Under most circumstances, the City of Lompoc can handle all response actions with its own Wastewater Collection personnel. They have the skills and experience to respond rapidly and in the most appropriate manner. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system.

Circumstances may arise when the City of Lompoc could benefit from the support of private-sector construction assistance where large diameter pipes requiring shoring and dewatering. The City of Lompoc may also choose to use a private contractor for open excavation operations that might exceed one day to complete.

1. Responsibilities of Wastewater Collection Personnel upon Arrival

It is the responsibility of the first personnel arriving at the site of a sewer overflow to protect the health and safety of the public by mitigating the impact of the overflow to the maximum extent possible. Should the overflow not be the responsibility of the City of Lompoc but there is imminent danger to public health, public or private property or to the quality of waters of the state, then the Wastewater Collection Supervisor or designee takes prudent emergency action until the responsible party assumes responsibility and provides actions.

Upon arrival at an SSO, the Wastewater Collection personnel perform the following:

a. Determines the cause of the overflow, e.g. sewer line blockage, pump lift station mechanical or electrical failure, sewer line break, etc.;

b. Identifies and requests assistance or additional resources to correct the overflow or to assist in determination of its cause;

c. Takes immediate steps to stop the overflow, e.g. relieves pipeline blockage, manually operates pump lift station controls, repairs pipe, etc.; extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property onto public property or easement);

d. Provides appropriate barricades to control public and traffic access as needed, and;

e. Requests additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the overflow.

2. Initial Measures for Containment

Wastewater Collection personnel initiate measures to contain the overflowing sewage and recover sewage which has already been discharged, minimizing impact to public health or the environment. They further:

a. Determine the immediate destination of the overflow, e.g. storm drain, street curb gutter, body of water, streambed, etc.;

b. Identify and request the necessary materials and equipment to contain or isolate the overflow, if not readily available; and

c. Take immediate steps to contain the overflow, e.g., block or bag storm drains, recover through vacuum truck, divert into downstream manhole, etc.

3. Additional Measures under Potential Prolonged Overflow Conditions

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

a. Taking appropriate measures to determine the proper size and number of pumps required to effectively handle the sewage flow;

b. Implementing continuous or periodic monitoring of the by-pass pumping operation as required; and

c. Addressing regulatory agency issues in conjunction with emergency repairs.

4. Clean-Up

Clean sewer overflow sites thoroughly after an overflow, generally using current Santa Barbara County Environmental Health Department guidelines. No readily identified residue (e.g., sewage solids, papers, rags, plastics, and rubber products) should remain. Additional clean-up procedures may include:

a. Digital photos taken whenever possible of the area before and after cleanup;

b. Thoroughly flushing the area with water and clean-up of any sewage or wash-down water; solids and debris are to be collected and transported for proper disposal;

c. Securing the overflow area to prevent contact by the public until the site has been thoroughly cleaned; and

d. Where sewage has resulted in ponding, pumping the pond dry and disposing of the residue in accordance with applicable regulations and policies.

Sanitary Sewer Overflow Reporting

The Sanitary Sewer Overflow Report Form **(Appendix 6-B)** compiles information required to be reported to State Office of Emergency Services (Cal OES), Regional Water Quality Control Board, and the City of Lompoc Environmental Coordinator responsible for Health depending upon the nature of the spill. Reporting is also required through the California Integrated Water Quality System (CIWQS), per the MRP (**Appendix 6-A**).

If the overflow results in a discharge of 1,000 gallons or more to a drainage channel or surface water, Wastewater Collections shall notify the State Office of Emergency Services, Regional Water Quality Control Board, and the Santa Barbara County Environmental Health contact person orally within two hours after becoming aware of the discharge, as per the MRP.

The Wastewater Collection Supervisor or designee completes the Sanitary Sewer Overflow Report. The Wastewater Superintendent or designee promptly notifies agencies as appropriate when the overflow is eliminated. Sewer overflow reporting information includes the following:

1. Determination if the sewage overflow reached surface waters, i.e., all overflows where sewage was observed running to surface waters, or there was obvious indication (e.g. sewage residue) that sewage flowed to surface waters;

2. Determination that the sewage overflow had not reached surface waters by describing conditions at the sewage overflow, which support this determination;

3. Determination of the start time of the sewer overflow by the best one of the following methods:
    a. Date and time information received and/or reported to have begun and later substantiated by Wastewater Collection personnel;
    b. Visual observation;

4. Determination of the stop time of the sewer overflow by the best one of the following methods:
    a. When the blockage is cleared or flow is controlled or contained; or
    b. The arrival time of the Wastewater Collection personnel, if the overflow stopped between the time it was reported and the time or arrival;

5. Direct visual observations of the overflow;

6. Determination of the volume of the sewer overflow; and

7. Photographs of the event, when possible.

Customer Satisfaction

The Wastewater Collection Supervisor or designee may follow up in person or by telephone with the entity reporting the overflow. The cause of the overflow and its resolution may be disclosed.

6.4 PUBLIC ADVISORY PROCEDURE

This section describes the actions the City of Lompoc will take, in cooperation with the State Office of Emergency Services, Regional Water Quality Control Board, and/or the Santa Barbara County Environmental Health, to limit public access to areas potentially impacted by un-permitted discharges of pollutants to surface water bodies from the Wastewater Collection System.

Temporary Signage

The Santa Barbara County Environmental Health has primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination.
The Wastewater Division Superintendent or designee and City elected official determine if posting of a confirmed overflow is necessary.

Other Public Notification

The Wastewater Division Superintendent or designee and/or the City Manager or his/her designee determine the need for further public notification.

6.5 REGULATORY AGENCY NOTIFICATION PLAN

General

Notification of regulatory agencies shall take place in accordance with the current MRP **(Appendix 6–A).**

Immediate Notification

If the overflow results in a discharge greater than or equal to 1000 gallons to a drainage channel or surface water, or in a location where it probably will be discharged to surface water, Wastewater Collections shall notify the State Office of Emergency Services (Cal OES), obtain a notification control number, and provide information related to the discharge as requested by Cal OES within two hours after becoming aware of the discharge, or as per the current MRP. In tur, Cal OES will notify the Regional Water Quality Control Board, and the City of Lompoc Environmental Coordinator. Substantive changes in the quantity or impact of the discharge must be made to Cal OES until a certified CIWQS report is made.

See Appendix 6-E for additional contact information. It includes local agencies as well as other city departments. Contacts for wastewater and collections specifically are listed under number 40.

Secondary Notification

Wastewater Division Superintendent or designee may contact other agencies, as necessary, as well as other interested and possibly impacted parties.

6.6 OUTREACH, TRAINING AND EDUCATION

Training and educational activity occurs under various City programs. It includes formal classroom training, and informal on-the-job and hands-on training. Training is facilitated by both City staff and by outside training workshops. Training courses are added and existing courses are modified to stay current with the rapidly changing technology and requirements, and may include computer-aided and online training. Collection crew is cross-trained so that critical tasks can be done without interruption even if the crewmembers change. Task proficiency is a requirement for all job positions and promotions, and training records are maintained to monitor completed classes. The City Collection Crew provides operational training on sewer cleaning equipment and vehicle operation.

Safety training is an integral part of the City's program. Every staff member receives formal training. Collections personnel are trained in traffic management, confined space entry and in hazard communication, as required by regulations.

The City prepares employees to respond to major emergencies and disasters, and has established an operation center and emergency response teams. Collection crew are made aware of and follow the Sewer Overflow Response Plan (SORP), and are appropriately trained. Emergency SORP training exercises are conducted periodically and documented.

In the case that the City may use a contractor for emergency repairs or SSO assistance, it provides the contractor with its SORP. The contractor must provide documentation that its employees or subcontracted employees engaged in the work are familiar with the SORP and have been adequately informed.

Specific Outreach and Communications to the public relating to sewer spills is minimal and no public training takes place. These topics as they relate to interfacing with the general public are addressed in SSMP Element 11.

6.7 MAINTENANCE OF SORP

The SORP is reviewed and updated as needed. Possible amendments may include:

A. Change in procedures;

B. Change in contact personnel; or

C. Changes due to regulatory requirements.

ELEMENT 6 APPENDICES

Appendix 6 - A	Monitoring and Reporting Program
Appendix 6 – B	Sanitary Sewer Overflow Report Form
Appendix 6 – C	Sewer Overflow Notice Action Flow Chart
Appendix 6 – D	Sewer Overflow Response Tracking Protocol
Appendix 6 – E	Emergency Phone Numbers
Appendix 6 – F	Suggested Criteria for Demonstrating How a Sewer Overflow was Unavoidable
Appendix 6 – G	Water Quality Monitoring Plan

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(I)

2. Water Code section 13193 et seq. requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.

3. Water Code section 13271, et seq. requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.

4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems" (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.

5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.

6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDR to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.

7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to redesigning the CIWQS[3] Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.

9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.

10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program[4] objectives, assess compliance, and enforce the requirements of the SSS WDRS.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

_____
Date

Signed by
Thomas Howard
Executive Director

[3]California Integrated Water Quality System (CIWQS) publicly available at: http://www.waterboards.ca.gov./ciwqs/publicreports.shtml

[4]Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/sso/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to $5,000 a day per violation pursuant to Water Code section 13350; up to $1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	**DEFINITIONS** [see Section A on page 5 of Order 2006-0003-DWQ, for Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of **any volume** resulting from an enrollee's sanitary sewer system failure or flow condition that: • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from an enrollee's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

CATEGORIES	**DEFINITIONS** [see Section A on page 5 of Order 2006-0003-DWQ, for Sewer Overflow (SSO) definition]
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	• Within two hours of becoming aware of any Category 1 SSO **greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water**, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.	Call Cal OES at: **(800) 852-7550**
REPORTING (see section C of MRP)	• Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months.	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	• Conduct water quality sampling **within 48 hours** after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.

RECORD KEEPING (see section E of MRP)	• SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume.	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
    i. Name of person notifying Cal OES and direct return phone number.
    ii. Estimated SSO volume discharged (gallons).
    iii. If ongoing, estimated SSO discharge rate (gallons per minute).
    iv. SSO Incident Description:
        a. Brief narrative.
        b. On-scene point of contact for additional information (name and cell phone number).
        c. Date and time enrollee became aware of the SSO.
        d. Name of sanitary sewer system agency causing the SSO.
        e. SSO cause (if known).
    v. Indication of whether the SSO has been contained.
    vi. Indication of whether surface water is impacted.
    vii. Name of surface water impacted by the SSO, if applicable.
    viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
    ix. Any other known SSO impacts.
    x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).

4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**

   i. **Category 1** – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:

      a. Reach surface water and/or reach a drainage channel tributary to a surface water; or

      b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

   ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee's sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.

   iii. **Category 3 –** All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**

   i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:

      a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.

b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.

iii. **"No Spill" Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a "No Spill" certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, "No Spill" certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a "No Spill" certification statement for that month.

iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

i. **Causes and Circumstances of the SSO:**

a. Complete and detailed explanation of how and when the SSO was discovered.

b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).

c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.

d. Detailed description of the cause(s) of the SSO.

e. Copies of original field crew records used to document the SSO.

f. Historical maintenance records for the failure location.

ii. **Enrollee's Response to SSO:**

a. Chronological narrative description of all actions taken by enrollee to terminate the spill.

b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.

b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.

ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e- mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

a. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:

1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
2. SSO Location Name.
3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
5. Whether or not the SSO reached a municipal separate storm drain system.
6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
7. Estimate of the SSO volume, inclusive of all discharge point(s).
8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
9. Estimate of the SSO volume recovered (if applicable).
10. Number of SSO appearance point(s).
11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
12. SSO start date and time.
13. Date and time the enrollee was notified of, or self-discovered, the SSO.
14. Estimated operator arrival time.
15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.

16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.

b. **Certified Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a:

1. Description of SSO destination(s).
2. SSO end date and time.
3. SSO causes (mainline blockage, roots, etc.).
4. SSO failure point (main, lateral, etc.).
5. Whether or not the spill was associated with a storm event.
6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
7. Description of spill response activities.
8. Spill response completion date.
9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.
10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
11. Whether or not health warnings were posted as a result of the SSO.
12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
13. Name of surface water(s) impacted.
14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.

c. **Draft Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:

1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.

d. **Certified Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:

1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.

e. **Certified Category 3 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:

1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. **Reporting SSOs to Other Regulatory Agencies**

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. **Collection System Questionnaire**

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. **SSMP Availability**

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
   i. Ammonia
   ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
   i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not result in SSOs. Each complaint record shall, at a minimum, include the following information:
      a. Date, time, and method of notification.
      b. Date and time the complainant or informant first noticed the SSO.
      c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
      d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
      e. Final resolution of the complaint.

ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.

iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.

3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:

   i. Supervisory Control and Data Acquisition (SCADA) systems

   ii. Alarm system(s)

   iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.
5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13
Date

Jeanine Townsend
Clerk to the Board

SSO REPORT FORM: APPENDIX 6 – B

City of Lompoc Sanitary Sewer Overflow Report Form

[1] Information **required** for Category 1 [2] Information **required** for Categories 2 and 3
** Information **required** for Category 1 if estimated spill volume ≥ 1000 gallons and spill reached surface water or stormwater drainpipe

Initial Contact Details

Reporting Party _____

Address:_____Telephone:_____

Physical Location Details

[1, 2] Spill Location Name: _____

[1, 2] GPS Latitude: _____deg_____ min *or* _____decimal degrees
[1, 2] GPS Longitude: _____deg_____ min *or* _____decimal degrees

Street Number: _____
Street Direction: □ North □ South □ East □ West □ Other _____
Street Name: _____
Street Type: _____Suite or Apartment: _____
Cross Street: _____

City: □ Lompoc □ Other _____ State: □ CA Zip: □ 93436 □ Other_____
[1, 2] County: □ Santa Barbara □ Other _____

Spill Location Description:
_____
_____
_____

[1, 2] Regional Water Quality Control Board: □ Central Coast Region 3 □ Other:_____

Spill Details

[1, 2] Spill Appearance Point: □ building or structure □ force main or pressure sewer □ gravity sewer
□ manhole □ other sewer system structure □ pump station □ other (explain):
_____
_____
_____

[1, 2] Did the spill discharge to a drainage channel and/or surface water? □ Yes □ No

[1, 2] Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system? □ Yes □ No

[1, 2] Private lateral spill? □ Yes □ No Name of responsible party (for private lateral spill only, if known):
_____

[1, 2] Final spill destination: □ beach □ building or structure □ other paved surface □ storm drain □ street/curb and gutter
□ surface water □ unpaved surface □ other (explain):
_____

[1, 2] Estimated spill volume: _____ gallons
[1, 2] Estimated volume of spill recovered: _____ gallons
[1] Estimated volume of spill that reached surface water, drainage channel, or not recovered from storm drain: _____ gallons
Estimated current spill rate (if applicable): _____ gallons

[1, 2] Estimated spill start date / time: _____
[1, 2] Date and time Wastewater Collections Section was notified of or discovered spill:
_____

[1, 2] Estimated Collections personnel arrival date / time: _____

[1, 2] Estimated spill end date / time: _____

[1, 2] Spill cause: □ debris □ flow exceeded capacity □ grease deposition / FOG □ operator error
□ pipe structural problem / failure □ pump station failure □ rainfall exceeded design □ root intrusion □ vandalism

□ other (explain):
_____
_____
_____

If spill caused by wet weather, choose size of storm:
□ 1 year □ 2 year □ 5 year □ 10 year □ 50 year □ 100 year □ >100 year □ unknown
Diameter of sewer pipe at the point of blockage or spill cause (if applicable): _____ inches
Material of sewer pipe at the point of blockage or spill cause (if applicable): _____
Estimated age of sewer pipe at the point of blockage or spill cause (if applicable): _____
Description of terrain surrounding the point of blockage or spill cause (if applicable):
□ flat □ mixed □ steep

[1, 2] Spill response activities (check all that apply): □ cleaned-up (mitigated effects of spill) □ contained all or portion of spill
□ inspected sewer using CCTV to determine cause □ restored flow □ returned all or portion of spill to sanitary sewer system
□ other (specify):
_____
_____
_____

[1] Spill response completion date: _____

Visual inspection results from impacted receiving water:
_____
_____
_____

[1] Health warnings posted? □ Yes □ No
[1] Name of impacted beach (es) (n/a if not applicable): _____
[1] Name of impacted surface water(s) (n/a if not applicable): _____

[1] Is there an ongoing investigation? □ Yes □ No

[1] When 50,000 gal or more reach surface water, water quality samples analyzed for: □ ammonia (required) □ E. coli (required)
□ other chemical indicator(s) (optional): _____
□ no water quality samples taken □ not applicable to this spill □ other (specify): _____

[1] Water quality sample results reported to: □ County Health Agency □ Regional Water Quality Control Board
□ none of the above □ no water quality samples taken □ other (specify):
_____

[1,2] Spill corrective action taken: □ added sewer to preventive maintenance program □ adjusted schedule / method of preventive maintenance □ enforcement action against FOG source □ plan rehabilitation or replacement of sewer
□ repaired sewer □ other (specify):_____
_____
_____

Dates of previous SSOs at same location: _____

Notification Details

**OES Control Number: _____

**OES Called Date / Time: _____

[1] County Health Agency and Environmental Coordinator notified: □ Yes □ No

[1] County Health Agency notified Date / Time (required if "yes," above): _____

Regional Water Quality Control Board Notified Date / Time: _____

Other Agency Notified: _____

Was any of this spill report information submitted via fax to the Regional Water Quality Control Board? □ Yes □ No

Date and time spill report information was submitted via fax to the Regional Water Quality Control Board (required if "yes," above):
_____

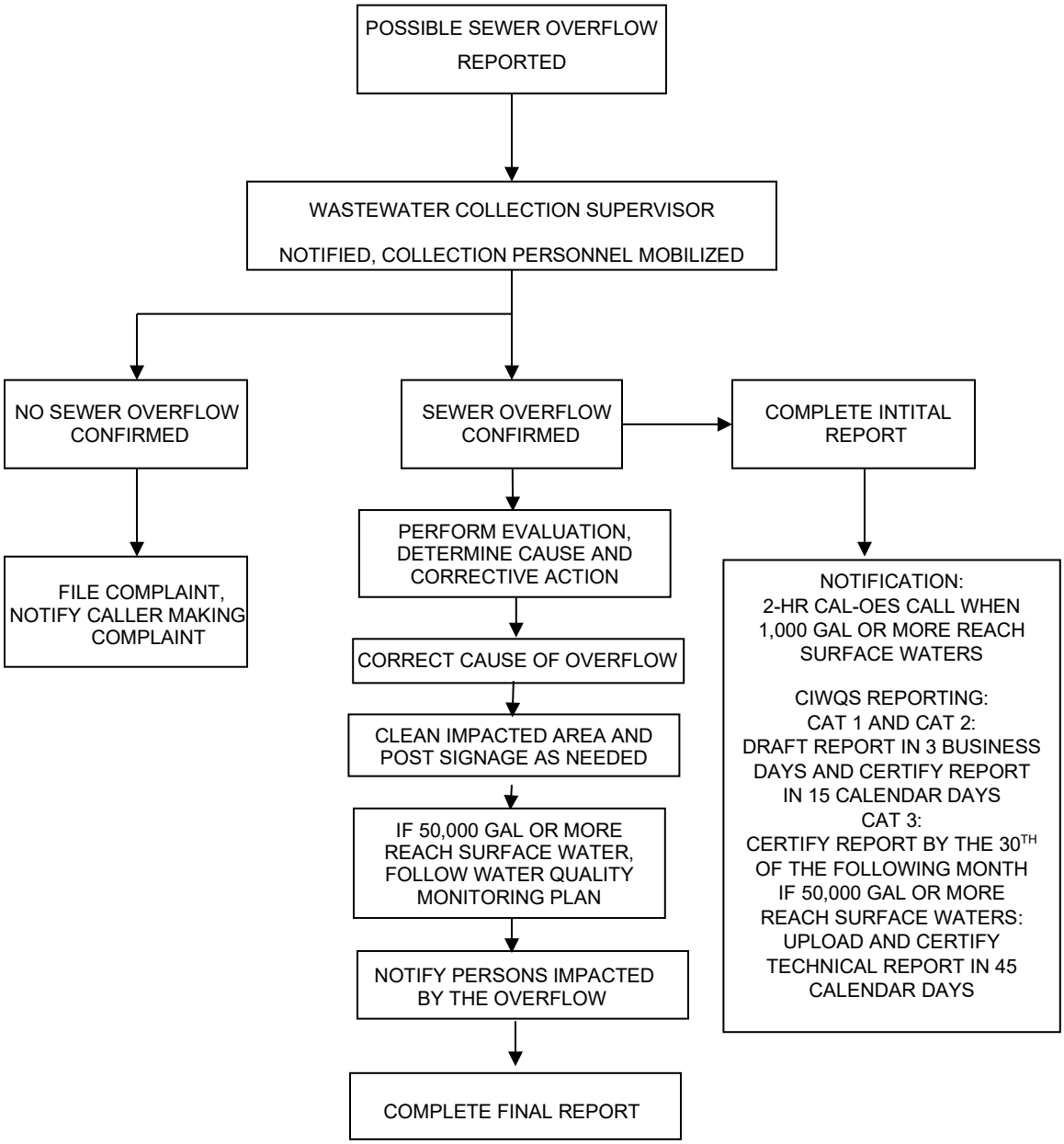
Name of Person Completing Form:_____Title:_____

Signature: _____Date:_____

Form Completion

APPENDIX 6 - C

SEWER OVERFLOW ACTION PLAN FLOW CHART
WASTEWATER COLLECTION SYSTEM



APPENDIX 6 - D

SEWER OVERFLOW (SSO) RESPONSE TRACKING PROTOCOL
CITY OF LOMPOC WASTEWATER SYSTEM

Step	Event
1	Report of possible SSO received by a dispatcher
2	Dispatcher enters received information into Sewer Overflow Report
3	Dispatcher contacts Wastewater Collection Supervisor or designee, which then deploys collections personnel to confirm reported SSO.
4	Maintenance personnel reports back to the Sewer Collection Supervisor reporting significance of the overflow.
5	Sewer Collection Supervisor or designee completes initial Overflow report. If the overflow will affect a drainage channel or surface water, the sewer Collection Supervisor or designee shall notify the State Water Resources Control Board contact person and Envinomental Coordinator orally within two hours of becoming aware of the discharge.
6	Data from Overflow Report are entered into permanent record on file at the Wastewater Division.

1. **Administration (City of Lompoc) ..... (805) 875-8212**
2. Airport ..... (805) 875-8268
3. **Building Department ..... (805) 875-8220**
4. Cal-Trans Representative, Chris Diaz
   Office ..... (805) 688-6649
   Cell ..... (805) 459-7580
   Danny Lopez, Lead Worker ..... (805) 459-0472
   Emergency Closure for
   Traffic Lanes ..... (805) 549-3212
5. Goetz & Associates ..... (805) 735-8000
   (All properties listed below)
   Chestnut Grove, Cypress Planned, Cypress Woods
   Foot Hill Estates, Glen Ellen, Linda Vista
   Lompoc Village (Gate #5468), Stonebrook (Gate #5652)
   Villa De Casitas, Villa de Las Flores
   Walnut Meadows, Winchester Village
6. City Attorney ..... (805) 875-8251
7. City Clerk ..... (805) 875-8242
8. Community Development ..... (805) 875-8279
   A. Crown Laurel (Key Sign Twice) ..... (1425)
9. Level 3 Communications
   Fiber Line Office ..... (877) 453-8353
   Fiber Hotline ..... (800) 336-9193
   6AM – 8PM
10. Economic Development ..... (805) 875-8232
11. Electric ..... (805) 875-8011/(805) 875-8012
12. **Engineering ..... (805) 875-8269**
    A. Environmental Coordinator ..... (805) 875-8275
13. **Santa Barbara County Environmental Health ..... (805) 681-4944**
14. **Fire ..... (805) 736-4513/(805) 875-8050**
15. Human Resources ..... (805) 875-8205
16. Information Systems ..... (805)875-8290
17. Landfill ..... (805) 736-9042
18. Library ..... (805) 736-3477

19. Lompoc Unified School District
(Contact one of the school district personnel below, in the order listed. These numbers are also listed with the school office)
    - Operations Supervisor ..... (805) 736-2371 ext 3173
    - Operations Supervisor ..... (805) 736-2371 ext 3174
    - Sprinkler Mechanic ..... (805) 736-0227

20. Lompoc Valley Community Center ..... (805) 735-3001/(805) 735-3002

21. Mission Hills Community Services District
    - District Cell Phone – On Call ..... (805) 588-2833
    - District Telephone ..... (805) 733-1945
    - Field Supervisor, Rick Young ..... (805) 588-2833
    - General Manager, Loch Dreizler ..... (805) 588-2833

22. Parks & Recreation ..... (805) 875-8100

23. Planning ..... (805) 875-8288

24. Police ..... (805) 736-2341/(805) 875-8102

25. Public Works ..... (805) 875-8269

26. Purchasing ..... (805) 875-8001

27. Pretreatment (Wastewater)
    - **Water Resources Protection Technician ..... (805) 875-8403/(805) 315-7117**
    - **Chemist ..... (805) 875-8415/(805) 455-6078**

28. Regional Water Quality Control Board ..... (805) 549-3688
    - Fax ..... (805) 788-3584

29. Solid Waste ..... (805) 875-8024

30. State Office Of Emergency Services ..... (916) 845-8510
    - Fax ..... (916) 845-8511

31. Stormwater ..... (805) 875-8275

32. Streets ..... (805) 875-8021

33. Transit – COLT Bus Service ..... (805) 736-7666/(805) 875-8266

34. Trees ..... (805) 875-8034

35. UTI (for Verizon)
    - After hours & weekends ..... (805) 451-1198
    - Local Customer Operations ..... (805) 733-8329

36. Union Pacific R & R (Fiber Optic Communications Line)
    - Signals or Crossings 1 (800) 848-8715
    - 24 hr Emergency 1 (800) 892-1283

37. Utility Connections (City Treasurer) ..... (805) 875-8246

38. USA DIG ALERT ..... 811 *or* 1 (800) 227-2600

39. Water ..... (805) 736-1617

40. Wastewater/Sewer ..... (805) 736-5083
Wastewater Collections Supervisor ..... (805) 315-7098/(805) 736-7393
Senior Wastewater Collection Worker ..... (805) 315-7013/(805) 736-1037
Wastewater Collection Worker ..... (805) 315-7064/(805) 736-6963

41. Vine by Vintage,401 West Pine Avenue (Gate #0519) ..... (805) 735-3675
(Woodstone Apartments)
After hours ..... (805) 291-7794

APPENDIX 6 - F

OVERVIEW OF SOME MEASURES TO AVOID SEWER OVERFLOWS

A. Proper Collection System Maintenance and Operations Program

- Cleaning of pipes (grease, root deposits)
- Sealing or maintenance of deteriorating sewers
- Remediation of poor/substandard construction (short term)
- Sewer replacement or rehabilitation program (long term)
- Proper maintenance and operations of pump stations
- Inspection of private lateral connections

B. New Wastewater Disposal System Construction

- Use latest technology and standards in constructing new wastewater disposal system improvements
- Perform proper construction inspection/quality assurance procedures.

Sanitary Sewer Overflow
Water Quality Monitoring Plan
October 2022

Table of Contents

Appendices

A Field Forms

B Calibration Logs

C Chain of Custody Forms (CoCs)

Project Management

Project Organization

This monitoring program will be conducted under the direction of the City of Lompoc (the City) with guidance provided by Larry Walker Associates (LWA). FGL Environmental will serve as the primary laboratory, but alternatives might be used due to logistics and timing. The Project Contact list is provided in **Table 1.**

Table 1. Project Contact List

Name	Water Quality Monitoring Role	Phone Number	Email
Dorin Marrs	Monitoring Coordinator	805.875.8408	D_Marrs@ci.lompoc.ca.us
Todd Zarkovacski	Field Crew	805.875.8416	
Abraham Carmona	Field Crew	805.875.8416	
Mason Sagpang	Field Crew	805.875.8416	
Denise Conners	Technical Advisor, LWA	530.753.6400	DeniseC@LWA.com
Kelly Dunnahoo	Laboratory Director, FGL	805.392.2000	KellyD@FGLinc.com

Background

In 2006, the State Water Resources Control Board (State Water Board) adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS WDRs), Order No. 2006-0003-DWQ. The Monitoring and Reporting Program (MRP) established monitoring, record keeping, reporting, and public notification requirements. On September 9, 2013, Order No. WQ 2013-0058-EXEC became effective that clarified and expanded requirements of the original MRP and defined new sanitary sewer overflow (SSO) categories. The SSO definitions, as well as the notification, monitoring, and technical reporting requirements are shown in **Figure 1**.

This monitoring plan addresses water quality monitoring requirements for Category 1 SSOs that are greater than or equal to 50,000 gallons. As defined by Order No. WQ 2013-0058-EXEC, the following elements must be included in an SSO Water Quality Monitoring Plan to comply with subsection D.7(v) of the SSS WDRs:

1. Protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Water quality monitoring analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Procedures for proper maintenance and calibration of monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program and documentation of maintenance and calibration, as necessary, to ensure their continued accuracy.

5. Water quality sampling within 48 hours of the City becoming aware of the SSO, for, at a minimum, the following constituents:

    a. Ammonia

    b. E. Coli

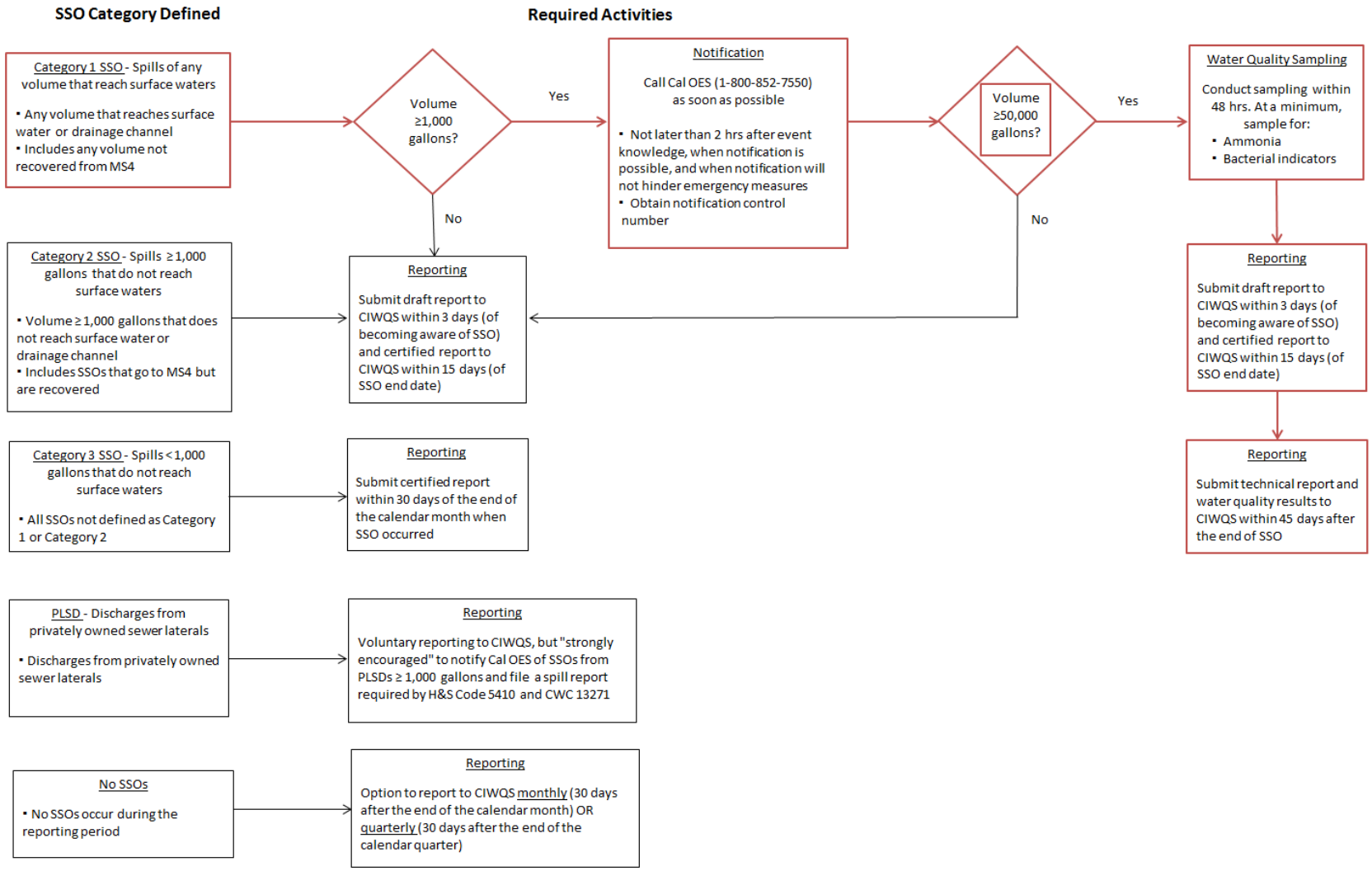


Figure 1. SSO Action Flow Chart (Based on Order No. WQ 2013-0058-EXEC)

Data Generation and Acquisition

Sampling Process Design

Sampling Event Timing

The Monitoring Coordinator will determine when the field crew will be mobilized to sample the receiving water. Sampling must be conducted within 48 hours after initial Category 1 SSO and spill volume notification. The monitoring coordinator will target daylight sampling within the first 24 hours of the SSO notification, but sample timing may be shifted due to safety and logistical issues.

Sampling will not be conducted if there are any concerns regarding field crew safety. These concerns may include heavy rain events, which compromise access points through flooding and swift currents. Thunderstorms will also be avoided when lightning is occurring. Sampling will only be conducted if there are at least two members of the field crew team available.

Monitoring Site Locations

Upon notice of a Category 1 SSO, the Monitoring Coordinator will determine where the field crew will sample. The Monitoring Coordinator will be responsible for determining the sampling locations. At a minimum, sampling will occur where the SSO enters the surface water body, 100 feet upstream of the entry point, and at least one point downstream of the entry point. The downstream location(s) will be determined from visual monitoring and estimated spill travel time (see Section B.3.1). The Monitoring Coordinator will provide a detailed description of potential monitoring site locations to the Field Crew.

Upon arrival at the monitoring sites, the Field Crew will determine the best locations to sample by assessing the hydrology of the receiving water and any safety precautions. The Field Crew should look for locations where the receiving water can easily be entered or sampled mid-channel by a grab pole. Once the sampling site location is selected, but before sampling starts, the Field Crew will record the latitude and longitude of the sampling location into the Field Form (**APPENDIX A**).

Equipment Preparation

The Field Crew shall maintain a sampling kit with the necessary supplies to conduct a monitoring event. **Table 2** lists the equipment and supplies that will be included in the sampling kit.

Table 2. Monitoring Equipment List

Storm Kit
Spare batteries for field meter (6)
Spare sample labels
Pencils (2) and waterproof pens/markers (2)
Diagonal clippers
Electrical tape
Cable ties (assorted sizes)
Utility knife
Zip-lock baggies (assorted sizes)

- Powder-free nitrile gloves
- Rubber bands, heavy duty
- Camera
- Duct tape
- GPS Device

SSO Water Quality Monitoring Plan

Log books/ Field forms

Chain-of-custody forms

New sample bottles

Intermediate containers

Flow meters

Coolers and ice

Cellular phone

Any necessary safety gear

Grab pole

Umbrella

Paper towels

Trash bags

Sampling Containers

The Field Crew will maintain a supply of sampling bottles for at least 4 events. The Field Crew will order bottles directly from the laboratory and will reorder bottles if they are unused for six months. **Table 3** includes the required bottle types, sample volumes, and preservatives for ammonia and *E. Coli* samples.

Table 3. Constituents to be Analyzed, Sample Volume Required, and Sample Type

Constituent	Optimum Vol.	Min. Vol.	Collection Method	Bottle Type	Preservation
Ammonia (NH_3, as N)	500	200	Direct Fill	500mL Plastic	H_2SO_4, <6° C
E. Coli	100	100	Direct Fill	100mL Sterile Plastic	<10° C

Field Meter Calibration

All field meters will be properly calibrated and maintained by the Field Crew. Calibrations will be performed according to the methods and frequency recommended by the equipment manufacturer. When calibrating the instruments, the Field Crew will document all pertinent information in a Calibration Log (**APPENDIX B**) and keep it with the rest of the project documentation.

Water Quality Monitoring

The Field Crew will be responsible for the following tasks upon arrival at the monitoring location:

1. Determine best sampling locations and record latitude and longitude readings for the upstream, SSO entry point, and downstream sampling sites.
2. Calculate spill travel time at the downstream monitoring site.
3. Collect water quality samples in the following order: first at the SSO entry point, second at the downstream site(s), and third at the upstream monitoring site.
4. Complete all field forms and prepare the samples for delivery to the laboratory.

The following sections outline the necessary steps the Field Crew must take when performing the above actions.

Spill Travel Time

When the Field Crew arrives at the downstream monitoring site, they will estimate spill travel time by calculating travel time within enclosed storm drains (distance traveled ⁄ initial spill rate) and within open surface waters. Travel time within the open surface waters can be determined two different ways depending on the accessibility and safety of the monitoring site.

Velocity Probe

Using a velocity probe is the preferred method of spill travel time calculation, but it requires extra safety precautions, since the Field Crew will have to wade and cross the surface water body.

1. The Field Crew must first ensure that the receiving water body is flowing at a safe rate and its span can be crossed by wading.
2. One Field Crew member will be responsible for using the velocity probe and the other will stand on the shore and record the readings.
3. The Field Crew member with the velocity probe will enter the surface water at the shore and begin to take a velocity measurement, roughly six inches below the surface. The Field Crew member will wait for the reading to stabilize before reporting the value to the recording Field Crew member.
4. The Field Crew member will then move the velocity probe two feet further into the surface water body and make another measurement. This will continue until the entire span of the receiving water body has been measured.

5. The Field Crew will not cross into any unsafe portions of the receiving water body and will note on the Field Form if the measurements are only for a portion of the channel.

Visual Velocity Estimation

If the receiving water body is unsafe to enter, the velocity can be measured by observing floating debris.

1. The Field Crew members will stand on the edge of the channel, 30 feet apart.

2. The Field Crew member standing upstream will indicate when a large piece of debris passes their point. At this time the Field Crew member standing downstream will start timing.

3. Once the same piece of debris passes the downstream Field Crew member, they will stop timing and calculating the velocity (ft/sec) by dividing 30 feet by the number of seconds it took for the debris to travel that length.

If there isn't any large debris floating in the surface water, the upstream Field Crew member can use a nearby stick or other buoyant object.

Sample Collection Methods

Sample collection methods will vary depending on the surface water and the safety of the Field Crew. Clean, powder-free, nitrile gloves will be worn for all bottle handling. The direct fill sample collection method is the preferred sampling method, since it does not use an intermediate container. In cases where the direct fill method cannot be used due to accessibility or safety an intermediate bottle and a grab pole can be used.

Direct Fill Sample Collection

The direct fill sample collection method will be used in cases where the surface water can be entered safely by the Field Crew. Field Crew will wear waders and ensure that the water level and velocity of the surface water are low enough to provide a safe entry and sampling environment.

Ammonia and bacteriological sample bottles will be filled by direct submersion to approximately mid-depth as follows.

1. Wade to approximately the area of the water body with the highest flow rate and face upstream. This will most likely be midstream, but can be in a different portion of the stream, depending on the hydrology.

2. Submerge the sample bottle with its cap on to approximately mid-depth at a location of significant flow (avoid stagnant water). Hold the bottle upright under the surface while it is still capped.

3. Open the lid carefully just a little to let water run in. Fill the bottle and screw the cap tightly while the bottle is still underneath the surface.

4. Remove bottle from stream and place on ice.

Intermediate Container Sample Collection

If the flow, water level and/or access point are deemed unsafe then an intermediate bottle attached to a grab pole will be used for sample collection. A clean, new intermediate bottle will be used for each sampling event and sampling site.

Ammonia and bacteriological sample bottles will be filled by intermediate container sample collection as follows:

1. Attach the intermediate bottle to an expandable pole using tape or cable ties and remove lid.
2. Submerge the intermediate bottle, attached to expandable pole, to approximately mid-depth at a location of significant flow (avoid stagnant water).
3. Remove bottle from water and empty contents. Repeat this twice more.
4. Once the intermediate bottle is properly rinsed, return it to approximately mid-depth at a location of significant flow (avoid stagnant water).
5. Using the intermediate bottle, fill the bacteriological sample container and then the ammonia bottle. Ensure that neither bottle overflows and that the preservative stays in the sample container.
6. After bottle fills, replace bottle lid, remove bottle from pole, and place on ice.

Sample Handling and Custody

The Field Crew will ensure that all samples are collected and submitted to their respective labs by the maximum hold times listed in Table 4. If timing or logistics prevent a hold time being met, the Field Crew will contact the Monitoring Coordinator.

Table 4. Constituent Hold Times and Analytical Methods

Constituent	Analytical Method[1]	Maximum Hold Times	Analytical Lab
Ammonia (as N)	SM 4500-NH3-G	28 days	FGL, Labs
E. Coli	SM 9223-B/E	8 hours	OEC, Inc

Sample Bottle Labels

The Field Crew will label all sample bottles with a waterproof label, which will contain the agency name, sample collection date, analyte, analysis method, station number and name and Field Crew names. The analytes and analysis methods are shown in **Table 4** and the station identification protocols are shown in **Table 5**.

Table 5. Site Names for Sample Handling

Station Number	Station Name
US-001	Surface Water Upstream
ENTRY	Surface Water Point of Entry

DS-001	Surface Water Downstream 1
DS-XXX[1]	Surface Water Downstream XXX[1]

1 Additional downstream monitoring sites will be labeled in sequential order starting from the SSO surface water point of entry.

Example sample bottle label:

Direct Fill Sample Bottle Label

City of Lompoc

Station Number - ____

Analyte – Analysis Method _____

Date & Time:_____ Collected by:_____

Transport

All samples will be kept on ice from the time of collection to the time of receipt by laboratory personnel. It is imperative that all samples be analyzed within maximum holding times (see **Table 4**). Samples will be shipped/delivered as specified in **Table 6**.

Table 6. Analytical Laboratories

Analytical Laboratory	Analysis	Shipping Method
FGL Environmental 3442 Empressa Dr, Ste D San Luis Obispo 805-783-2940	Ammonia	Hand delivered
Oilfield Environmental and Compliance, Inc 307 Roemer Way, Suite 300 Santa Maria, CA 93454	E.coli	Hand delivered/picked up
FGL Environmental 853 Corporation St Santa Paula, CA 93060 805-392-2000	Ammonia	Shipped

Chain of Custody Form

Chain-of-Custody (CoC) forms will be filled out by the Field Crew for all samples submitted to the laboratories. CoCs will contain the following information:

- Sampler name
- Address (where the results will be sent)
- To whom the laboratory results are being sent
- Sample collection date and time
- Sample location
- Analysis method requested
- Sample container type and number
- Comments/special instructions
- Samples relinquished by (signature, print name, date)
- Samples received by (signature, print name, date)

Example lab specific CoCs are included in **APPENDIX C.**

Reporting

A Category 1 SSO in which 50,000 gallons or greater are spilled to a surface water requires multiple stages of notification and reporting. The City will adhere to the required timeline outlined in **Table 7**, which begins when the City becomes aware of an SSO. The specific requirements for notification and reporting are specified by Order No. WQ-2013-0058-EXEC and detailed in the City's Sanitary Sewer Management Plan.

Table 7. Notification and Reporting for Spills Where 50,000 Gallons or More Reach Surface Waters

Time Period	Requirement
<2 Hours	Notification to CalOES
Within 3 Business Days	Draft Category 1 SSO Report to CIWQS
Within 15 Calendar Days	Certified Category 1 SSO Report to CIWQS
Within 45 Calendar Days	SSO Technical Report with water quality results to CIWQS

Sewer System Management Plan
Element 7

7.0 Fats, Oils, and Grease (FOG) Control Program

- **Requirement:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed the Enrollee must provide justification as to why it is not needed. If the FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include following as appropriate:

a. An implementation plan and schedule for public education outreach program that promotes proper disposal of FOG.

b. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area.

c. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by SSOs

d. Requirements to install grease removal devices such as traps or interceptors, design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements.

e. Authority to inspect grease producing facilities, enforcement authorities and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinances.

f. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section.

g. Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

Element 7: Fats, Oils, and Grease (FOG) Control Program

This SSMP element discusses the Fats, Oils, and Grease (FOG) Control Program that the City of Lompoc Wastewater Division has in development for the management, operation and maintenance of the sanitary sewer collection system. This section fulfills the FOG Control Program requirement of the SWRCB SSMP Element 7. Sections 7.1 through 7.7 provide a broad overview of the FOG Control Program.

A key objective of Element 7 is to focus on compliance with regulations as opposed to punitive measures.

7.1 CHARACTERIZING FOG SOURCES

FOG is a major cause of sewer line blockages leading to increased maintenance and possible SSOs. Blockages are associated with certain locations containing fats, oils, grease, or other encumbrances within the collection system. They are typically found in areas with restaurants, around apartment complexes, and at certain automotive related facilities, as well as in establishments built between 1916–1950 with clay sewer lines.

A closed circuit television (CCTV) deployed in the collection system identifies areas within the City that require more frequent inspection and maintenance. In rare cases high FOG concentrations have been also identified by the occurrence of a n SSO. **SSOs are discussed in more detail in Element 6.**

Certain locations are flushed with greater frequency than other lines to reduce odor and greasy build-up in the lines. Lines with a history of build-up are generally flushed at intervals of 3, 4, or 6 months from the last line flushing and are visually examined periodically. Lines with normal conditions or no history of FOG problems are flushed at intervals of 12 to 36 months.

Currently, certain locations of FOG-related issues including SSOs, FOG related blockages, sewer repairs, maintenance, cleaning frequencies, and identification of the suspected cause of problems are recorded into a City database.

7.2 REGULATORY REQUIREMENTS

Regulatory requirements specific to the control of FOG discharges shall be identified in the City of Lompoc Municipal Code, Title 13, Chapter 13.16, Article 9: Fats, Oils, and Grease Control Program. Program areas authorized in the Lompoc Municipal Code shall include FOG-related discharge prohibitions; grease control device requirements, including maintenance requirements; identification of best management practices (BMPs); monitoring, reporting, and inspection, and notification, conditions; and enforcement.

Additional regulatory controls applied generally to all collection system users are identified in the City Municipal Code, Title 13, Chapter 13.16, Articles 1 through9. Application of Article 9 provisions is intended to work in concert with the provisions of Articles 1 through 8. FOG users are not exempt from any of the regulatory requirements specified in Chapter 13.16.

7.3 FOG CONTROL PROGRAM

The City has determined a FOG Control Program is necessary to facilitate the maximum beneficial public use of the City of Lompoc's sewer services and facilities while preventing blockages of the sewer lines resulting from discharges of FOG to the sewer system. This section discusses the elements required to implement a successful FOG Control Program that complies with regulatory requirements. All FOG-discharging facilities are subject to the requirements of the FOG Control Program that shall be specified in Chapter 13.16, Article 9 of the City Municipal Code. Procedures for implementing the City's FOG Control Program shall be outlined in the City's Fats, Oils, and Grease (FOG) Pretreatment Program Policy. While the City maintains the legal authority to permit all FOG-discharging facilities, they may be, but are not routinely, issued individual wastewater discharge permits. FOG program staff do, however, regularly inspect FSEs to verify compliance with FOG Control Program requirements. Emphasis is placed upon FSEs because of the potential impact on the sewer system related to food preparation. This section provides a summary of the FOG Control Program.

On-site FOG Handling and Disposal Practices

FOG control devices. Unless the Director or his/her designee issues an exemption, the City of Lompoc Sewer System Ordinance shall require any User that discharges more than a *de minimus* quantity of FOG from its facility into the sanitary sewer system perform pretreatment to comply with the City's Pretreatment Program. Users are generally required to install, operate and maintain a FOG discharge grease control device that is sufficient to remove FOG contained in wastewater discharges. Such devices shall be sized, configured and connected in accordance with the most recent Uniform Plumbing Code (UPC) and approved by wastewater pretreatment or collections personnel. Restaurants and other FSEs that discharge a de minimis amount of FOG, such as those engaged only in reheating, hot holding, assembly, or mixing of ready to eat food products, may be exempted from this requirement.

Best Management Practices (BMPs)

a. Food Service Establishments (FSEs). All FSEs and other entities that operate commercial kitchens, even if only on an occasional basis, are subject to FOG ordinance and pretreatment requirements which include Kitchen Best Management Practices (KBMPs) designed to reduce the amount of FOG discharged into the sanitary sewer system. These KBMPs shall include, but are not limited to, scraping plates prior to washing, using baskets in sink drains, and dry clean up for spills. FSEs, unless granted an individual written waiver by the Director or designee, shall implement KBMP. Outreach to FSEs includes providing educational materials relating to kitchen practices regarding the need and benefit of reducing or eliminating FOG producing materials from entering an establishment's sewage connection by separating them out for removal from the FSE as garbage. All FSEs shall post and keep posted, the Kitchen Best Management Practices in a conspicuous area in the food preparation and dishwashing areas at all times and maintain documentation of annual training of employees regarding FOG control measures and Kitchen Best Management Practices.
b. Other Non-residential Sewer Users. Certain other Users utilize products in their businesses that include products that, if discharged to the sewer system, have the potential to contribute to FOG entering the sewer system. These include automobile service facilities that provide petroleum and grease based products and services in the course of conducting their business, and cannabis businesses that include production facilities.

c. Residential Sewer Users. Residential areas also can contribute to FOG discharges, however, their share of FOG contribution to the sewer system is de minimus and no FOG control devices are required.

FSE Record-keeping Requirements

All FSEs and multiple FSE dischargers shall be required to keep all manifests, receipts and invoices of all cleaning, maintenance, grease removal of/from the Grease Control Device, and disposal carrier and disposal site location records for no less than three years. FSEs and multiple FSE dischargers shall, upon request, make the manifests, receipts, invoices and records available to any City of Lompoc representative. In addition, FSEs and multiple FSE dischargers shall maintain the following records, as applicable:

1. A logbook of Grease Control Device cleaning and maintenance practices.
2. A record of Kitchen Best Management Practices being implemented.
3. Copies of records and manifests of waste hauling interceptor contents.
4. A logbook of annual training of employees regarding FOG control measures and Kitchen Best Management Practices.
5. Records of sampling data and sludge height monitoring for FOG and solids accumulation in the FOG interceptors.
6. Any other information determined to be appropriate by the Director or designee to ensure compliance with the FOG Control Program.

FSE Grease Storage for Recycling

Disposal of yellow grease including waste cooking oil into the sanitary sewer is prohibited. It is recommended that all FSEs use a grease rendering service for yellow grease. Yellow grease should be stored in a labeled and color-coded container with tight-fitting lid, and reside in a secondary containment container for spills. The container should be stored away from floor drains. Several grease rendering companies currently serve the Lompoc area. (The City cannot endorse or recommend grease rendering companies.)

Pretreatment Program

Under the Code of Federal Regulations at Title 40 of the Code of Federal Regulations (CFR) Part 403, the City is required to implement a Pretreatment Program to regulate discharge from non-domestic sources in its service area. The FOG Control Program is considered to be a component of the City's Pretreatment Program. Pretreatment Program is administered under the general direction of the Director and the supervision of the staff Chemist who serves as the lab director for the wastewater treatment plant. Title 13 Chapter 16 of the Lompoc Municipal Code provides the City with the necessary legal authority to implement the Pretreatment Program.

The City's Pretreatment Program uses an office database management system to track and monitor FSEs and other FOG producers. The database contains all Users that are subject to pretreatment. Information stored in the database includes: general facility information (e.g., name and description of facility, address, phone number, history, etc.), inspections, grease haulers and renders used, corrective actions taken, and compliance status. The database also includes: previous FOG blockages, sanitary sewer overflows (SSOs), sewer repairs and maintenance, cleaning frequencies, method of cleaning, suspected cause(s) of sewer problems, odor complaints and frequencies, and estimated costs of maintaining the sewer.

FOG Program Budget

The FOG Control Program is funded from Collections, Pretreatment, and Wastewater's Administrative budget. It is expected the expenditures spent on the FOG Program will remain fairly constant. The City budget includes both maintenance and capital funding for wastewater needs.

7.4 PROGRAM ADMINISTRATION

The City's Collection personnel maintain historical records of all SSOs, FOG related blockages, sewer repairs, maintenance, cleaning frequencies, site locations, and suspected cause of problems. It is used to help identify particular sewer system sections subject to blockages or with a past history of blockages so that specific preventive measures can be taken.

FSEs, automotive related industries and certain other FOG generating users are inspected regularly, with inspection frequencies being determined based on a variety of prioritizing factors. FOG-producing entities whose activities have resulted in special activities on the part of the City, including but not limited to issuance of notices of violation, increased cleaning frequency, or increased inspection frequency, are scheduled to be inspected more frequently. All users that are likely to have caused or contributed to FOG-related blockages or SSOs will be inspected promptly upon discovering the likely role of the user.

Present staffing is adequate to inspect facilities that discharge FOG to the sewer system. However, the ongoing establishment of local wineries and the emerging cannabis facilities may lead to additional staffing needs.

Inspection Procedures

All safety precautions shall be taken during each inspection. All inspectors shall have personal protective equipment (PPE) consisting of safety glasses, vest, gloves, hardhat, boots, and anything else required by site conditions available. Traffic cones shall be used when necessary. A gas monitor shall be used immediately prior to each inspection of a hydro-mechanical grease interceptor or gravity grease interceptors, as well as during the inspection. Additional PPE may be required depending on the inspection site.
Sampling equipment may include maintenance hole cover openers, sample containers, ice chest, cold packs, Sludge Judge®, paper towels, hand sanitizer, trash can, trash bags, towels, note pad, pen, chain of custody, and digital camera. Additional materials may be required where necessary.

Inspection Activities

Inspection activities may vary, depending on the reason for the inspection. Pretreatment personnel and/or other City representatives will first announce their arrival and may inspect the grease device manifests/logs. Inspection activities may also include inspection of any kitchen and all its grease removal devices, implementation of KBMPs, posted signs, and outside grease removal devices. The inspection activities may also include interviewing the staff, reviewing training logs and materials, and providing educational materials.

Inspection Criteria

Operation and maintenance practices for grease control are evaluated by the City during each facility inspection. Primary City inspection criteria include, but are not limited to the following, as applicable:

1. Grease Control Device compliance which may include visual inspection or measurement of FOG to determine performance.
2. Grease Control Device compliance with minimum pumping frequency.
3. Review of receipts/manifests/service logs and invoices to assess compliance with the minimum pump frequency requirements.
4. And for FSEs:

a.) Visual verification of Kitchen Best Management Practices being posted conspicuously in the food preparation and dishwashing areas.

b.) Evidence that employees of the food service establishment have been trained once each calendar year regarding FOG Control measures and BMPs as well as a review of training log/documentation.

Follow-up Procedures

When a User is found to be in non-compliance with program requirements, a notice to comply or a notice of violation may be issued depending on the history and severity of the FOG problem. In most cases, Users will receive a notice to comply within a specific time frame. The inspector informs the User that a follow-up inspection will occur to verify the required action, e.g., pumping/cleaning, has been performed and equipment is operating in conformity with regulatory requirements. If a blockage is severe, the inspector or other City personnel may remain on-site until a pumping company arrives and the FOG problem is remedied.

7.5 OUTREACH, TRAINING AND EDUCATION

This section of Element 7 applies to the FOG Control Program. ***Customer Communication of a more general nature is found in Element 11, Communication Program.***

Educating owners and managers of facilities with potential to discharge FOG is an important and effective way to reduce FOG from entering the sanitary sewer. The City develops and distributes educational brochures and posters with grease removal device information, benefits of using a grease rendering service, BMPs, adverse effects of FOG blockages, grease removal device sizing, and frequently asked questions. Users may also find educational materials on the City's webpage (www.cityoflompoc.com).

Particular emphasis is directed toward assisting FSEs. Brochures and posters may be reviewed and distributed to all FSEs during inspections. City staff may also take the opportunity during inspections to educate the owner or manager of additional steps that can be taken to prevent FOG from entering the sewer.

Residential areas often contribute to FOG blockages, however, that impact is de minimus. The City may occasionally provide FOG brochures throughout the City to residents relating to FOG reduction efforts. This generally is accomplished with inserts included in utility bill mailings. If

a residential area is identified as a significant FOG contributor, then additional outreach takes place via mail or hand-deliveries to residents in that area.

7.6 ENFORCEMENT

An Enforcement Response Plan provides guidelines for City staff to detect, investigate, and respond to instances of User noncompliance encountered in its Pretreatment Program. The City implements and enforces its approved Pretreatment Program in accordance with the requirements of its NPDES permit, RWQCB requirements, and the federal pretreatment regulations specified at Title 40 of the Code of Federal Regulations (CFR) Part 403.

The City's authority for enforcement is specified in its Sewer Use Ordinance (SUO), Chapter 13 of the Lompoc Municipal Code, which incorporates applicable local, California, and Federal pretreatment regulations. The purpose of the SUO is to regulate wastewater to protect public health and safety, City facilities and personnel, and the environment. All nondomestic dischargers into the City sewerage system, including both commercial and industrial facilities, are considered Users subject to the requirements and enforcement procedures outlined therein. Users violating conditions of the SUO; other municipal requirements such as wastewater discharge permit provisions; and City, State, and Federal requirements and policies governing wastewater disposal must resolve instances of noncompliance in a timely manner. Accordingly, the Enforcement Response Plan was developed to provide consistent, timely, fair and equitable enforcement responses; to eliminate economic advantages for violations; and to ensure that the City recovers expenses attributable to violators. The City may apply wastewater fees for reimbursement costs for extra work conducted on behalf of the Users for monitoring/inspecting, review of accidental discharges, and non-compliance issues deemed necessary for the City to implement wastewater pretreatment requirements. Users which continually fail to comply with pretreatment requirements could be subject the enforcement remedies specified in the Lompoc Municipal Code Title 13, Chapter 13.16. In general, enforcement actions are meant to focus the efforts of dischargers on correcting violations and are intended as restorative, not punitive, measures.

7.7 DEVIATION FROM FOG REQUIREMENTS

The Director may approve deviations from FOG requirements as long as the deviations do not improperly or inappropriately excuse complying with the Lompoc Municipal Code Title 13, Chapter 13.16.

Sewer System Management Plan
Element 8

8.0 System Evaluation and Capacity Assurance Plan

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

h. Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows, including flows from SSOs that escape the system, associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events.

i. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria.

j. Capacity Enhancement Measures: The steps needed to establish a short and long term CIP to address identified hydraulic deficiencies including prioritization, alternatives analysis and schedules. The CIP may include increases in pipe size, I/I reduction, increases/redundancy in plumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

k. Schedule: The Enrollee shall develop a schedule of completion dates for all potions of the capital improvement program developed in (a) and (c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements.

Element 8.0: SYSTEM EVALUATION & CAPACITY ASSURANCE

8.1 OVERALL ASSESSMENT

The City of Lompoc collection system is largely built-out, as few new areas are being annexed for development. Infiltration and inflow (I&I) is still a concern, but was likely more of a problem prior to upgrading a separate storm drain system beginning in the 1970s.

Use of closed-circuit television (CCTV) as an inspection tool has identified City sewer mains that require close attention. Most of the issues are a result of sewer mains having been emplaced in natural bedding with considerable external loading that, over a period of several decades, had resulted in deteriorating line condition. Most of these are located on the south side of the City system, and many date from 1916. Root intrusion is also an issue in some areas. In all, approximately 21 miles of City sewer mains (pre-1960) are currently identified as being in need of rehabilitation or replacement.

Current installation criteria offer considerable improvements over past practices. Fewer joints are needed with durable PVC pipe, and use of designed bedding enhances stability.

8.2 CURRENT ACTIVITIES

Lompoc City Council considers and approves budgets every two years. Projects in the current budget (FY 2019-20, and FY 2020-21) include $2,500,000 for engineering and replacement of City sewer mains.

It is important to fund projects over time in a sustainable way, making sound infrastructure investments for the future. To improve the overall financial health of the Wastewater Division, multiple successive rate increases have been approved by Lompoc City Council over recent years. The additional revenue generated helps fund future City sewer main projects.

8.3 CAPITAL IMPROVEMENT PROJECTS

Capital improvement program (CIP) projects for sewer rehabilitation and replacement consist of individual improvements and small repair projects that run cradle-to-grave (and therefore can begin before and continue beyond the budget cycle) and receive funds annually. Current CIP projects that target overall sewer rehabilitation and replacement, projects that address inflow and infiltration, and projects aimed at increasing mainline capacity where deficiencies were identified in a Citywide CCTV study and the current Wet Weather Capacity Analysis. Currently, miscellaneous sewer line replacements are budgeted at $1,250,000/yr.

8.4 CAPITAL IMPROVEMENT PROJECTS STATUS

RECENT CITYWIDE SANITARY SEWER ADDITIONS AND REHABILITATION/REPLACEMENT PROJECTS	STATUS (as of Dec. 2020)
Ocean Avenue Upgrade	In Engineering
South C/D Alleys Rebuild	In Engineering
Replace River Park Lift Station	Scheduled 2027

SEWER I&I PROJECTS	CURRENT STATUS
Citywide Sanitary Sewer I&I Reduction	ON-GOING
Lompoc I&I Removal	ON-GOING
Misc. Spot Replacements	ON-GOING

Sewer System Management Plan
Element 9

9.0 Monitoring, Measurement and Program Modifications

Requirement: The Enrollee shall

a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.

b. Monitor the implementation and where appropriate measure the effectiveness of each element of the SSMP.

c. Assess the success of the preventive maintenance program.

d. Update program elements as appropriate based on monitoring or performance evaluations.

e. Identify and illustrate SSO trends including frequency location and volume.

9.0 COLLECTION SYSTEM MONITORING, MEASUREMENT & PROGRAM MODIFICATIONS

The Lompoc Wastewater Collection Division (LWCD) strives toward proper maintenance, operations and management of the sanitary sewer collection system. Efforts focus on little or no SSO frequency and impact, improving collection system reliability, and providing capacity in the system to convey peak flows. The following information refers to what data is collected on a daily basis and how that data is used to analyze sewer collection system performance, structural and maintenance related problems, crew productivity, and overall success of maintenance and capital improvement programs.

9.1 DATA COLLECTION

LWCD utilizes ADMINS (Alpha) program software, which provides the means to capture retrieve and track all collection system maintenance activities. "How-To" documents have been created for data entry with examples specific to Lompoc's collection system. Staff is trained on use of this program with administration and quality control provided by the Information Systems/Geographical Systems (IS/CIS) administrator.

Sewer crew daily records provide information that assists staff in analyzing the sanitary sewer collection system. Included on crew daily log and work order sheets are: location of work; pipe or manhole ID#; length of pipe worked on, whether activities were part of an emergency response or preventative maintenance (citywide district cleanings and/or "Enhanced Maintenance" repetitive cleaning); structural or maintenance problems discovered in the pipe and their severity; whether additional follow-up is needed; staff names; equipment and material used; and start and end times.

LCWD staff enters all information into the ADMINS program. Maps displaying structural and maintenance deficiencies in the collection system have been useful for understanding the various dynamics of the collection systems in different areas of the City. Using this visual display of information, together with frequent discussions between management, crew, engineering, and IS/GIS, LWCD updates maintenance activities as appropriate.

Contractors are sometimes utilized in addition to internal staff for completing targeted and district-wide condition assessment projects. Closed-circuit television (CCTV) is used to identify problems within sewer pipe and provide an overall condition rating of each pipe.

CCTV is used to capture the structural and maintenance condition of pipes within a sewer basin. All CCTV information is to be entered into the Admins program. Reports are created to analyze CCTV data and condition scores. Such reports are useful for determining specific rehabilitation methods as well as coordinating repairs with other public works efforts such as road rehabilitation and reconstruction. Maintenance hole condition assessments/inspections are completed in conjunction with mainline condition assessment projects and separately as necessary.
LCWD has a vehicle with CCTV capabilities. This vehicle is utilized for takes videos of pipes under roadways slated for rehabilitation or reconstruction, spot-checking maintenance cleaning efforts and to quickly identify causes of blockages.

9.2 DATA REPORTING

Performance indicator information is generated on a quarterly and annual basis. Some of the criteria tracked are represented in the table below.

Performance Indicator	FY 2019 (latest)
Sewer Odor Complaints	12
Sewer Mainline Blockages	2
Sewer Emergency Calls	2
Emergency Response w/in 2 Hours (%)	100%
Sewer Mainlines Repaired	0

Reported data suggests consistent workload for sewer maintenance. Recent repairs can be attributed to better communication between sewer maintenance and CCTV inspection.

9.3 SANITARY SEWER OVERFLOWS

LCWD tracks detailed information pertaining to sanitary sewer collection system overflows (SSOs).

SSOs have become very infrequent on the City sewer mains. The last SSO was a Category 3 on September 18, 2012, of approximately 50 gallons. **Additional information regarding how the City manages its SSO programs can be found in Element 6 of this SSMP.**

Sewer System Management Plan
Element 10

10.0 SSMP Program Audits

- **Requirement:** As part of the SSMP the Enrollee shall conduct periodic internal audits appropriate to size of the system and the number of SSOs. At a minimum these audits must occur every two (2) years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollees compliance with the SSMP requirements identified in this subsection including identification of any deficiencies in the SSMP and steps to correct them.

Element 10.0: SSMP PROGRAM AUDITS

The Program Audits section of the SSMP exists to measure compliance with prior individual SSMP Element planned activities. Since the inception of the SSMP information related to Collections has been informally analyzed in order to identify deficiencies and improve program performance, however these activities have not been formalized in a manner consistent with SSMP requirements.

10.1 PURPOSE AND USE

This element requires periodic operational or quality audits, as opposed to financial audits. It requires an evaluation of the effectiveness of WW Collections in meeting its intentions as stated in the individual elements of the SSMP. A useful definition of this type of audit from the book, Fundamentals of Quality Auditing (Parsowith) is “A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.” In a sense the SSMP audit creates a “report card” that measures actual performance against planned performance. The audits are required at least every two years and, as required, will be kept on file with the WW Superintendent.

10.2 RECENT AUDIT HISTORY

Information suitable for inclusion in past periodic audits has generally been gathered but not packaged in a manner consistent with requirements. Data have not always been captured in a format that makes it easily extractable.

10.3 CORRECTIVE MEASURES

A procedure has been put in place to ensure that audit requirements are met in the future. Two actions have been put in place to ensure that periodic audits take place as required:

1. Oversite responsibility for the timely completion of periodic audits has been made the responsibility of the Wastewater Superintendent.

2. A “recall file” that specifies the required dates and materials relating to audit requirements has been created.

Sewer System Management Plan
Element 11

11.0 Communication Programs

- **Requirement:** The Enrollee shall communicate on a regular basis with the development, implementation and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented. The enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollees sanitary sewer system.

ELEMENT 11.0: COMMUNICATION PROGRAM

This section highlights the communications and outreach plan developed for the City of Lompoc Sewer System Management Plan (SSMP). Additional outreach activity specifically relating to SSMP Element 6, Overflow Emergency Response Plan, and SSMP Element 7, Fats, Oils, and Grease (FOG) Control Program are described therein.

The City of Lompoc primary "customers" are the residential, industrial, and commercial customers that connect to the sewers located within Lompoc. In addition, two "satellite systems" contribute flow to the City of Lompoc sanitary sewer collection system. These contributing systems (or Member Agencies)) are Vandenberg Village Community Service District and Vandenberg Air Force Base. The customers of the satellite systems are the residential, industrial, and commercial customers that connect to the collector sewers located within the service areas of each of the contributing systems.

11.1 COMMUNICATIONS WITH MEMBER AGENCY SATELLITE SYSTEMS

The City developed and implemented a communications program with its Member Agencies. The plan has established a collaborative approach to communicate with contributing systems and work together during the development and implementation of, and future improvements, to the SSMP. The City plans to work with them as they develop their SSMP's and facilitate meetings to discuss common issues and provide support during the SSMP development process.

Meetings will be held with representatives who are responsible for development and maintenance of the SSMP at both of the Member Agencies. The City's Wastewater Superintendent is the designated position which will interface with the satellite systems. The agenda or topics for meetings with satellite systems may include master plan, capacity issues, emergency response plans, and capital programs.

11.2 COMMUNICATIONS WITH AND OUTREACH TO RESIDENTIAL, INDUSTRIAL, AND COMMERCIAL CUSTOMERS AND THE GENERAL PUBLIC.

The City provided a link at the public website where the public is encouraged to view and comment on SSMP sections. The website provides a list also referred to in all other outreach efforts.

The City of Lompoc conducts public outreach and education for residents and businesses related to sanitary sewer overflows, preventing grease blockages, and Best Management Practices for grease handling and other topics as provided at community events related to SSO.

11.3 SPECIFIC OUTREACH: FOG MITIGATION:

The City inspects service facilities for compliance with the City Code. Educational materials may be distributed during these inspections as needed. The City also conducts Plan Checks for all new and remodeling restaurants and other food service facilities to determine proper grease removal device sizing, if warranted.

The City may distribute informational flyers to residential and business property owners and tenants describing the negative impacts of discharging fats, oils, and grease into the sanitary sewer system as needed. In areas where a sewer overflow is attributed to the build up of fats, oil or grease in the sewer pipes, the City canvasses the vicinity with door hanger type flyers notifying

the neighbors of the event and reinforcing the message to avoid pouring these items down the drain while describing the continued negative impacts that this will likely have on the sewer system. Both mailers and door hangers typically provide information in English and Spanish. **Additional discussion of customer outreach related to FOG is covered in Section 7.5.**

11.4 COMMUNICATION WITH AND OUTREACH TO, LAND DEVELOPERS, CONSULTANT ENGINEERS, CONTRACTORS.

The City has disseminated information, in meeting and/or by flyers, to land developers, consultant engineers, and plumbing contractors regarding the need and methods to reduce SSOs. The City communicates and solicits input regarding the SSMP requirements with emphasis on design and construction practices that reduces sewer overflows.

Internally, the City communicates with various departments, such as Environmental Services, Public Works, Transportation, and Building and Code Enforcement regarding the overall SSMP, program audits, emergency response plan, FOG program, and design standards.

For Capital Improvement Projects, key stakeholders including engineering consultants and contractors are contacted. Potential issues of interest include design standard, capital program, and consulting and contracting opportunities.

11.5 OUTREACH TO PLUMBERS AND BUILDING CONTRACTORS

Plumbers and sewer contractors have access to all available City of Lompoc plans, specifications and standard details. Information is available on construction standards, proper operations and maintenance activities, and effective measures for removing blockages.

11.6 COMMUNICATIONS WITH CITY ELECTED OFFICIALS

The SSMP is part of discussions with City Council and the Utility Commission, particularly with respect to budget development. Presentations are made to both bodies when seeking periodic approval of the SSMP in accordance with prescribed time schedules.